ECONOMIC AND SOCIAL COMMISSION
FOR WESTERN ASIA

PROCEEDINGS OF
THE CONFERENCE ON THE CAPABILITIES
AND NEEDS OF DISABLED PERSONS
IN THE ESCWA REGION

20-28 November 1989
AMMAN - JORDAN

UNITED NATIONS 1992
Mention of firm names and commercial products does not imply the endorsement of the United Nations.

The views expressed in signed articles are those of the authors and do not necessarily reflect those of the United Nations.
CONTENTS

PART ONE
FINAL REPORT OF THE CONFERENCE

Introduction................................................................. 3

I. ORGANIZATION OF THE CONFERENCE.......................... 6
   A. Organization of work.............................................. 6
   B. Attendance....................................................... 6
   C. Opening of the Conference.................................... 7
   D. Election of officers............................................ 8
   E. Adoption of the agenda......................................... 9
   F. Documentation.................................................... 10
   G. Proceedings..................................................... 10
   H. Adoption of the recommendations of the Conference.... 11
   I. Closing session.................................................. 11

II. SUMMARY OF DISCUSSIONS AND RECOMMENDATIONS FOR ACTION.... 13
   A. General recommendations..................................... 13
   B. Prevention and early detection.............................. 13
   C. Childhood disability........................................... 14
   D. Education and training....................................... 14
   E. Vocational rehabilitation and employment............... 15
   F. Database and research on disability issues............... 16
   G. Transfer of appropriate technologies...................... 17
   H. Women and disability......................................... 17
   I. Adaptation of the physical and social environment to the needs of the disabled........ 18
CONTENTS (continued)

J. Media, public awareness and mass communications................. 19
K. Technical co-operation............................................. 19
L. Fund-raising.......................................................... 20

ANNEXES TO FINAL REPORT

I. List of participants................................................. 22
II. Programme of work.................................................. 45
III. List of documents.................................................. 50
IV. Organization of sessions.......................................... 54

PART TWO
TECHNICAL PAPERS

III. Overview of problems and needs of disabled persons – international perspective.............................................. 57
United Nations Centre for Social Development and Humanitarian Affairs

IV. Implementation of the World Programme of Action concerning Disabled Persons: A profile of the ESCWA region...................... 65
Economic and Social Commission for Western Asia

V. The realistic approach of the World Health Organization to disability prevention and management through community-based rehabilitation.................................................. 87
World Health Organization

VI. Special education for disabled persons: an agenda for the 1990s... 92
UNESCO

VII. Future trends in special education planning, organization and management.................................................. 106
UNESCO

VIII. Training and development of workers with disabled persons...... 113
UNESCO
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>IX</td>
<td>UNICEF-assisted programmes and global strategy on childhood disability prevention and rehabilitation</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>United Nations Children's Fund</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Vocational rehabilitation and employment of the disabled</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td>International Labour Organisation</td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td>International development of disability statistics:</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>accomplishments and goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>United Nations Department of International Economic and Social Affairs Statistical Office</td>
<td></td>
</tr>
<tr>
<td>XII</td>
<td>Adaptation and transfer of new technologies designed for the disabled in the ESCWA region</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>Economic and Social Commission for Western Asia</td>
<td></td>
</tr>
<tr>
<td>XIII</td>
<td>The disabled: the blind and prospects of modern technology</td>
<td>182</td>
</tr>
<tr>
<td></td>
<td>Nazeh al-Qadamani</td>
<td></td>
</tr>
<tr>
<td>XIV</td>
<td>From old to new technologies: technical aids and the integration of disabled persons</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>Luis M. F. Azevedo</td>
<td></td>
</tr>
<tr>
<td>XV</td>
<td>Computer-based assistant-systems for the handicapped</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>M. A. Hashis and O. S. Eman</td>
<td></td>
</tr>
<tr>
<td>XVI</td>
<td>Social aspects of the disabled in the Western Asia region and the importance of their modification</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Amani Qandil</td>
<td></td>
</tr>
<tr>
<td>XVII</td>
<td>Access for the disabled in the urban environment</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>Riadh Tappuni</td>
<td></td>
</tr>
<tr>
<td>XVIII</td>
<td>Women and disability in the ESCWA region</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>Nazek Nosseir</td>
<td></td>
</tr>
<tr>
<td>IXX</td>
<td>Queen Alia Fund for Voluntary Social Work in Jordan and its activities in the field of special education</td>
<td>278</td>
</tr>
<tr>
<td></td>
<td>Queen Alia Fund for Voluntary Social Work in Jordan</td>
<td></td>
</tr>
<tr>
<td>PART THREE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUNTRY PAPERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XX. The situation of the disabled: their capacities and needs in Bahrain</td>
<td>293</td>
<td></td>
</tr>
<tr>
<td>Hanan Kamal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXI. Study of the disabled in Democratic Yemen</td>
<td>311</td>
<td></td>
</tr>
<tr>
<td>Hussein Ahmed al-Husni</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXII. The situation of the disabled in Egypt</td>
<td>338</td>
<td></td>
</tr>
<tr>
<td>M. A. S. el-Banna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXIII. Care of the disabled in Iraq</td>
<td>366</td>
<td></td>
</tr>
<tr>
<td>Basil el-Husseini</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXIV. Disability in Jordan</td>
<td>377</td>
<td></td>
</tr>
<tr>
<td>Abdallah al-Khatib</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXV. Capabilities and needs of the disabled in Kuwait</td>
<td>398</td>
<td></td>
</tr>
<tr>
<td>Munira al-Qatami</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXVI. Disabled persons in Lebanon</td>
<td>422</td>
<td></td>
</tr>
<tr>
<td>Hashem al-Husseini</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXVII. Report on programmes and methods of care for disabled persons in Oman</td>
<td>443</td>
<td></td>
</tr>
<tr>
<td>Fathi Abd al-Rahim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXVIII. Disabled persons in the West Bank and Gaza Strip</td>
<td>454</td>
<td></td>
</tr>
<tr>
<td>Nour al-Dajani</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXX. Report on programmes and methods of care for disabled persons in the State of Qatar</td>
<td>482</td>
<td></td>
</tr>
<tr>
<td>Fathi Abd al-Rahim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXX. Status of disabled persons and programmes of available services in Saudi Arabia</td>
<td>502</td>
<td></td>
</tr>
<tr>
<td>Jamil Sofi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXXI. The situation of disabled persons in the Syrian Arab Republic</td>
<td>528</td>
<td></td>
</tr>
<tr>
<td>Rashika Azouni</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
XXXII. Report on programmes and methods of care for disabled persons in the United Arab Emirates................................. 576
   Fathi Abd al-Rahim

XXXIII. Study of the disabled in the Yemen Arab Republic.............. 588
   Hussein Ahmed al-Husni
Part One

FINAL REPORT OF THE CONFERENCE
INTRODUCTION

1. In its resolution 31/123 of 16 December 1976, the General Assembly proclaimed the year 1981 the International Year of Disabled Persons. This marked one of the United Nations most successful international events. It was observed in all countries and generated world-wide awareness of the rights, capabilities and needs of disabled persons. For disabled persons themselves, it was a milestone in the long history of the struggle against discrimination and for equal rights. One important outcome of the International Year of Disabled Persons (IYDP) was the World Programme of Action concerning Disabled Persons, which was adopted by the General Assembly in its resolution 37/52 of 3 December 1982. The World Programme of Action is based on the principles of human rights, full participation, self-determination, integration into society and equalization of opportunities. It contains a set of guidelines for national, regional and international action. It represents a joint effort of Governments, United Nations bodies and non-governmental organizations to gain universal commitment to recognize the rights of disabled persons and to provide the services and opportunities for their full participation in society.

2. In adopting its resolution 37/53 of 3 December 1982 on implementation of the World Programme of Action, the General Assembly also proclaimed the period of 1983–1992 the United Nations Decade of Disabled Persons. The Decade provides a time-frame for Governments to intensify their efforts to improve the living conditions of disabled citizens. It was recommended that monitoring and evaluation be carried out, at periodic intervals, at international and regional levels, as well as at the national level, in order to assess the situation of disabled persons and to measure development.

3. At the international level, the Global Meeting of Experts to Review the Implementation of the World Programme of Action concerning Disabled Persons at the Mid-Point of the United Nations Decade of Disabled Persons was convened by the United Nations Office at Vienna. The Meeting, which was held at Stockholm from 17 to 22 August 1987, recognized that the opportunities offered by the Decade of Disabled Persons to stimulate implementation of the World Programme of Action had not been fully exploited and that insufficient progress had been made throughout the world.

---

1/ World Programme of Action concerning Disabled Persons (United Nations, New York, 1983), published by the Division for Economic and Social Information/DPI for the Centre for Social Development and Humanitarian Affairs/DIESA.
4. At the regional level, the ESCWA Social Development, Population and Human Settlements Division convened the 1st Meeting of the ESCWA Inter-Organizational Task Force on Disability. The Meeting, which was held at Amman from 21 to 23 October 1987, adopted guidelines for future activities in the ESCWA region in the form of a framework for regional activities. The establishment of the Task Force and its subsequent activities formed a major part of the work of the United Nations on disability issues in the region. These activities have a five-year span to coincide with the second half of the United Nations Decade of Disabled Persons, which will end in 1992.

5. In the context of the Decade and the implementation of the World Programme of Action, ESCWA, in collaboration with the Ministry of Social Development of Jordan, the Regional Bureau of the Middle East Committee for the Welfare of the Blind and CSOWA, and with additional financial assistance from the Arab Gulf Programme for the United Nations Development Organizations (AGFUND), the Organization of Petroleum Exporting Countries (OPEC) Fund and the Government of the Netherlands, organized the Conference on the Capabilities and Needs of Disabled Persons in the ESCWA Region. The Conference was held at Amman from 20 to 28 November 1989. As the Conference was conducted in both Arabic and English, simultaneous interpretations were available throughout the deliberations.

6. Special attention was given to the full participation of disabled persons in the deliberations of the Conference. All Conference documents were produced in both Arabic and English Braille for the benefit of blind participants. In addition, Perkins Braille machines were made available during the Conference to permit blind participants to type their own notes. Sign language interpretations were made available to ensure the full participation of deaf persons in the substantive discussions.

7. The Conference was attended by some 200 Arab and international experts—some 40 of whom were themselves disabled—including experts participating in their personal capacity, representatives of Governments, representatives of Arab organizations, mass media experts and some eminent personalities from the region, in addition to representatives of members of the ESCWA Inter-Organizational Task Force on Disability and other United Nations agencies (see the list of participants in annex I). Special interest in the Conference was

---

1/ The ESCWA Inter-Organizational Task Force on Disability is composed of representatives of the United Nations Centre for Social Development and Humanitarian Affairs (CSOWA), the Statistical Office of the United Nations, the Department of International Economic and Social Affairs (DIESA), the United Nations Development Programme (UNDP), the United Nations Children’s Fund (UNICEF), the International Labour Organisation (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Health Organization (WHO).
shown by the Government of Jordan at all levels. Her Majesty Queen Noor al-Hussein attended the opening and delivered a major speech. Queen Noor also attended the final sports day for the disabled and officially closed the Conference. His Royal Highness Prince Raad Bin Zaid attended various sessions and all the side events and played a major role in organizing the sports competition for disabled athletes. His Excellency Mr. Zuheir Melhas, the Minister of Health and Social Development of Jordan, acted as the Honorary Chairman of the Conference and delivered a keynote speech to the participants.

8. The Conference was a follow-up to the 1st Meeting of the ESCWA Inter-Organizational Task Force. It was aimed at reviewing and revitalizing the framework for regional activities endorsed by the 1st Meeting, evaluating the progress made, identifying obstacles encountered in the implementation of such activities and developing a new, concrete regional plan of action until the end of the United Nations Decade of Disabled Persons and beyond. For this purpose, the scientific programme of the Conference was designed to cover virtually all the major aspects of disability. A number of related side events also took place during the Conference.

9. The ESCWA secretariat hopes that the dissemination of the proceedings of this Conference will contribute to the strengthening of regional activities in the field of disability and help policy-makers, researchers and disabled persons themselves to identify areas of interest for future action.
I. ORGANIZATION OF THE CONFERENCE

A. Organization of work

10. The Conference included the following major components:

(a) Substantive presentations and discussions in the form of formal working sessions covering major subjects on disability;

(b) Exhibition by 18 companies from various parts of the world of the latest technologies designed to serve disabled persons. The exhibition was opened on Monday, 20 November 1989, at 3 p.m. by His Excellency Mr. Zuheir Melhas, Jordanian Minister of Health and Social Development. A demonstration was also given on the use of the equipment;

(c) A series of cultural and sports events for disabled persons showing the creativity and capabilities of disabled persons:

(i) In collaboration with the Jordanian Union of Voluntary Organizations, ESCWA sponsored a concert performed by the Egyptian Al-Noor Wal Amal Orchestra (an internationally recognized orchestra composed of 40 blind women musicians). It was held at the Cultural Palace of the Hussein Sports City on Tuesday, 21 November 1989, at 7 p.m.;

(ii) A sports competition for disabled persons was organized by ESCWA in collaboration with the Jordan Sports Federation for the Disabled. The participating teams came from Bahrain, Iraq, Jordan, Kuwait and the Syrian Arab Republic. It was opened by His Royal Highness Prince Raad Bin Zaid, on Wednesday, 22 November 1989, at 3 p.m. and closed by Her Majesty Queen Noor al-Hussein on Friday, 24 November 1989;

(iii) The background music for the reception given by ESCWA was performed by a small band of blind girls from the Regional Centre for Blind Girls in Amman (the Centre is affiliated to the Middle East Committee for the Welfare of the Blind).

11. The Conference adopted the timetable contained in the programme of work (see annex II). All of the main agenda items were discussed in the plenary sessions.

B. Attendance

12. The Conference was attended by representatives of the ESCWA Inter-Organizational Task Force on Disability, observers from other United Nations bodies and agencies, regional and international experts, participating in an
individual capacity, representatives of Governments and Arab organizations, mass media experts and a number of eminent personalities from the region. Some 40 of the participants were themselves disabled (see the list of participants in annex 1).

C. Opening of the Conference

13. The Conference was opened by Her Majesty Queen Noor al-Hussein. In her opening statement, Her Majesty reviewed several major social, environmental, cultural and medical causes of disability in the region. She stressed the increasing magnitude of the problem, referring to the population projection of 20 million disabled persons in the region by the year 2000. She suggested several measures to encourage the full participation of disabled persons in all aspects of society and to ensure the equalization of opportunities for them, including the adaptation of their physical and social environment to the needs of disabled persons; strengthening regional or subregional co-operation in order to prevent duplication and to allow the pooling of national capabilities and qualified staff; adaptation and transfer of appropriate technologies and the provision of training services for mothers and families of disabled persons. She also expressed a hope that fruitful recommendations would result from the deliberations of the Conference. She concluded her address by stating that she and His Majesty King Hussein were pleased to reaffirm their commitment to the very important goal of the equalization of opportunities for all citizens, including disabled persons.

14. During the opening session, the Assistant Director of the Special Groups Activities Branch of the United Nations Office at Vienna, GSDHA, addressed the Conference. He congratulated ESCWA on the active role it had played in promoting the goals of the World Programme of Action concerning Disabled Persons. He urged the participants to devise new dynamic strategies to translate the goals of the United Nations Decade of Disabled Persons into action.

15. During the opening session, the Executive Secretary of ESCWA addressed the Conference and welcomed the participants. In his statement, the Executive Secretary reviewed disability-related trends in the ESCWA region, together with their implications for overall socio-economic development. He stated that the extent of the problem of disability in the region had recently increased in size, as well as in scope, and that the prolonged armed conflicts such as the Iran-Iraq war, the Lebanese conflict and the repeated Arab-Israeli wars and ruthless suppression of the intifadah in the occupied territories all added to the gravity of the problem. He added that, on the basis of the regional framework for action which was endorsed by the 1st Meeting of the Inter-Organizational Task Force, there was an urgent need to formulate a new set of concrete action-oriented recommendations to be implemented by the Governments, non-governmental organizations (NGOs) and international agencies during the remaining period of the United Nations Decade and beyond. Concluding his address, he expressed his gratitude to the host Government and donors, and urged participants to contribute to the
success of the Conference through suggestions and proposals based on their varied and rich professional and personal experiences.

16. A message from His Royal Highness Prince Talal Bin Abdul Aziz al-Saud, President of AGFUND, was delivered by Mr. Mohamad Ali el-Banna. In his message, Prince Talal Bin Abdul Aziz al-Saud stated that AGFUND was pleased to contribute to the convening of such an important Conference. He added that it was imperative to strengthen regional co-operation in order to create suitable conditions to enable disabled persons in the region to lead a normal life. He stated that AGFUND would continue to support projects to help disabled persons in the region.

17. During the morning session of 22 November 1989, Her Excellency Ms. Ethel Wiklund, Ambassador, Special Advisor on Matters concerning Disabled Persons, addressed the Conference on behalf of the Government of Sweden. She said that His Excellency Mr. Bengt Lindqvist, Minister for Family Affairs and Matters concerning the Disabled and the Elderly of the Ministry of Health and Social Affairs in Sweden, had declared that so far the Decade had not effectively improved the situation of disabled persons. She added that the Swedish Government considered binding international rules necessary. Also, she confirmed her Government’s wish to continue to participate in the global efforts to improve the situation of disabled persons.

18. During the same session, the Resident Representative of UNDP in Iraq, representing UNDP at the Conference, also made a brief keynote statement regarding the role of UNDP in the field of disability for countries of the ESCWA region.

19. During the morning session of 23 November 1989, the Palestinian delegate, Mr. Emad Tarawiye, made a brief statement regarding the increased scope of disability-related problems caused by the Israeli suppression and intifadah against the occupation.

20. During the morning session of 26 November 1989, His Excellency, Mr. Zuheir Melhas, Minister of Health and Social Development, made a brief keynote address. In his address, Mr. Melhas said that health services and national planning were the primary concern of disability-related issues in Jordan. He outlined the recent improvements regarding health-related services and preventive measures of disability in Jordan.

D. Election of officers

21. The following persons were elected as officers of the Conference:

- His Excellency Mr. Zuheir Melhas
- Sheikh Abdullah al-Ghanim
- Mr. Fathi Abdul Rahim

Honorary chairman
Chairman
Vice-Chairman
Ms. Munira al-Qatami  
Mr. Abdel Aziz al-Sartawi  
Mr. Othman Farraj  
Mr. Hashem al-Husseini  
Mr. Yousef al-Othaimeen  
Mr. Suhail al-Ubaidy  
Mr. Mohamad al-Suqour  
Colonel Yousef el-Karmi  
Mr. Mohammad Ali el-Banna  
Mr. Riad Tabbarah  
Mr. Akil Akil

Vice-Chairman  
Vice-Chairman  
Vice-Chairman  
Vice-Chairman  
Vice-Chairman  
Vice-Chairman  
Vice-Chairman  
Vice-Chairman  
Rapporteur  
Executive Co-ordinator  
Secretary of the Conference

E. Adoption of the agenda

22. The Conference adopted the following agenda:

1. Overview of the problems and needs of the disabled: an international perspective.

2. Overview of the problems and needs of disabled persons: a regional perspective.

3. Vocational rehabilitation, employment and income maintenance.

4. Education and training.

5. Prevention, treatment and community-based rehabilitation (CBR).

6. Childhood disability prevention and rehabilitation.


8. Social aspects of disabled persons in the ESCWA region.

9. Adaptation of physical and social environment to the conditions of the disabled.

10. Women and disability.
11. Introduction, adaptation and transfer of appropriate technologies in the ESCWA region.

12. Overview of country papers on disability issues (presentation of country papers and analysis).

13. The role of non-governmental organizations in the region (informal session).

14. The role of mass media in the field of disability (informal session).

15. Co-operation among the United Nations agencies in the ESCWA region (closed session).

F. Documentation

23. Thirty-three technical documents on the agenda items were prepared and made available in both English and Arabic, as well as in Braille. A complete set of documents in the most appropriate format was sent to each participant for his/her review and study prior to the Conference. A list of all the documents prepared for the Conference is contained in annex III. Additional documents on speeches and presentations were distributed to participants during the Conference, together with papers received during the Conference from various organizations and individuals. Several copies of the ESCWA data base on disability-related issues (e.g., the directory of experts, Arabic and English bibliographies, directory of institutions, indicators on disability issues) were also made available at the information desk for reference throughout the Conference.

G. Proceedings

24. The scientific programme of the Conference covered almost all the major aspects of disability. In accordance with the timetable contained in the programme of work (annex II), several days were devoted to the presentation of substantive and technical papers. Each session was composed of a 30-minute presentation by the main speaker(s), brief comments on the presentation by a competent discussant chosen from among the participants and a minimum one-hour discussion on the subject (see the attached organization of sessions in annex IV). In the first few days, ESCWA Inter-Organizational Task Force members organized each session around a particular field of competence. CSDWA organized the session on the overview of the problems and needs of disabled persons: international perspective; WHO organized the session on prevention and treatment and community-based rehabilitation; UNESCO organized the session on the training and education of disabled persons; UNICEF organized the session on childhood disability prevention and rehabilitation; ILO organized the session on vocational rehabilitation and the employment of disabled persons; and the Statistical Office of DIESA organized the session on the development of disability statistics in the region. ESCWA organized the sessions on the overview of the problems and needs of disabled persons.
regional perspective; the transfer of appropriate technology for disabled persons (round-table session); women and disability; social aspects of disabled persons in the ESCWA region; and the adaptation of the physical environment to the needs of disabled persons. The background papers were the result of studies carried out under the specific socio-economic and cultural conditions of the ESCWA region and therefore their findings were directly relevant to the situation in the ESCWA region. Regarding the round-table session on the transfer of appropriate technology for disabled persons, four technical background papers, including the ESCWA paper, were presented prior to the discussions.

25. In addition to the formal sessions, a number of informal sessions on various disability-related issues were held, e.g. the role of the mass media in the field of disability and co-ordination among NGOs of disabled persons and the closed session on co-ordination among the United Nations agencies and bodies in the ESCWA region. Furthermore, a few ad hoc sessions dealing with issues of concern to particular categories of disabled persons were held. During the course of the substantive discussions, 56 recommendations covering all aspects of the scientific programme of the Conference were made. (These are presented separately in chapter II of this report).

26. Following the discussions on the above-mentioned substantive and technical issues, the last day of the Conference was devoted to the overview and analysis of country papers. During the interesting and lively discussions that followed the country presentations, the participants contributed useful ideas and knowledge gained from their own experiences.

H. Adoption of the recommendations of the Conference

27. The recommendations of the Conference were adopted by consensus on 28 November 1989.

I. Closing session

28. During the closing ceremony on 28 November 1989, which was attended by Queen Noor al-Hussein, the recommendations were read to the Queen by the Rapporteur. The Chairman of the Conference made a brief statement on behalf of the participants. He expressed the gratitude of the participants to the Government of Jordan for the excellent facilities and services provided for the Conference. He also expressed the participants' appreciation to ESCWA for the efficient way in which the preparations and organization of the Conference had been carried out.

29. A brief closing statement was made by the Chief of the ESCWA Social Development, Population and Human Settlements Division. He expressed his deep gratitude to Her Majesty Queen Noor al-Hussein and to His Highness Prince Raad Bin Zaid for their patronage of the Conference, and also to the Government of Jordan for hosting the Conference. He also thanked the participants for their
outstanding contribution to the successful deliberations of the Conference. He stated that in future every effort would be made to ensure the participation of disabled experts in substantive meetings that had no direct relevance to disability.

30. Her Majesty Queen Noor al-Hussein officially closed the Conference with a message of congratulations from His Majesty King Hussein on the successful completion of the Conference.
II. SUMMARY OF DISCUSSIONS AND RECOMMENDATIONS FOR ACTION

31. During the deliberations of the Conference, the participants reached agreement on the following framework within which regional activities could be elaborated in the remaining period of the Decade and beyond.

A. General recommendations

(a) At the international, regional and national levels, disabled persons, as members of organizations and in their personal capacity, should participate fully in decision-making processes as equal partners. Appropriate legislation should be enacted to this end.

(b) Questions of disability and related policies should be based not on charitable considerations, but on an awareness of the importance of the integration of disabled persons into socio-economic development. In this regard, it is recommended that policies in all socio-economic sectors take into account the needs and contribution of disabled persons. It is also recommended that existing national development policies and legislation be systematically reviewed with a view to promoting equalization of opportunities for disabled persons.

(c) An important condition for the success of national rehabilitation services is effective co-ordination among various ministries, government agencies and NGOs. It is therefore recommended that national co-ordination or implementation committees be established where they do not exist, or that existing committees be strengthened so that they perform these tasks effectively. Governments should allocate special funds to support these committees.

(d) Ongoing issues of disability and the need to achieve the goals of the United Nations Decade of Disabled Persons necessitate the design of programmes and activities in the field of disability at the national, regional and international levels. These should go beyond the end of the Decade in 1992, and should be developed and actively implemented by ESCWA, in collaboration with the relevant regional, international and Arab organizations, especially CSODHA, the Statistical Office of DIESA, WHO, ILO, UNESCO, UNDP, AFGFUND and the League of Arab States, in order to publish information, undertake research and implement the World Programme of Action. For this purpose, it is recommended that a series of regional technical meetings dealing with various aspects of disability be held before the proposed 1992 global conference to mark the end of the United Nations Decade of Disabled Persons.

B. Prevention and early detection

(a) It is recommended that Governments, NGOs and concerned institutions in the region initiate policies and plans to implement programmes regarding
prevention and the early detection of disability, taking into consideration all of the causes that lead to disability.

(b) Services provided to disabled persons through centralized institutional activities do not always reach sufficient numbers of disabled persons, particularly in rural and remote areas. Community-based rehabilitation (CBR) is a desirable means of overcoming this problem. One of the most important advantages of CBR is that it involves the families of disabled persons, and it is recommended that this concept be advocated within the framework of the International Year of the Family, which is to be celebrated just after the end of the Decade. A major prerequisite for the development of CBR is the systematic assessment of existing community development projects which can satisfy the needs of disabled persons, with the aim of selecting the most appropriate CBR for the particular social and cultural conditions of each country or region. CBR programmes should encourage local production of low-cost technical aids for disabled persons made from locally available resources.

(c) The most significant cultural factor in the prevalence of severe disability in the region is the practice of kinship marriage in all communities and among all social classes. Special attention should be given to genetic testing before marriage. Furthermore, there is an urgent need for appropriate legislative measures to prevent hereditary disability.

C. Childhood disability

(a) It is recommended that, as a way of preventing childhood disability, there should be mass immunization programmes, nutritional programmes and prenatal care. It is also recommended that diagnostic tools be developed and that programmes for early detection be implemented.

(b) It is recommended that systematic programmes (including CBR programmes) be developed for mothers of disabled children and other members of their families in order to encourage positive attitudes towards disability and help the family to deal with it in an appropriate manner. These programmes should include training for parents in prevention, early intervention and rehabilitation. A training manual for parents should be developed as an essential component of this programme. It is important that rehabilitation of the disabled should cover children, adults and the elderly.

D. Education and training

(a) Educational services for disabled children and young people in the ESCWA region are all too often centred on isolating them, which frustrates the integration process. Opportunities for primary, secondary and higher education should be made available to the disabled and "mainstreaming" of disabled persons should be promoted whenever possible.
(b) The ministries of education should set up special education programmes. In this regard, there is an urgent need to train sign language interpreters for formal education and mass media. Also, the provision of Braille educational materials and audio-visual aids for visually impaired persons should be encouraged. Programmes for the training of trainers should be implemented.

(c) There is an urgent need to develop a standardized Arabic sign language which is complementary to indigenous sign languages. The standardized sign language should be widely disseminated in the form of manuals and other audio-visual materials. It is also important that adult education programmes for deaf adults should be provided on a regular basis.

(d) It is recommended that particular attention be given to special education programmes for severely disabled children and those with multiple disabilities. Training of special teachers and provision of special education materials and services are prerequisites for achieving this goal. Special education should also be introduced as a subject in regular teacher training programmes.

(e) It is recommended that disabled persons be included in community literacy and adult education programmes and that this question should be given special emphasis during the International Literacy Year, 1990.

(f) It is recommended that scientific information on special education be widely disseminated in the countries of the ESCWA region.

E. Vocational rehabilitation and employment

(a) Everyone, including the disabled, has a right to paid employment or self-employment. Vocational rehabilitation programmes are prerequisites to enable a disabled person to exercise this right with dignity. It is therefore recommended that Governments undertake studies of labour market needs in order to adapt vocational training for the disabled to those needs. Efforts at mainstreaming in the field of vocational training are also important.

(b) The Conference urges employers' and workers' organizations to adopt training policies that are in line with market requirements.

(c) It is recommended that Governments of ESCWA countries adopt policies aimed at increasing employment opportunities for disabled persons including disabled employment quota schemes, subsidies, co-operatives, tax reductions and other such incentives. Governments should also adopt social security schemes that take into account the needs of disabled persons.

(d) The Conference recommends that special attention in the area of vocational training be given to mental disability and in particular severe mental disability, with a view to integrating these categories of disabled
persons into their community, enabling them to live a life of dignity and be self-reliant.

(e) The Conference urges Governments which have not yet ratified the 1983 ILO Convention 159 on vocational rehabilitation and employment of disabled persons to do so. Their activities in this area should be based on the principles set out in that Convention.

F. Database and research on disability issues

In spite of the limited data available, it is clear that disability rates in the region are among the highest in the world, owing to repeated wars and armed conflicts, in addition to more traditional causes of disability. A major requirement for the formulation of appropriate policies and programmes to deal with this important social problem is the development of an adequate data base including statistics and information on various aspects, characteristics and causes of disability in the region. Therefore, the following measures are recommended:

(a) All countries in the region should include appropriately formulated questions in all national censuses, household surveys and national registrations and the resulting information should be published and made available to all concerned institutions.

(b) ESCWA should continue to develop its data bank on disability issues including directories of institutions and workers in the field of disability, a list of companies producing technical aids, a bibliography on disability and a directory of projects being undertaken in the countries of the region. These data should be regularly updated and made available to Governments and NGOs in the most appropriate form.

(c) ESCWA, in collaboration with the United Nations agencies and Arab scientific bodies, should develop a glossary of Arabic terms relating to disability, co-ordinating with organizations which have already begun such work. A short list of various types of disabilities recognized by WHO should be drawn up, in order to achieve a more systematic and precise regional and national application of norms in surveys carried out in the region.

(d) Data series should be developed in an understandable and directly usable form by researchers, policy makers and field workers. In this connection, the current ESCWA project on social indicators should be continuously updated and widely disseminated.

(e) Research on the prevalence, causes and consequences of disability and the nature of disability-related problems should be encouraged through the provision of guidance, appropriate funding and opportunities for publication in journals, newsletters and conference proceedings.
(f) ESCWA should develop an active clearing-house programme through which the activities of institutions dealing with disability and case-studies are disseminated to all concerned, together with similar relevant information in the form of a periodic newsletter. Research material should be systematically distributed in the region in Arabic and funding should be made available for this purpose.

G. Transfer of appropriate technologies

It is clear that the integration of disabled persons in the community often requires the use of appropriate technologies related to various aspects of disability. The Conference therefore recommends the following measures:

(a) Advanced technologies developed in industrial countries should be adapted to meet local needs and transferred to the region through staff training.

(b) The use of computers should be promoted to assist the integration of disabled persons in the community. The process may involve the adaptation of hardware to make it accessible to various categories of disabled persons and the development of appropriate software packages.

(c) Local production of appropriate and simplified technologies should be encouraged for items such as wheelchairs, prosthetic devices and mobility aids, taking into account technical, socio-economic and cultural conditions in the society in question. Governments are urged to undertake pilot projects for the establishment of suitable rehabilitation industries and to set up a national delivery system of rehabilitation aids.

(d) Urgent efforts should be made to develop an Arab speech recognition system, artificial intelligence and other computer-aided systems. In view of the absence of Arabic language in computer technology and the difficulty involved, the necessary research should be undertaken to Arabize computer systems to make them compatible with programs for disabled persons.

(e) The problem of the high cost of new technologies cannot be separated from the cost of maintenance and service. Governments should subsidize whenever possible the acquisition of these technologies. In this regard, international and regional co-operation should be an important means for widening markets and thus reducing the unit cost.

(f) To keep abreast of new innovations, Arab experts, and in particular disabled experts, should participate in seminars, exhibits and events at both regional and international levels.

H. Women and disability

Many of the problems facing disabled women are the same as those facing disabled men. All the recommendations of this conference therefore apply to
disabled women. But there are particular characteristics which apply to women only as a result of the position of women in Arab societies by reason of their low levels of education and economic participation. These characteristics also arise from the role of women as wives and homemakers and their primary responsibility for the upbringing of children. In view of this, the Conference recommends the following measures:

(a) Institutions concerned should formulate programmes to train disabled women to perform various types of housework and to provide them with the necessary aids for that purpose. Furthermore, it is necessary to adapt the physical environment inside the home to the needs of these women and to give them psychological and practical training to take care of their children.

(b) Special attention should be devoted to women who have responsibility for the welfare of disabled family members and these women should be given psychological and practical training to cope effectively with those disabilities.

(c) Efforts should be concentrated on the rehabilitation of disabled women and breaking down the social barriers that prevent their active participation in economic life and fulfilment of their marital responsibilities. Counselling activities relating to the marital life of disabled persons should be intensified.

(d) All national, regional and international programmes for the advancement of women should include women with disabilities.

1. Adaptation of the physical and social environment to the needs of the disabled

It is not sufficient to rehabilitate and teach disabled persons and their families in order to integrate them in the normal life of the community; it is also necessary to adapt the physical and social environment to the needs and conditions of disabled persons. The Conference, therefore, recommends the following measures:

(a) In city planning and in building and construction legislation, attention should be paid to the conditions that facilitate the movement of disabled persons and ensure their safety. This includes, for example, infrastructural services, transport and the entrances and interiors of buildings.

(b) Educational and media programmes should be formulated which would (i) promote the awareness necessary for the acceptance of disabled persons in the community and the elimination of stereotypes and prejudices against them and (ii) facilitate their participation in economic activity and their complete integration in socio-economic life.
(c) Scientific research on the adaptation of the physical and social environment should be encouraged, and the results of such research should be disseminated in Arabic to the media, decision makers and specialists, taking into consideration United Nations publications and international standards.

J. Media, public awareness and mass communications

The media is a basic means of providing disabled persons with the information they need and of changing social attitudes with a view to ensuring their acceptance and integration into overall development plans and programmes. The Conference, therefore, recommends the following measures:

(a) A regional information programme on disabled persons should be formulated and proclaimed, drawing attention to the responsibilities of the media towards disabled persons, their families and society.

(b) Due importance should be attached to the training of media professionals to help them to assume their responsibilities towards disabled persons, to the organization of training programmes and the teaching of disability issues in the schools of mass communications and journalism, to the unification of terms and concepts used in communicating with disabled persons, to the exchange of media expertise in the field of disability and the creation of links between disabled persons and academic and media professionals in the field.

(c) Intensive efforts should be made through the various media to spread awareness in the community and promote positive attitudes towards disabled persons and to correct negative ones. Sign language should be used in all television programmes.

(d) Maximum benefit should be drawn from advanced technologies in the world to improve communication equipment in line with socio-economic conditions in the region and to benefit from broadcast information programmes suitable for more than one country.

(e) A regional centre should be established for studies and research on information and disabled persons, a yearly prize should be awarded for the best media item dealing with the issue of disability, and an exchange of information programmes on disability among the countries of the region should be initiated.

(f) Appropriate attention should be devoted to the guidance of children through information programmes aimed at promoting a spirit of co-operation with and proper treatment of the disabled from childhood.

K. Technical co-operation

(a) International aid and development agencies should assess how their development programmes affect disabled persons and to what extent these
persons benefit from the programmes or have access to them. A certain portion
of overseas development assistance budgets allocated to the region should be
earmarked for disability-related projects.

(b) Priority should be given to technical co-operation programmes for
the disabled in the least developed countries in the region and other
Countries which suffer particularly from disability problems, because of wars,
occupation and armed conflicts.

(c) ESCWA is requested to establish a separate unit on
disability-related issues to co-ordinate regional activities in this field and
to follow up the implementation of the recommendations of this Conference.

(d) Voluntary work in favour of the disabled is an important component
of overall programmes in this field and is an essential complement to public
activities; however, it is still not properly developed in most countries of
the ESCWA region. It is therefore recommended that the United Nations
Volunteers Programme intensify its activities in this region, particularly
those concerned with sponsoring the training of administrative and technical
personnel of relevant NGOs, facilitate the exchange of expertise among them
and sponsor the voluntary work of NGOs in remote and rural areas at the
grass-roots level.

(e) NGOs concerned with the disabled should be given the necessary
financial support, especially in view of the fact that the work of these
organizations, which are active at the grass-roots level, is of great
importance in meeting the needs of the disabled.

(f) ESCWA and other specialized United Nations agencies are requested to
strengthen their regional technical advisory services in the field of
disability, and to emphasize data base and research activities, special
education and vocational training and the adaptation of the social and
physical environment to the needs of disabled persons; NGOs should have access
to this information.

(g) The Regional Bureau of the Middle East Committee for the Affairs of
the Blind has demonstrated its effectiveness in serving the blind and
promoting their welfare within and outside the region of Western Asia;
however, these services have not been extended to any degree to other
categories of the disabled. The Conference therefore recommends that the
Bureau extend the basis of its activities to include other categories of the
disabled and recommends that Governments of the region support the Bureau in
carrying out this mission.

L. Fund-raising

(a) In order to implement the above recommendations, more intensive
efforts should be made to obtain the necessary funds for problems of
disability. ESCWA, as the agency charged with the co-ordination of the
regional activities of the United Nations agencies in the field of disability,
is requested to take the initiative in fund-raising in order to support its own activities as well those of the other United Nations agencies.

(b) In addition to the regular long-term projects on disability issues in the region, there is an urgent need in some countries of the region for assistance to emergency projects dealing with disability. It is therefore recommended that ESCWA establish a regional emergency fund in order to respond to those needs through limited aid to the NGOs and other organizations concerned.
Annex I

LIST OF PARTICIPANTS*,a/

A. Eminent personalities

Her Majesty Queen Noor al-Hussein
Jordan

His Royal Highness Prince Raad Bin Zaid
President
Jordan Sports Federation for the Handicapped
Jordan

His Excellency Mr. Zuheir Melhas
Minister of Health and Social Development
Jordan

Sheikh Abdullah al-Ghanim**
President of the Middle East Committee
and its Regional Bureau for the Affairs of the Blind
Vice President of Rehabilitation International
for the Arab Region
(Accompanied)

Her Excellency Mrs. Ethel Wiklund
Special Adviser on Disability Issues
Ministry of Foreign Affairs
Sweden

His Excellency Mr. Lars Lönback
Ambassador
Embassy of Sweden in Amman

B. Member States

Bahrain

Mr. Ali Abdul Aziz Ali
Administrative Member
Bahrain Mobility International

* Participants attending the Conference in a personal capacity and not representing their countries, organizations or international organizations, are listed in alphabetical order in section H.

** Has disability.

a/ The list of participants was not submitted for formal editing.
Mr. Ibrahim Kabil
Administrative Member
Bahrain Mobility International

Democratic Yemen

Mr. Abdul Rahman Abdul Qader Abdo
Director, Social Welfare Department
General Department for Local Affairs

Ms. Asmahan Al Khader
Supervisor, Social Planning, and
Deputy Chief, Disabled Persons Section
General Department for Local Affairs

Jordan

Mr. Mohamed al-Suqour
Secretary-General
Ministry of Social Development

Mr. Ismail Abdul Qader
Director of Special Education
Ministry of Social Development

Mr. Wa'el Masoud
Chief, Education Section
Ministry of Social Development

Colonel Yousef el-Karmi
Secretary-General
Jordan Sports Federation for the Handicapped

Ms. Amal Nahas
Director
Queen Alia School for the Deaf

Mr. Mahmoud Kafaween
Director, Vocational Rehabilitation Centre
Ministry of Social Development

Ms. Rubhiya Hamadeh
Director
Al Manar School for the Mentally Retarded

Mr. Yaser Salem
General Director
Nazeer Al Hariri Special Education Centre
Mr. Samih Khader**
Friends of the Blind Society
(Accompanied)

Mr. Khader Qubtan
Legislative Adviser
Ministry of Social Development

Kuwait

Mr. Mohamed Ben Abbas
Social Worker, Vocational Rehabilitation Centre
Ministry of Social Affairs and Labour

Mr. Issa al-Saadi
Social Worker and Supervisor
Department for the Welfare of the Disabled
Ministry of Social Affairs and Labour

Palestine

Mr. Emad Tarawiyeh
Deputy Chief
Palestinian Red Crescent Society
Cairo

Mr. Bassam Qasrawi
Senior Medical Officer
Social Welfare Institute
Palestinian Red Crescent Society
Kuwait

Ms. Jean Calder
Rehabilitation Specialist and
Director, Ain Shams Centre for the Disabled
Cairo

Mr. Yousef al-Haq
Member
PLO Office in Amman

Saudi Arabia

Mr. Yousef al-Othaimeen
Deputy Assistant for Rehabilitation
Ministry of Labour and Social Affairs
Riyadh
Yemen Arab Republic

Mr. Hussein Abdul Qader
Director, Social Welfare Centre
Ministry of Social Affairs and Labour
Sana'a

C. United Nations Secretariat units

United Nations Centre for Human Settlements (Habitat)

Mr. Ali Shabou
Regional Information Officer
Amman, Jordan

United Nations Centre for Social Development and Humanitarian Affairs (CSDHA)

Mr. Mohammad Sharif
Assistant Director
Special Groups Activities Branch:
Aging, Youth, Disabled Persons
United Nations Office at Vienna

Ms. Marian Awad
Social Affairs Officer
Disabled Persons Unit
United Nations Office at Vienna

United Nations Statistical Office (DIESA)

Ms. Mary Chami
Statistician
New York

D. United Nations bodies

United Nations Children's Fund (UNICEF)

Ms. Gulbadan Habibi
Programme Officer
New York

Ms. Hind Khatib
Programme Officer
Amman, Jordan

Ms. Fat'hiah Saudi
Consultant
Amman, Jordan
United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA)

Mr. Aziz Daoud
Disability Programme Specialist
Amman, Jordan

United Nations Development Programme (UNDP)

Mr. Salah Bourjini
Resident Representative
Baghdad, Iraq

Ms. Sete Mesropian
Senior Programme Assistant
Baghdad, Iraq

Ms. Sherine al-Jaff
Programme Assistant
Baghdad, Iraq

E. Specialized agencies and other organizations in the United Nations system

International Labour Office (ILO)

Mr. Mokhless Mugharbel
Regional Adviser
Vocational Rehabilitation for the Arab States
Geneva

Mr. Yousef Zu'mot
Expert
Vocational Rehabilitation for the Disabled
Muscat, Oman

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Ms. Lena Saleh
Specialist
Special Education Programme
Paris

UNESCO Regional Office for the Arab States (UNEOBAS)

Mr. Mohamed Kazem
Personal Representative of the Director-General in the Arab States and Director of UNEOBAS
Amman, Jordan
Mr. Abdulhalim Joukhadar
Regional Adviser
Population Education
Amman, Jordan

Ms. Marilina Viviani
Assistant Programme Specialist
Basic Education
Amman, Jordan

World Health Organization (WHO)

Mr. Mohammad Is'haq al-Khawashky
Representative
Cairo, Egypt

Mr. Mohamed Khalil
Regional Adviser
Occupational Health
Alexandria, Egypt

Ms. Safia Ibrahim
Consultant and Director of Polio Institute
Cairo, Egypt

F. Arab organizations

Arab Bureau of Education for Gulf States

Mr. Ibrahim al-Thabet
Chief, Studies and Publication Unit
Riyadh, Saudi Arabia

Arab Council for Childhood and Development

Mr. Abdul El-Monem el-Eshnify
Chief, Information
Cairo, Egypt

Arab Federation of Organizations for the Deaf

Mr. Fayez Chalati
Specialist
Special Education and Rehabilitation
Damascus, Syrian Arab Republic
Arab Labour Organization

Mr. Adib al-Humsi
Director
Technical Co-ordination, Planning and Follow-up Department
Arab Labour Office
Baghdad, Iraq

Arab Resource Collective

Mr. Michael Scott
Executive Director
Nicosia, Cyprus

Arab Town Organization

Mr. Hussein Zeki Saeed
Deputy Mayor of Environmental Affairs for Amman City
Amman, Jordan

General Union of Chambers of Commerce, Industry, and Agriculture for Arab Countries

Ms. Nayla Haddad
Economic Researcher
Beirut, Lebanon

Gulf Co-operation Council

Mr. Ali al-Shamrani
Director Social Affairs
Riyadh, Saudi Arabia

Kuwait Institute for Scientific Research (KISR)

Mr. Hani Qasem
Assistant Researcher
Kuwait

Queen Alia Voluntary Fund for Social Welfare

Mr. Yousef Saleh
Supervisor
Special Education
Amman, Jordan
Scientific Centre for Documentation

Ms. Rehab Ershidat
Amman, Jordan

G. Non-governmental organizations

League of Red Cross and Red Crescent Societies (Geneva)

Mr. Mohammad al-Hadid
Assistant Secretary-General
Jordanian Red Crescent Society
Amman, Jordan

Oxford Committee for Famine Relief (OXFAM)

Ms. Elisabeth Taylor Amny
Country Representative
Cairo, Egypt

Ms. Lina Abu-Habib
OXFAM Office
Beirut, Lebanon

Mr. Peter Coleridge
Programme Co-ordinator for the Middle East
OXFAM Office
London, United Kingdom

World Rehabilitation Organization

Mr. Nadim Karam
Consultant and Country Representative
Beirut, Lebanon

H. Participants

Mr. Safa al-A'asar
Chief, Department of Psychology
Ain Shams University
Cairo, Egypt

Mr. Salman Abanda
Chief, Research Department
Regional Bureau for the Middle East
Committee for the Affairs of the Blind
Riyadh, Saudi Arabia
Ms. Ibtissam Abaza**
Psychiatrist
Cairo, Egypt
( Accompanied by daughter, Ms. Wala'a Hasan)

Mr. Fathi Abdel Rahim
Dean, College of Education
Arabian Gulf University
Manama, Bahrain

Ms. Hind Abed Rabbo
Sign Language Interpreter
National Centre for Speech and Hearing
Ministry of Health
Amman, Jordan

Mr. Sabri Abed Rabbo**
National Centre for Speech and Hearing
Ministry of Health
Amman, Jordan

Mr. Mouenes Abdul Wahab**
Director General
Friends of the Handicapped Association
Tripoli, Lebanon
( Accompanied)

Mr. Beleid Ibrahim Abhiri
Professor and Supervisor of Scientific Affairs
Society for the Blind
Benghazi, Libyan Arab Jamahiriya

Mr. Yousef Abo Awwad
Director
Al Birr Charity Society
Al Jouf, Saudi Arabia

Mrs. Aida Abu Ghazaleh
External Programmes Officer
Society for the Handicapped
Gaza Strip

Mr. Hatem Abu Ghazaleh
Director
Society for the Handicapped
Gaza Strip
Mr. Abdul Wahab Abu Halimeh  
Chief, Public Relations  
The Regional Centre for Rehabilitation and Training of Blind Girls  
Amman, Jordan

Mrs. Nawal Barakat Abu Rmeileh  
Head  
Al-Nasr Women's Society  
Amman, Jordan

Mr. El Agelli Mohamad Abu Shena  
Director, Rehabilitation and Training Centre for the Deaf  
Tripoli, Libyan Arab Jamahiriya

Ms. Laila Abu Talib  
Medical Social Worker  
Farah, The Royal Jordanian Rehabilitation Centre  
Amman, Jordan

Mr. Mohammed el-Sayyed Ahmad  
Society for the Deaf  
Cairo, Egypt

Mr. Ahmed Malallah al-Ansari  
Consultant Psychiatrist  
National Committee for the Disabled Persons Ministry of Health  
Manama, Bahrain

Mr. Fatma Ajamougle  
Director, Centre for the Mentally Retarded  
Homs, Syrian Arab Republic

Ms. Khidrea Ali  
Specialist, Rehabilitation and Training for the Disabled  
Tripoli, Libyan Arab Jamahiriya

Mr. Luiz Azevedo  
Biomedical Engineer  
Centre for Analysis and Signal Processing  
Technical University of Lisbon  
Portugal

Ms. Rashika Azzouni  
Specialist, Social Welfare and Rehabilitation  
Damascus, Syrian Arab Republic
Ms. Samira Baban  
Medical Director  
Cerebral Palsy Foundation  
Amman, Jordan

Mr. Mohammed Izzat Badawi  
National Centre for Speech and Hearing  
Ministry of Health  
Amman, Jordan

Ms. Hala Bana  
Teacher  
The Regional Centre for Rehabilitation and Training of Blind Girls  
Amman, Jordan

Mr. Mohammed Ali el-Banna  
Rehabilitation Counselor  
Ministry of Social Affairs and Labour and Representative, Arab Council for Childhood and Development  
Cairo, Egypt

Ms. Munira Ben Hindi**  
Director  
Centre of Bahrain Mobility International  
Manama, Bahrain  
(Accompanied)

Mr. Sultan Ben Talib  
Student, Special Education  
Arabian Gulf University  
Manama, Bahrain

Mrs. Omayma Borai**  
Consultant  
Cairo, Egypt  
(Accompanied by husband Mr. Dhia'a Mutaweh)

Mr. Mowafaq Bouri**  
Member  
Syrian Federation for the Deaf and Deputy Director, Society for the Deaf  
Damascus, Syrian Arab Republic

Mr. Mousa Charafeddine  
Medical Doctor and President, Friends of the Handicapped Association  
Beirut, Lebanon
Mr. Abdullah el-Dabouni  
Chief  
Special Education Department  
Farah, The Royal Jordanian Rehabilitation Centre  
Amman, Jordan

Mrs. Nour Dajani  
Chief, Economic Affairs Department  
Office of Palestinian Affairs  
Ministry of Foreign Affairs  
Amman, Jordan

Ms. Rhona Davies  
Professor  
Society for Care of the Handicapped  
Gaza, West Bank

Mr. Nassir al-Dous  
Director  
Department of Social Activities  
Riyadh, Saudi Arabia

Ms. Maha Ghannam  
Social Worker  
Federation of Charitable Societies  
Nablus, West Bank

Mr. Othman Farraj  
Professor of Psychology  
American University  
Cairo, Egypt

Mr. Khaled al-Habaeshee  
Reviser, Braille Printing  
Al-Noor Society for the Blind  
Tripoli, Libyan Arab Jamahiriya

Ms. Nabila Habashy  
Psychologist  
United Nations Volunteer  
UNDP  
Muscat, Oman

Bishop Gregoire Haddad  
Co-ordinator  
Co-ordination of NGOs for Development  
Beirut, Lebanon
Mr. Michael Haddad**
Director, Evangelical School for the Blind
President, Lebanese Society for the Blind
Lebanon
(Accompanied)

Ms. Rihab Haddad
Teacher
The Holyland Institute for the Deaf
As-Salt, Jordan

Ms. Mary Haddadin
Centre for Early Diagnosis of Handicaps
Amman, Jordan

Ms. Heba Haggrass**
Fashion expert and businesswoman
Cairo, Egypt
(Accompanied by husband Mr. Mohamed Hussein Mohamed)

Mr. Abdullah Hamdan
Dean of Registration
King Saud University
Riyadh, Saudi Arabia

Mr. Bassam Hamdan**
Director, Programme of Awareness, Action and
Accessibility for the Disabled
Contact and Resource Centre
Beirut, Lebanon
(Accompanied)

Mr. Mohammad al-Hameadi
Assistant Under-Secretary for Special Education
Ministry of Education
Kuwait

Ms. Manal Hamza
National Centre for Speech and Hearing
Ministry of Health
Amman, Jordan

Mr. Ahmed Hasab El-Nabi Hassanain
Sign Language Interpreter
Cairo, Egypt
Mr. Mohammed Abed Moneim Hashaish
Director
Cairo Scientific Centre and
Professor, School of Engineering
Cairo University
Cairo, Egypt

Mr. El-Mo'tacem Billah Hegazi**
Rehabilitation Consultant and Psychiatrist
Al-Wafa Wal Amal Society
Cairo, Egypt
(Accompanied by wife Mrs. Marwah al-Mushri)

Ms. Hala Hilmi
Specialist, Special Education (Volunteer)
Jordan

Mr. Fakhri Hourani
Chief, Rehabilitation Programme
Farah, The Royal Jordanian Rehabilitation Centre
Amman, Jordan

Mr. Mohammed al-Houtheil
Member, Al Birr Charity Society
Al-Jouf, Saudi Arabia

Mr. Basil al-Hussaini
Specialist
Ministry of Social Affairs and Labour
Baghdad, Iraq

Ms. Shaika al-Hussaini
Specialist, Special Education
Al-Amal Institute for Disabled Children
Manama, Bahrain

Mr. Hashem al-Husseini
Director, Social Training Centre
Beirut, Lebanon

Mr. Hussein al-Husni
Chief, Department of Higher Education
University of Aden
Aden, People's Democratic Republic of Yemen

Ms. Amal Ibrahim**
Director
Al-Huda Association for Social Welfare
Beirut, Lebanon
(Accompanied)
Mr. Ghosn al-Ibri  
Director, Care and Rehabilitation Centre  
Ministry of Social Affairs and Labour  
Muscat, Oman

Ms. Hala al-Jawhari  
Director, Regional Centre for the Rehabilitation and  
Training of Blind Girls  
Amman, Jordan

Mr. Peter Johnson  
Professor  
Society for Care of the Handicapped  
Gaza-West Bank

Ms. Shaza Jundi  
Director, Cerebral Palsy Society and  
Centre for Cerebral Palsy  
Ministry of Social Affairs and Labour  
Damascus, Syrian Arab Republic

Mr. Bassam Kamal  
Chief, Medical and Social Services Section  
Farah, The Royal Jordanian Rehabilitation Centre  
Amman, Jordan

Mr. Essam Kamal  
Co-ordinator, Sports for the Disabled  
General Establishment for Youth and Sports  
Manama, Bahrain

Ms. Faten Kamal  
Secretary General  
Bahrain Mobility International  
Manama, Bahrain

Ms. Hanan Kamal  
Chief, Social Rehabilitation Section  
Ministry of Labour and Social Affairs  
Manama, Bahrain

Mr. Walid Kamhawi  
Board Member and Representative of al-Maqassed  
Charity Society in Jerusalem  
Amman, Jordan

Ms. Amani Kandil  
Professor  
National Centre for Social Research  
Cairo, Egypt
Ms. Ghusoon el-Kareh
Director, Centre for Special Education
Young Women's Moslem Association
Amman, Jordan

Ms. Ibtisam Kaylani
Director, Al-Amal School for the Disabled
Damascus, Syrian Arab Republic

Mr. Zaidan al-Khamaiseh
Specialist, Special Education
Farah, The Royal Jordanian Rehabilitation Centre
Amman, Jordan

Mr. Abdullah al-Khatib
President, Executive Council of
General Union for Voluntary Societies
Amman, Jordan

Ms. Najwa Kushtban
Physiotherapist
Al-Hariri Foundation
Saïda, Lebanon

Ms. Joan Mary Majali
Vice President
Cerebral Palsy Foundation
Amman, Jordan

Mr. Saleh al-Majid
Director of the President's Office
The Regional Bureau of the Middle East Committee
for the Affairs of the Blind
Riyadh, Saudi Arabia

Mr. Gamil Mattar
Director, Arab Centre for Development
and Future Research
Cairo, Egypt

Mrs. Carola Mueller-Holtkemper
First Secretary
Embassy of Federal Republic of Germany
Amman, Jordan

Mr. Ahmed Mutwalli
Professor, Internal Medicine
King Saud University
Handicapped Children's Association
Riyadh, Saudi Arabia
Mr. Mahmoud Najem**
Supervisor, Vocational Training
Society for the Blind
Benghazi, Libyan Arab Jamahiriya
(Accompanied)

Mr. Ra'ed al-Nassar**
Director, Ibn Um Maktoum Sports Club
King Saud University
Riyadh, Saudi Arabia
(Accompanied by Mr. Naser Dous
   Director, Social Activities Department)

Mr. Ahmed Abdullah al-Nsour
Chief, Allied Health Services
Clinical Psychologist
Farah, The Royal Jordanian Rehabilitation Centre
Amman, Jordan

Ms. Nazek Nosseir
Associate Professor
American University
Cairo, Egypt

Mr. Fouad Nseir
Director, Evangelical School for the Blind
Jdaiyet Al-Matin, Lebanon

Mr. Faisal al-Obaidan
Teacher
Al-Noor School
Association for the Blind
Kuwait

Mr. Suhail al-Obaidi
General Director
Arab Union of Sports for the Disabled
Baghdad, Iraq

Mr. Saleh Oraibi
Chief, Rehabilitation Department
Centre for the Physically Handicapped
Amman, Jordan

Mr. Akram Okkeh
Director
The Arab Society for the Physically Handicapped
Jerusalem
Mr. Ali O'tom
Rehabilitation Doctor
Farah, The Royal Jordanian Rehabilitation Centre
Amman, Jordan

Ms. Josi Salem Pickartz
Clinical Psychologist and Rehabilitation Officer
National Psychiatric Centre (Fahes)
Amman, Jordan

Mr. Nazeh Qadaman
Computer Manager
Regional Bureau of the Middle East Committee for
the Affairs of the Blind
Riyadh, Saudi Arabia

Ms. Munira al-Qatami
Adviser
Ministry of Health
Kuwait

Mr. Ibrahim Qaqish
Specialist, Rehabilitation and Physiotherapy
Amman, Jordan

Ms. Haya Qubain
Sign Language Interpreter
National Centre for Speech and Hearing
Ministry of Health
Amman, Jordan

Mr. Ihsan Ra'afat
Director, National Centre for Psychiatric Health
Amman, Jordan

Ms. Sahar Razzouk
Secretary, Society of the Visually Handicapped
Jerusalem

Mr. Ahmad Ali Saho
Director, Department of Clinical Psychology and Rehabilitation
National Center for Mental Health
Amman, Jordan

Mr. Fares Saleem
Medical Director and Consultant
Handicapped Children's House
Riyadh, Saudi Arabia
Mr. Mahmoud Salem
Teacher, Special Education
National Medical Institution
Amman, Jordan

Ms. Rasmia Salmi
Teacher
Regional Centre for the Rehabilitation and
Training of Blind Girls
Amman, Jordan

Mr. Mohammad al-Satlan
Secretary-General
Kuwait Mobility International
Kuwait

Mr. Abdel Aziz al-Sartawi
Associate Professor
Al-Ain University
United Arab Emirates

Mr. Sabri al-Shanteir
Teacher, Special Education
Kuwait Blind Association
Kuwait

Mr. Fawaz Sharayha
Chief
Projects Division
General Union of Voluntary Societies
Amman, Jordan

Mr. Mahmoud al-Shatti**
Teacher
Ministry of Education
Kuwait
(Accompanied)

Mr. Edmund Shehadeh
Director
Bethlehem Arab Society for the
Physically Handicapped
Bethlehem

Ms. Helena Shehadeh**
Executive Secretary
Society for the Handicapped
Jerusalem
(Accompanied)
Mr. Adel al-Shemmari
Member
Al-Qadisiyah Warrior War Welfare Society
Baghdad, Iraq

Mr. Jamil Sofi
UNDP Programme Officer
Riyadh, Saudi Arabia

Mr. Nassib Solh
Director General
Al-Amal Institute for the Disabled
Lebanon

Mr. Hassan al-Sowaidy
Executive Manager
Qatari Red Crescent Society
Doha, Qatar

Ms. Najah Taffalah**
National Centre for Speech and Hearing
Amman, Jordan

Ms. Nancy Tamash
Centre for Early Diagnosis
Ministry of Health
Amman, Jordan

Mr. Mohammed Tarawneh**
Structural Engineer
Baghdad, Iraq

Ms. Nadia Tarazi
Member, Central Committee for the Disabled in the West Bank
Gaza Strip

Mr. Alad Farag al-Ulwi
Chief, Educational Section
Al-Noor Society for the Blind
Tripoli, Libyan Arab Jamahiriya

Mr. Sadiq al-Wazni
Lawyer and Director of the Ja'afar Association for Special Education
Amman, Jordan
Mr. Ahmed Yassine al-Sabbagh  
Chief, General Administration  
Ministry of Social Affairs and Labour  
Damascus, Syrian Arab Republic  

Mr. Abdul Ghani al-Youzbaki  
Specialist, Rehabilitation and Welfare of the Disabled  
Baghdad, Iraq  

Ms. Samira al-Zoubi  
National Centre for Speech and Hearing  
Ministry of Health  
Amman, Jordan  

I. Media representatives  

Mr. Abas Gad al-Haq  
Chief Editor  
Middle East News Agency  
Cairo, Egypt  

Mr. Khaled Hussein  
Director  
Middle East News Agency  
Cairo, Egypt  

Mr. Salah-Eddine Hafez  
Deputy Chief Editor  
Al-Ahram  
Cairo, Egypt  

Mr. Medhat Zeki  
Deputy Director  
Television Channel 3  
Cairo, Egypt  

Ms. Nahla Ibrahim  
Reporter  
Television Channel 3  
Cairo, Egypt  

Ms. Leila Deeb  
Journalist  
BBC and Middle East Daily  
Amman, Jordan
J. Exhibiting companies and organizations

Arab Council for Childhood and Development
Cairo

Cerebral Palsy Foundation
Amman

Everest and Jennings International
Federal Republic of Germany

Friends of the Handicapped Association
Lebanon

Heisteele
The Danish Consulate

Iben Sina Medical Centre
Amman

IBM Scientific Centre
Cairo

INEX Foreign Trade Co-operative
Poland

Intersan
Spain

Jordan National Speech and Hearing Centre
Amman

Ministry of Labour and Social Affairs
Baghdad

Nazek Al Hariri Centre for Special Education
Amman

Otto Bock
Federal Republic of Germany

Phonic Ear
Denmark

Preston Corporation
United States of America

The Regional Centre for the Rehabilitation of Blind Girls
Amman
UNESCO and other United Nations agencies

Viennatone
Austria

Wassermann Marketing
Federal Republic of Germany

K. ESCWA secretariat

Executive Secretary

Chief, Social Development, Population and Human Settlements Division

Senior Social Affairs Officer, Social Development, Population and Human Settlements Division

Industrial Development Officer, Joint ESCWA/UNIDO Industry Division

Human Settlements Officer, Social Development, Population and Human Settlements Division

Social Affairs Officer, Social Development, Population and Human Settlements Division

Associate Social Affairs Officer, Social Development, Population and Human Settlements Division
Annex II

PROGRAMME OF WORK

Monday, 20 November 1989

9 a.m.  Departure from Inter-Continental Hotel to the Royal Cultural Centre.

10-11 a.m.  Opening of the Conference.

11-11.30 a.m.  Reception.

11.30 a.m.-12 noon  Return to Inter-Continental Hotel.

12 noon-3 p.m.  Lunch break.

3-5 p.m.  Opening of the exhibit.

5 p.m.  Organizational meeting:

(a) Election of officers;

(b) Adoption of the agenda and organization of work.

Tuesday, 21 November 1989

9-11 a.m.  Overview of the problems and needs of the disabled: International perspective (The United Nations Centre for Social Development and Humanitarian Affairs (CSDHA)).

11-11.30 a.m.  Break.

11.30 a.m.-1.30 p.m.  Overview of the problems and needs of the disabled: Regional perspective (ESWA).

1.30-5 p.m.  Break.

5-6 p.m.  Shows of exhibiting companies.

6 p.m.  Departure from Inter-Continental Hotel to the Cultural Palace at the Hussein Sports City.
7 p.m. Concert performed by the Egyptian orchestra Al-Noor Wal Amal, at the Cultural Palace at the Hussein Sports City.

Wednesday, 22 November 1989

9-10 a.m. Keynote speeches by:

Her Excellency, Mrs. Ethel Wiklund Ambassador, Special Adviser on Matters concerning Disabled Persons, Ministry of Foreign Affairs;

UNDP Resident Representative, Iraq.

10-11.30 a.m. Prevention, treatment and community-based rehabilitation (WHO).

11.30 a.m.-12 noon Break.

12 noon-1.45 p.m. Education and training of disabled persons (UNESCO).

1.45-2.30 p.m. Lunch break.

2.30 p.m. Departure from Hotel Inter-Continental to the Jordan Sports Federation for the Handicapped.

3-5 p.m. Opening of the sports competition under the patronage of His Royal Highness Prince Raad Bin Zaid.

5-7 p.m. Transfer of technologies appropriate for disabled persons in the ESCWA region.

7.30-9 p.m. Reception given by ESCWA.

Thursday, 23 November 1989

9-9.30 a.m. Keynote speech by the Palestinian delegate, Mr. Emad Tarawiyyeh.

9.30-11 a.m. Global view of UNICEF-assisted programmes and global strategy on childhood disability prevention and rehabilitation (UNICEF).
11-11.30 a.m.  
Break.

11.30 a.m.-1.30 p.m.  
Vocational rehabilitation and employment of disabled persons (ILO).

1.30-3 p.m.  
Lunch break.

3-5 p.m.  

5-7 p.m.  
Shows of the exhibiting companies.

**Friday, 24 November 1989**

9-11 a.m.  
Open discussion on disability issues.

2.30-3 p.m.  
Departure from Hotel Inter-Continental to the sports field of the Jordan Sports Federation for the Handicapped.

3 p.m.  
Sports competition (final game).

**Saturday, 25 November 1989**

8.30 a.m.-2.30 p.m.  
Field visits.

4-5 p.m.  
Informal session on the role of mass media on disability-related issues.

5.45 p.m.  
Departure from Hotel Inter-Continental to the headquarters of the General Union of Voluntary Societies in Jordan.

6-10 p.m.  
Reception given by the General Union of Voluntary Societies in Jordan.

**Sunday, 26 November 1989**

9-10 a.m.  
Keynote speech by His Excellency, Zuheir Melhas, Minister of Health and Social Development, Jordan.

10-11.30 a.m.  
Social aspects of disabled persons in the Western Asia region and the importance of their modification (ESCWA).
11.30 a.m.–12 noon  Break.

12 noon–1.30 p.m.  Adaptation of the physical and social environment to the conditions of the disabled (ESCWA).

1.30–3 p.m.  Lunch break.

3–5 p.m.  Women and disability in the Western Asia region (ESCWA).

8–10 p.m.  Informal session for disabled persons.

**Monday, 27 November 1989**

9–11 a.m.  Presentation and discussion of the country papers (ESCWA):

- Presentation and discussion of the country papers of the United Arab Emirates, Qatar, and Oman;
- Presentation and discussion of the country papers of Bahrain and Egypt.

11–11.30 a.m.  Break.

11.30 a.m.–2 p.m.  Presentation and discussion of the country papers of Iraq and Jordan.

- Presentation and discussion of the country papers of Kuwait, Democratic Yemen and the Yemen Arab Republic.
- Presentation and discussion of the papers submitted by Lebanon and West Bank and Gaza Strip.
- Presentation and discussion of the country papers of Saudi Arabia and the Syrian Arab Republic.

5–7 p.m.  Informal session for non-governmental organizations (organized by Mr. Abdullah al-Khateeb).

7–8 p.m.  Closed session to discuss co-ordination among the United Nations agencies and bodies.
Tuesday, 28 November 1989

9 a.m.-12 noon

Adoption of the recommendations of the Conference.

5.30-7 p.m.

Closing session: under the auspices of Her Majesty Queen Noor al-Hussein.
<table>
<thead>
<tr>
<th>Document Title</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aide-mémoire</td>
<td>E/ESWA/SD/89/WG.1/INF.1 and Corr.1</td>
</tr>
<tr>
<td>Provisional agenda (organization of work)</td>
<td>E/ESWA/SD/89/WG.1/L.1/Rev.1</td>
</tr>
<tr>
<td>Annotated provisional agenda</td>
<td>E/ESWA/SD/WG.1/L.1/Add.1</td>
</tr>
<tr>
<td>The realistic approach of the World Health Organization to disability prevention and management through community-based rehabilitation</td>
<td>E/ESWA/SD/89/WG.1/2</td>
</tr>
<tr>
<td>UNICEF-assisted programmes and global strategy on childhood disability prevention and rehabilitation</td>
<td>E/ESWA/SD/89/WG.1/3</td>
</tr>
<tr>
<td>Adaptation and transfer of new technologies designed for the disabled in the ESCWA region</td>
<td>E/ESWA/SD/89/WG.1/4</td>
</tr>
<tr>
<td>The situation of the disabled in Egypt</td>
<td>E/ESWA/SD/89/WG.1/5</td>
</tr>
<tr>
<td>Access for the disabled in the urban environment</td>
<td>E/ESWA/SD/89/WG.1/6</td>
</tr>
<tr>
<td>Study of the disabled in Democratic Yemen</td>
<td>E/ESWA/SD/89/WG.1/7</td>
</tr>
<tr>
<td>The situation of disabled persons in the Syrian Arab Republic</td>
<td>E/ESWA/SD/89/WG.1/8</td>
</tr>
<tr>
<td>Report on programmes and methods of care for disabled persons in the Sultanate of Oman</td>
<td>E/ESWA/SD/89/WG.1/9</td>
</tr>
<tr>
<td>Report on programmes and methods of care for disabled persons in the State of Qatar</td>
<td>E/ESWA/SD/89/WG.1/10</td>
</tr>
<tr>
<td>Document title</td>
<td>Symbol</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>The situation of the disabled: their capacities and needs in Bahrain</td>
<td>E/ESCAWD/SD/89/WG.1/11</td>
</tr>
<tr>
<td>Social aspects of the disabled in the Western Asia region and the importance of their modification</td>
<td>E/ESCAWD/SD/89/WG.1/12</td>
</tr>
<tr>
<td>Report on programmes and methods of care for disabled persons in the United Arab Emirates</td>
<td>E/ESCAWD/SD/89/WG.1/13</td>
</tr>
<tr>
<td>International development of disability statistics: accomplishments and goals</td>
<td>E/ESCAWD/SD/89/WG.1/14</td>
</tr>
<tr>
<td>Disabled persons in the West Bank and Gaza strip</td>
<td>E/ESCAWD/SD/89/WG.1/15</td>
</tr>
<tr>
<td>Special education for disabled persons: an agenda for the 1990s</td>
<td>E/ESCAWD/SD/89/WG.1/16</td>
</tr>
<tr>
<td>Future guidelines in special education planning, organization and management</td>
<td>E/ESCAWD/SD/89/WG.1/17</td>
</tr>
<tr>
<td>Disability in Jordan</td>
<td>E/ESCAWD/SD/89/WG.1/18</td>
</tr>
<tr>
<td>The disabled: the blind and prospects of modern technology (supplementary document)</td>
<td>E/ESCAWD/SD/89/WG.1/19</td>
</tr>
<tr>
<td>Study of the disabled in the Yemen Arab Republic</td>
<td>E/ESCAWD/SD/89/WG.1/20</td>
</tr>
<tr>
<td>Overview of problems and needs of disabled persons - International perspective</td>
<td>E/ESCAWD/SD/89/WG.1/21</td>
</tr>
<tr>
<td>Disabled persons in Lebanon</td>
<td>E/ESCAWD/SD/89/WG.1/22</td>
</tr>
<tr>
<td>Capabilities and needs of the disabled in Kuwait</td>
<td>E/ESCAWD/SD/89/WG.1/23</td>
</tr>
<tr>
<td>Care of the disabled in Iraq</td>
<td>E/ESCAWD/SD/89/WG.1/24</td>
</tr>
</tbody>
</table>
Document title

Women and disability

Vocational rehabilitation and employment of the disabled

Bibliography on disability-related issues in the ESCWA region (English only)

Implementation of the World Programme of Action concerning Disabled Persons: a regional profile of the ESCWA region

Status of disabled persons and programmes of available services in the Kingdom of Saudi Arabia

Training and development of workers with disabled persons

Provisional list of disability-related projects (English only)

Bibliography on disability (Arabic only)

Queen Alia Fund for Voluntary Social Work in Jordan and its activities in the field of special education

Directory of institutions in the field of disability in the ESCWA region (Arabic only)

Directory of experts in the field of disability (Arabic only)

Summary of the country papers in the field of disability (Arabic only)

Symbol

E/ESCWA/SD/89/WG.1/25

E/ESCWA/SD/89/WG.1/26

E/ESCWA/SD/89/WG.1/27

E/ESCWA/SD/89/WG.1/28

E/ESCWA/SD/89/WG.1/29

E/ESCWA/SD/89/WG.1/30

E/ESCWA/SD/89/WG.1/31

E/ESCWA/SD/89/WG.1/32

E/ESCWA/SD/89/WG.1/33

E/ESCWA/SD/89/WG.1/34

E/ESCWA/SD/89/WG.1/35

E/ESCWA/SD/89/WG.1/36
From old to new technologies: technical aids and the integration of disabled persons
Luiz M.F. Azevedo

Computer-based assistant-systems for the handicapped
M.A. Hashish, O.S. Emam

Provisional list of documents
E/ESCWA/SD/89/WG.1/INF.2

Provisional list of participants
E/ESCWA/SD/89/WG.1/INF.3/Rev.1
### Annex IV

**Organization of Sessions**

<table>
<thead>
<tr>
<th>Session</th>
<th>Chairperson of the Session</th>
<th>Organizer(s)/Speaker(s)</th>
<th>Discussant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CSWMA</td>
<td><strong>Sheikh Abdullah al-Ghanim</strong></td>
<td><strong>Mr. Mohammed Sharif</strong></td>
<td><strong>Ms. Amal Ibrahim</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Overview of the problems and needs of the disabled: international perspective (9-11 a.m., 21st)</strong></td>
<td><strong>Ms. Marian Awad</strong></td>
<td></td>
</tr>
<tr>
<td>2. ESCWA</td>
<td><strong>Mr. Fathi Abdul Rahim</strong></td>
<td><strong>Mr. Akil Akil</strong></td>
<td><strong>Ms. Mariam Awad</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Overview of the problems and needs of the disabled: regional perspective (11.30 a.m.-1.30 p.m., 21st)</strong></td>
<td><strong>Ms. Kay Abe-Nagata</strong></td>
<td></td>
</tr>
<tr>
<td>3. WHO</td>
<td><strong>Ms. Munira al-Qatami</strong></td>
<td><strong>Mr. M. al-Khawashki</strong></td>
<td><strong>Mr. Mo'tacem Hejazi</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Prevention, treatment and care (10-11.30 a.m., 22nd)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. UNESCO</td>
<td><strong>Mr. Abdel Aziz al-Sartawi</strong></td>
<td><strong>Ms. Lena Saleh</strong></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td><strong>Special education for disabled persons (12 noon-1.45 p.m., 22nd)</strong></td>
<td><strong>Mr. Abdalla Hamdan</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Mr. F. Abdul Rahim</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. UNICEF</td>
<td><strong>Mr. Ithnan Farraj</strong></td>
<td><strong>Ms. Gulbadan Habibi</strong></td>
<td><strong>Ms. Shaik al-Husseini</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Global view of UNICEF-assisted programme and global strategy for childhood disability and prevention (9-11 a.m., 23rd)</strong></td>
<td><strong>Ms. Fat'hieh Saudia</strong></td>
<td></td>
</tr>
<tr>
<td>6. ILO</td>
<td><strong>Mr. Hashem al-Husseini</strong></td>
<td><strong>Mr. Mokhless Mugharbel</strong></td>
<td><strong>Mr. F. Abdul Rahim</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Mr. Yousef Zumot</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Vocational rehabilitation and employment of disabled (11.30 a.m.-1.30 p.m., 23rd)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Statistical Office, OIESA</td>
<td><strong>Mr. Yousef al-Othaimm</strong></td>
<td><strong>Ms. Marie Chame</strong></td>
<td><strong>Mr. Hashem al-Husseini</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Development of disability statistics in the region (3-5 p.m., 23rd)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session</td>
<td>Chairperson of the session</td>
<td>Organizer(s)/Speaker(s)</td>
<td>Discussant</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>8. ESCWA</td>
<td>Mr. Suhail al-Uidy</td>
<td>Mr. Riadh Tappuni</td>
<td>Mr. Mohamad Taraw</td>
</tr>
<tr>
<td>Physical adaptation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12 noon-12.30 p.m., 26th)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. ESCWA</td>
<td>Mr. Mohamad al-Suquor</td>
<td>Mr. Amani Kandil</td>
<td>Ms. Munira Ben Hi</td>
</tr>
<tr>
<td>Social aspects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.ESCWA</td>
<td>Colonel Yousef el-Karmi</td>
<td>Ms. Nazek Nosseir</td>
<td>Ms. Heba Hagrass</td>
</tr>
<tr>
<td>Women and Disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3-5 p.m., 26th)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. ESCWA (round-table)</td>
<td>Mr. Hassan Charif (organizer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate technologies</td>
<td>- Mr. Luiz Azevedo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5-7 p.m., 22nd)</td>
<td>- Mr. Nazeh Qadami</td>
<td>round-table</td>
<td></td>
</tr>
<tr>
<td>12. Role of NGOs (informal session)</td>
<td>Mr. Abdullah al-Khatib</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(afternoon, 26th)</td>
<td>(organizer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Role of mass media</td>
<td>Mr. Jamil Mattar (organizer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(afternoon, 26th)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Country papers</td>
<td>Sheikh Abdullah al-Ghanim</td>
<td>- Mr. Fathi Abdul Rahim (United Arab Emirates, Qarat, Oman)</td>
<td></td>
</tr>
<tr>
<td>(27th)</td>
<td></td>
<td>- Ms. Hamad Kamal (Bahrain)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mr. Mohamad Ali el-Banna (Egypt)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mr. Basil al-Hussainy (Iraq)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mr. Abdullah al-Khatib (Jordan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ms. Munira al-Qatami (Kuwait)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mr. Hussein Husni (Democratic Yemen, Yemen Arab Republic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mr. Hashem al-Hussain (Lebanon)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ms. Nour Dajani (West Bank and Gaza Strip)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mr. Jamil al-Soofi (Saudi Arabia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ms. Rashika Azzouni (Syrian Arab Republic)</td>
<td></td>
</tr>
<tr>
<td>15. Closing Session</td>
<td>Sheikh Abdullah al-Ghanim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(afternoon, 28th)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part Two

TECHNICAL PAPERS
III. OVERVIEW OF PROBLEMS AND NEEDS OF DISABLED PERSONS
   - INTERNATIONAL PERSPECTIVE -

   Statement of the
   Centre for Social Development and Humanitarian Affairs
It is estimated that 500 million of the world's total population are disabled as a consequence of mental, physical or sensorial impairments. By implication, 25 per cent of the population of every community is adversely affected by the presence of disability. Wars, violence, poverty, malnutrition, demographic and ecological trends account for the major factors which contribute to disability. It is feared that the number of disabled persons in the world will continue to increase rapidly if no counter-measures are taken to arrest this trend.

In 1976, the General Assembly of the United Nations decided to proclaim 1981 the International Year of Disabled Persons. It marked one of the most successful international events in the history of the United Nations. It was observed in all countries and generated world-wide awareness of the rights and needs of disabled persons. For disabled persons themselves, it was a milestone in the long history of their struggle against discrimination and segregation and for equal rights.

In reviewing the problems and needs of disabled persons, it is essential to set the scene in a wider context. The disability issue can only be addressed in a comprehensive interdisciplinary perspective by the international community. Indeed, as early as 1949, resolutions adopted by the social commissions of the United Nations set the scene for co-ordinating plans and activities of the United Nations and leading national and international non-governmental organizations working in the field of disability. It is evident that the problems and needs of disabled persons cannot be isolated from those of the rest of the population as they are inextricably interwoven with the whole social and economic development process.

One important outcome of the International Year of Disabled Persons was the preparation of the World Programme of Action concerning Disabled Persons which was adopted by the General Assembly at its thirty-seventh session in 1982. The World Programme of Action is based on the principles of human rights, full participation, self-determination, integration into society and equalization of opportunities. It contains a set of guidelines for national, regional and international action. It represents a joint effort of Governments, United Nations organizations and bodies and non-governmental organizations to gain universal commitment to recognize the rights, and provide the services and opportunities for full, active participation of disabled persons in society.

This Conference on the Capabilities and Needs of Disabled Persons in the ESCWA Region, the Second Meeting of the ESCWA Inter-Organizational Task Force on Disability, is taking place at an important moment in the history of United Nations' activities. After 40 years of existence, the United Nations is being scrutinized and critically evaluated by the international community. Member States have recognized the need to reform and restructure the Organization so as to make it more efficient and more readily responsive to the present needs of all countries. To this end, the Secretary-General decided, with effect from 1 March 1987, to concentrate in Vienna all activities on social policy
and development under the authority of the Director-General of the United Nations Office at Vienna and Head of the Centre for Social Development and Humanitarian Affairs and Co-ordinator for all United Nations drug control-related programmes.

This arrangement has the advantage of clustering together all important interrelated activities in the social field and enables the Organization to speak with a more coherent voice on major social issues. It is hoped that this approach will confer on all concerned parties new direction and vigour in their work in the field of disability.

When adopting the World Programme of Action, the General Assembly also proclaimed the period 1983-1992 as the United Nations Decade of Disabled Persons. The Decade provides essentially a time-frame for Governments to commit themselves to intensify their efforts to improve the living conditions of their disabled citizens. Monitoring and evaluation are carried out at periodic intervals at international and regional levels, as well as at the national level, in order to assess the situation of disabled persons and to measure developments in this field.

In its capacity as the focal point within the United Nations system for global disability programmes and activities, the United Nations Office at Vienna, Centre for Social Development and Humanitarian Affairs, convened in Stockholm in August 1987 the Global Meeting of Experts; most of the participants were disabled persons. The purpose of the Meeting was to prepare a report that would enable the Secretary-General to help the General Assembly at its forty-second session to evaluate the implementation of the World Programme of Action at the mid-point of the United Nations Decade of Disabled Persons. For the first time in the history of the United Nations, a precedent-setting decision was taken to make the documentation of the meeting available in Braille and audio-cassette form; sign language interpretation was also provided. It is therefore gratifying to see that the documentation of the present Conference is also available in formats accessible to disabled participants. It is hoped that these facilities can be further improved inside as well as outside the United Nations system, even in these days of constrained resources. The United Nations considers sign language interpretation and its teaching, as well as the use of Braille and easy access to barrier-free buildings, as part of the basic rights of disabled persons.

Following its review of the global situation of disabled persons, the Global Meeting of Experts adopted a report which outlines recommendations for further implementation of the World Programme of Action during the second half of the Decade of Disabled Persons. The report recognized the fact that the opportunities offered by the Decade of Disabled Persons to stimulate global implementation of the World Programme of Action had not been fully exploited. It noted that little progress had been made throughout the world, especially in the least developed countries where disabled persons are doubly disadvantaged by given economic and social conditions, and that the situation of many disabled persons may indeed have deteriorated during the first half of the Decade.
In today's world many Governments are deeply preoccupied with financial restraints and economic restructuring. The flow of resources to developing countries has decreased. Important regions of the world are facing hunger, malnutrition, endemic diseases, natural and man-made disasters. These factors, as well as wars and conflicts in different parts of the world, multiply the number of disabled persons. In many countries of the developing world, the heavy burden of foreign debts has a negative impact, especially on the underprivileged and the deprived. The number of impoverished families is on the increase. All this clearly indicates that disability policy should increasingly form an integral part of overall socio-economic development.

Progress in realizing the high hopes engendered during the International Year of Disabled Persons has evidently not been at the desired pace. The results of the mid-Decade review reflected the gap between the just aspirations of disabled persons and their realization. However, before reflecting on the negative aspects, it is essential to take stock of the achievements. The creation of a global consensus in the area of disability has been a significant step forward. The World Programme of Action concerning Disabled Persons embodies this consensus. It reflects some of the most critical components of the normative framework which the United Nations has been formulating. The quest for equality of opportunities and the inalienable right of participation are two of the core values emphasized in the World Programme of Action. These values are critical for disabled persons.

The extraordinary progress made in science and technology and the breakthroughs in electronics have opened marvellous opportunities for disabled persons, especially for prevention of disability and rehabilitation. The World Programme of Action directs attention to the fact that the technology which will prevent or control most disablement is available and is improving. The remarkable recent progress in biomedical research promises revolutionary new tools which could greatly strengthen all interventions. Both basic and applied research deserve our support in the coming years.

Knowledge about the problems and needs of disabled persons has increased considerably. Numerous strategies are being formulated and innovative approaches are being considered. New mechanisms for making them accessible for those in need are gaining strength daily. Required at the present is a common platform, firm political will and commitment backed by the necessary technique and the proper use of meagre resources. Some of the numerous ideas which have emerged as a result of the mid-Decade review include the following (to name but a few):

1. Solution to problems related to the basic needs of disabled persons should be found in an integrated perspective, embracing both economic development and social progress.

2. Policies, plans and programmes should be taken up by the disabled persons themselves.
3. The situation of disabled persons cannot be improved solely by strategies and policies, but also requires action-oriented programmes and projects aimed at the grass-root level and well co-ordinated nationally, regionally and internationally.

4. Concerted efforts are required to protect and preserve the rights of disabled persons and to create an environment conducive to equalization of opportunities.

In defining the agenda for future action and taking into account foreseeable economic situations and global social trends, the General Assembly at its forty-third session adopted resolution 43/98 of 8 December 1988 on the implementation of the World Programme of Action concerning Disabled Persons and the United Nations Decade of Disabled Persons. In this resolution, the Assembly recommended priorities for global activities and programmes during the second half of the United Nations Decade of Disabled Persons. For Member States, which have the main responsibility for the implementation of the World Programme of Action, suggested priorities outlined in the annex to the resolution are as follows:

"(a) To develop and implement national plans of action, using a multisectoral, interdisciplinary approach in consultation with organizations of disabled persons;

"(b) To promote the development and functioning of organizations of disabled persons by providing technical and financial support;

"(c) To establish and/or strengthen national committees or similar co-ordinating bodies;

"(d) To launch a public information and education campaign in which disabled persons are portrayed as equal members of society;

"(e) To support cultural activities to promote awareness of the United Nations Decade of Disabled Persons by giving disabled people the opportunity to participate in musical, artistic and drama activities;

"(f) To review, update and, where necessary, improve national legislation to ensure general conformity with international standards;

"(g) To consider ... (including) in ... legislation and planning the rights of ... disabled (persons), including those of persons who are:

"(i) Hearing-impaired, including the right to have sign language (accepted as their official language), and to have sign language interpretation;

"(ii) Visually-impaired, including access to Braille material, audio aids and large print information;
"(iii) Mentally-impaired, including access to easy reading materials;

"(iv) Speech-impaired, including access to new technologies;

"(h) To formulate and implement disability-related projects for inclusion in technical co-operation programmes financed by the United Nations Development Programme through the country programmes funded by the indicative planning figures;

"(i) To review and extend services and benefits available to disabled people and their families, aimed at ensuring basic level income maintenance and promoting self-directed personal assistance, housing, transport and other facilities needed for independent living;

"(j) To train personnel, including disabled persons, to build a national capability to deal with disability;

"(k) To establish machinery for appropriate data collection on disabilities, to be used in national planning;

"(l) To use indigenous raw materials, scientific expertise and production facilities for the manufacture and local repair of appropriate technical aids and appliances needed by disabled persons;

"(m) To accede to and implement the provisions of the Nairobi Protocol to the Florence Agreement concerning the duty-free international movement of equipment and material needed to assist the daily living of disabled people;

"(n) To ratify, if they have not yet done so, International Labour Organisation Convention No. 159 of 1983 on Vocational Rehabilitation and Employment of Disabled Persons;

"(o) To support research into the special needs of disabled persons and into programmes to benefit them and their families;

"(p) To develop services and facilities to promote the rehabilitation and equalization of opportunities of disabled women, elderly disabled persons, disabled refugees and disabled migrants.

"... Intergovernmental organizations are urged to give priority to issues concerning disabled persons and to take (the) initiatives ... (in implementing) the World Programme of Action."

Non-governmental organizations are urged to do the following:

"(a) To establish regular and systematic contacts with the United Nations system and other non-governmental organizations in collecting and disseminating information and research findings, planning activities and sharing innovative experiences and in maximizing the use of available resources;
"(b) To mobilize their networks and resources to publicize the aims and objectives of the United Nations Decade of Disabled Persons;

"(c) To provide regular information on their activities and meetings to the Disabled Persons Unit of the Centre for Social Development and Humanitarian Affairs of the Secretariat and actively to support its activities."

The outcome of this Conference on the Capabilities and Needs of Disabled Persons in the ESCWA Region will be valuable in orientating the Governments of the Western Asia region in their implementation of the above priorities and programmes during the second half of the Decade. Of vital importance for the new role on social policy and development assigned to the United Nations Office at Vienna is for this Conference to reflect on ways and means of integrating the problems and needs of disabled persons into the national development policies in the Western Asia region. One cannot fail to mention the collaboration with the Arab Gulf Fund for United Nations Development Organizations (AGFUND), which has been essential in addressing some salient problems and needs of disabled persons. AGFUND support for United Nations activities has been tangibly demonstrated in a number of significant financial contributions to the Voluntary Fund for the United Nations Decade of Disabled Persons for selected field projects. By way of example, co-financing arrangements were effected for six disability-related projects in the following developing countries: Djibouti, India, Lebanon, Swaziland, Tunisia and Uruguay. In addition, the Administrative Committee of AGFUND approved co-financing grants for disability-related projects in Jordan, Lebanon and Mauritania.

Following a request by the General Assembly at its forty-third session, the Secretary-General will conduct a feasibility study on the substantive, financial and administrative implications of alternative ways to mark the end of the United Nations Decade of Disabled Persons in 1992. The study, which will be submitted to the General Assembly at its forty-fifth session, will include a review of the global progress achieved and obstacles encountered during the Decade. It will also provide a mechanism for establishing the actions needed until the year 2000 and beyond. It is anticipated that regional meetings will be organized in connection with this activity. A regional meeting on this subject in the Western Asia region will be required in view of the success of a comparable technical meeting held in Kuwait in connection with the 1981 International Year of Disabled Persons.

The General Assembly has given clear guidelines for priority activities and programmes devoted to the problems and needs of disabled persons. The guidelines should also help in the effort to revitalize the Decade for effective implementation of the World Programme of Action. In this regard, a comprehensive and well-co-ordinated information and education campaign in conjunction with the Decade is needed at the national as well as regional and international levels. Such activity could have significant impact on the success of the Decade in raising awareness of the problems and needs of
disabled persons. Pragmatic and dynamic approaches are needed to raise funds and mobilize human resources where most needed in the disability field.

Furthermore, the need for assistance in policy formulation and in building structures for disability-related issues has been well identified and recognized. This calls for effective measures to strengthen the technical co-operation programmes and activities which have not been effectively carried out up to now for lack of resources. The practicability of organizing small-scale technical meetings before the end of the Decade - dealing with areas such as "prevention", "rehabilitation", "equalization of opportunities" as well as "human rights" - must seriously be considered in order to identify solutions to the problems and needs of disabled persons.
IV. IMPLEMENTATION OF THE WORLD PROGRAMME OF ACTION CONCERNING DISABLED PERSONS: A PROFILE OF THE ESCWA REGION*

* This document draws heavily upon a report submitted by Mr. Satish Arora, which was extensively revised by the ESCWA secretariat.
Background

The World Programme of Action concerning Disabled Persons states in paragraph 201 thereof\(^1\) that it is necessary to review periodically the implementation of the Programme of Action. The United Nations Centre for Social Development and Humanitarian Affairs (CSHDA) prepared a questionnaire which was circulated to all Member States and to which 82 responded, including nine countries for the ESCWA region (Bahrain, Democratic Yemen, Egypt, Iraq, Jordan, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic).

The profile which follows is based primarily on replies from the nine Member States in the ESCWA region.

The analysis attempts to examine, from the perspective of the Governments, the extent to which there has been progress in achieving the goals of the World Programme of Action in the region. It also attempts to analyse the existing trends and to examine how desirable trends may be accelerated. Responses would be considered as indicative of the areas that demand special attention and action. Furthermore, they give an indication of how the new emerging models and concepts have been received and translated into action in the region.

I. NATIONAL POLICY-MAKING: COMMITMENTS, STRUCTURES AND STRATEGIES

The World Programme of Action stresses in chapter I thereof that "the ultimate responsibility for remedying the conditions that lead to impairment and for dealing with the consequences of disability rests with Governments". The first chapter of this paper examines indicators of commitment of countries; structures which have been established to deal with disability issues; and strategies which tend to guide the implementation of disability programmes.

A. Commitment

1. Statements of commitment

Regardless of their level of generality, statements of commitment serve as prerequisites for the establishment and administration of policy: they imply both authority and direction all the way to eventual implementation.

Five countries in the ESCWA region issued political statements of commitment in favour of the prevention of disability, rehabilitation and equalization of opportunities for disabled persons: Democratic Yemen, Egypt, Iraq, Saudi Arabia and the Syrian Arab Republic. Four countries of the ESCWA region - Bahrain, Jordan, Kuwait and Oman - reported that such statements are under preparation.

The statements of commitment of all five countries are contained in legislative measures: Saudi Arabia passed such a measure in 1934; Democratic Yemen in 1978 and the Syrian Arab Republic in 1985. In addition, Iraq and the Syrian Arab Republic have clauses in their Constitutions which express such commitment. Iraq drew up such a clause in 1980.

2. Policy

Although five responding countries have issued statements of commitment on disability, only two - Iraq and Saudi Arabia - reported that they have adopted a plan and comprehensive policy with regard to disability issues. Four others have such a plan or policy under consideration: Bahrain, Democratic Yemen, Kuwait and Oman.

B. National policy-making structures

Commitment requires governmental machinery to translate aspirations into action. For this purpose, the World Programme of Action suggested that a special co-ordinating mechanism should be established as a focal point to look into and follow up the activities related to the World Programme of Action.
1. Functions

Except for Kuwait, all the responding countries of the region have made some arrangements for the co-ordination of activities concerned with disability issues. A special body for this purpose (e.g. a national commission or committee, secretariat or commissariat) exists in Bahrain, Egypt, Iraq, Jordan, Oman, Saudi Arabia and the Syrian Arab Republic. In Democratic Yemen, co-ordinating functions are carried out by the Public Administration for Local Affairs.

Three countries report that co-ordinating functions are carried out by existing government ministries. In Bahrain, it is the Ministry of Labour and Social Affairs. In Iraq, co-ordinating functions are carried out by the Ministry of Labour and Social Affairs, the Public Institution for Social Welfare, and the Department of Welfare for Disabled Persons. Oman reports that eight ministries carry out co-ordinating functions including the Ministry of Social Affairs and Labour and the Ministry of Health.

Functions of national co-ordinating bodies. Regarding the functions of national co-ordinating bodies, seven out of the eight countries with national co-ordinating bodies report that their committees performed policy co-ordination functions: Bahrain, Democratic Yemen, Egypt, Jordan, Oman, Saudi Arabia, and the Syrian Arab Republic. Six of the eight national committees perform planning functions (Bahrain, Democratic Yemen, Egypt, Jordan, Oman, and the Syrian Arab Republic). Executive, research and training functions are each carried out by national committees in five countries of the region. The national committees of three countries also carry out dissemination of information (Bahrain, Jordan and Saudi Arabia).

Egypt and the Syrian Arab Republic both report on additional functions performed by the national committees in their countries. In addition to planning and policy co-ordination, the Supreme Council on Rehabilitation in Egypt is responsible for "rehabilitation, employment and promoting the use of international and local experiences to that end, and the planning of rehabilitation projects for disabled persons". The national co-ordinating bodies in Oman not only foster co-ordination among Ministries concerned with the affairs of the handicapped, but also review services and programmes relating to disability. The Syrian Arab Republic reports that its national co-ordinating body, in addition to executive, planning and policy co-ordinating functions, also has the function of supervising the implementation of welfare programmes for disabled persons and their follow-up and evaluation.

Sometimes the functions of national committees are carried out through sub-committees. For instance, Bahrain, whose national committee was established in 1984, has four sub-committees: a sub-committee on the study of the situation of disabled; a sub-committee on co-ordination services; a sub-committee on information; and a financial sub-committee.
With regard to the frequency with which national co-ordinating committees meet, Iraq and Bahrain reported that their committees meet regularly. Bahrain specified that its committee meets once a month. The other six countries with national committees – Democratic Yemen, Egypt, Jordan, Oman, Saudi Arabia and the Syrian Arab Republic – all reported that their committees meet "occasionally".

Five countries reported that disabled persons' organizations were represented on their co-ordinating bodies: Bahrain, Democratic Yemen, Iraq, Saudi Arabia and the Syrian Arab Republic.

2. Finances

Allocations for disability issues are made exclusively as a separate budgetary item by Saudi Arabia. Iraq and the Syrian Arab Republic make such allocations not only as separate budget items, but as items integrated within sectoral budgets as well. All budgetary allocations for disability issues are integrated within the sectoral budgets of Democratic Yemen, Egypt, Kuwait and Oman.

C. Strategies

Two overall strategies – integration and decentralization – would appear to guide the implementation of policies in the area of disability. One particular aspect of the strategy of integration relates to the administration of programmes and policies which focus on disability issues. Policies concerning disabled persons should be formulated within major offices and branches of the Government.

1. Integration

It is felt that in order to treat disabled persons in an integrated way, and not to single them out as a group, governmental programmes relating to their needs and welfare should be integrated with programmes relating to the welfare of the population as a whole.

Regardless of whether or not there is a national co-ordinating body for dealing with the concerns of disabled persons, all responding States of the region have at least two major government offices which formulate policies concerning disabled persons. Social affairs, health and labour offices are mentioned by most of the responding countries. Five countries also mention Departments of Education and Social Security/Social Welfare: Bahrain, Iraq, Kuwait, Oman and Saudi Arabia. Policies concerning disabled persons are formulated in the President's or Prime Minister's Office of Iraq and Jordan; they are formulated in the Office of Statistics in Bahrain and Oman. Oman also mentions Offices of Housing and of Public Information.
2. Decentralization

Until a few year ago, the best care for disabled persons was thought to be through highly specialized institutions. Recently, this strategy has begun to shift, with special emphasis on integration based on decentralization using a community-based approach.

Five responding countries of the region reported that their Governments had adopted a clear policy on the involvement of regional and local authorities in the responsibility of promoting services for disabled persons at the community level: Egypt, Jordan, Oman, Democratic Yemen and the Syrian Arab Republic. The Syrian Arab Republic adopted such a policy as early as 1971, Egypt in 1978 and Oman in 1981.

Three countries have a policy on the involvement of regional and local authorities under consideration: Bahrain, Kuwait and Saudi Arabia.

Seven out of the nine responding countries have established committees, sub-committees or similar bodies concerned with the co-ordination of disability issues at the local level: Bahrain, Democratic Yemen, Egypt, Iraq, Kuwait, Oman, and Saudi Arabia. This is regardless of the fact that four of these countries have yet to adopt a policy on the involvement of local authorities. Kuwait has established committees at the local level, despite the fact that it does not report having a co-ordinating committee at the national level.

There are disabled persons' organizations represented in the local bodies of five of the seven countries which have them: Bahrain, Democratic Yemen, Iraq, Kuwait and Saudi Arabia.

3. Representation of disabled persons' organizations

Cutting across both the strategies of integration and decentralization is the idea that disabled persons should, as far as possible, participate in the decision-making which affects their lives.

The World Programme of Action noted in paragraph 90(k) thereof, that, in order for its provisions to be implemented, it was necessary for Member States "to facilitate the participation of disabled persons and their organizations in decisions related to the World Programme of Action". Almost all the responding countries of the ESCWA region have taken steps in this direction.

For instance, organizations of disabled persons are represented on co-ordinating committees at both the national and local/regional levels in Bahrain, Democratic Yemen, Iraq and Saudi Arabia. The Syrian Arab Republic, with a co-ordinating committee at the national level only, and Kuwait, with co-ordinating committees at the local/regional level only both report that disabled persons' organizations are represented in these respective bodies.
The World Programme of Action suggested in paragraph 93 thereof, that, in particular,

"Member States should establish direct contacts with such organizations and provide channels for them to influence government policies and decisions in all areas that concern them. Member States should give the necessary financial support to organizations of disabled persons for this purpose."

All responding countries of the region, except Egypt, report that their Governments provide financial support to organizations composed of disabled persons.

Five countries have provided names of organizations in their country which are composed of disabled persons or represent disabled persons: Bahrain, Democratic Yemen, Jordan, Kuwait and the Syrian Arab Republic. Organizations of or for the blind exist in all countries that provided information. Jordan, Kuwait and the Syrian Arab Republic report that they have organizations for the deaf. Organizations for the disabled in general are reported by Bahrain, Jordan and Kuwait. In addition to associations of blind persons and deaf persons, the Syrian Arab Republic reports that it also has organizations of deaf and mute persons, an association of those suffering from cerebral palsy and a society for physically handicapped children.

The same five countries that provided lists of disabled persons' organizations also gave information about the activities in which these organizations were involved. All of them, for instance, reported that these organizations are involved in providing counselling service on civil rights for disabled persons. Organizations of disabled persons in Bahrain, Democratic Yemen, Kuwait and the Syrian Arab Republic organize meetings, conferences, seminars, etc. In Bahrain, Democratic Yemen and Jordan these organizations participate in decision making through consultation with their Governments. They provide leadership training for members in Jordan and Kuwait. Kuwait reports that organizations of disabled persons participate in sports and social activities and programmes at the regional and international levels. Bahrain also reports that they organize cultural, social, sports and artistic events. In addition, Bahrain mentions that organizations of disabled persons are involved in promoting public awareness of the rights of the disabled and in assisting in changing negative attitudes of the disabled with regard to their own impairments. Democratic Yemen notes that disabled persons' organizations in that country are active in vocational rehabilitation and job placement service.

II. IMPLEMENTATION: AREAS OF ATTENTION

The governmental steps discussed in chapter I, i.e., the forming of statements of commitment and of policy to meet the needs of disabled persons and the establishment of machinery to operationalize and implement these ends, will remain only the external expression of political intent and concern,
unless specific measures directed at specific problems are adopted and implemented.

The World Programme of Action has suggested that the needs of disabled persons be considered under major headings: prevention, rehabilitation and equalization of opportunities.

A. Prevention and health care

1. Causes of disability

In order both to comprehend and deal with the problem of prevention of disability, it is necessary first to ascertain its causes, prevalence and incidences.

Egypt, Bahrain, Iraq, Jordan, Kuwait, the Syrian Arab Republic and the United Arab Emirates included questions on disability in their national population censuses. In addition, Lebanon, Egypt and Jordan have undertaken series of special surveys on characteristics of disabled persons.

While much of the information which has been collected documents the impairment and disability status of the population by age groups, sex and urban/rural residence, several countries have also collected information assessing the equalization of opportunities and describing the disability experience. For example, the Syrian Arab Republic, Egypt, Kuwait, Bahrain and Jordan have collected data on educational attainment and economic activity of disabled persons. Bahrain’s 1981 census includes information on causes of impairments by impairment and disability status, age group and sex.

The United Nations Department of International Economic and Social Affairs and the Statistical Office and Centre for Social Development and Humanitarian Affairs issued a report1 based on an ESCWA contribution2 which used an overall review of data collection in the countries of the region and summed up the situation with a series of observations, reporting that:

(a) Most of the data are not completely accurate;

(b) There are disparities between the basic patterns of disability in the countries of the region;


(c) There is a correlation between the social conditions facing a society and the pattern of disability in that society, such as a high prevalence of physically disabled and disfigured persons as well as mentally retarded persons in Lebanon as a result of continuous armed conflicts and the practice of kinship marriage;

(d) There is a distinct disparity between the actual size of the disability problem, and the capacity of care and rehabilitation institutions to handle this problem;

(e) There is a general lack of research and studies concerning the nature and extent of disability in the ESCWA region.

B. Basic rehabilitation services

The concept of rehabilitation differs fundamentally from that of prevention. Prevention focuses on the causes; rehabilitation focuses on those who already suffer from an impairment which prevents performance of functions normal for others of comparable biological age.

1. Community services

According to the recommendations of the World Programme of Action, rehabilitation should take place in the natural environment, supported by community-based services and specialized institutions.

The programmes of all the responding countries of the region reflect a response to this recommendation. They all state that they have adopted a strategy of providing basic community-level health services to the general population; disability prevention and rehabilitation constitute an integral part of all of these community-based services.

Regarding the agencies which provide services for disabled persons within the country, all responding countries mention the central government; Iraq mentions this entity alone. Egypt and the Syrian Arab Republic mention local government as well.

Non-governmental organizations, voluntary organizations and/or private agencies are mentioned by Bahrain, Egypt, Jordan and the Syrian Arab Republic.

In all countries where more than one type of agency provides community-based services, arrangements have been made to promote co-operation between them. Financial assistance has been the most common measure: it is given by five of the responding countries: Egypt, Jordan, Oman, Democratic Yemen and the Syrian Arab Republic. There is joint planning in Jordan, Oman, Saudi Arabia and the Syrian Arab Republic. Egypt, Jordan and Kuwait promote joint activities in the delivery of services. Bahrain, Oman and the Syrian Arab Republic carry out joint training programmes.
2. Referral services

As in the case of preventive health care, the most important aspects of community-based rehabilitation are the provisions by which those disabled persons who require services not available to them can be referred to more specialized assistance.

All the responding countries of the region not only provide basic community health services, but also, at least to a limited degree, state that they provide specialized rehabilitation services to which disabled persons can be referred. In five countries - Bahrain, Egypt, Iraq, Kuwait and Saudi Arabia - these referral services are generally available. In the other responding countries, they are available to a limited degree. For instance, in Jordan, Oman and the Syrian Arab Republic, these services are available in relation to rehabilitation and vocational training centres. The Syrian Arab Republic mentions that non-governmental organizations also provide these services.

There are various mechanisms which can provide the necessary links between the basic rehabilitation services and the specialized referral services for disabled persons. Oman, for instance, reports that "action is being taken and contacts and arrangements are going to be made in order to establish joint projects on specialized rehabilitation services". Iraq lists four types of institutions which perform this linkage function: the Disability Diagnosis Centre; medical committees throughout the country; rehabilitation institutes; and medical institutions specialized in rehabilitation.

Egypt describes the mechanisms which exist to link basic rehabilitation services and specialized referral services as follows: "There are specialized societies and authorities for taking care of certain groups of disabled persons (such as the deaf, the blind and the mentally retarded). The basic rehabilitation centres refer the disability cases which require the services of those specialized bodies".

In addition to the health sector, other sectors of all responding countries of the ESCWA region have adopted strategies to provide services to disabled persons at the community level. Eight of the nine responding countries report that their social services have such strategies: Bahrain, Democratic Yemen, Iraq, Jordan, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic. Strategies have been adopted by the educational services in seven of the countries: Egypt, Iraq, Jordan, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic. Similarly, strategies to meet the needs of disabled persons have also been adopted by the community development programmes in Kuwait, Oman and the Syrian Arab Republic.

3. Categories of disability covered by rehabilitation services

Rehabilitation programmes, regardless of how extensively they may cover a country geographically, may restrict their coverage to only specific categories of disabled persons.
Basic rehabilitation services in all responding countries of the region cover the visually impaired, the hearing impaired, and the mentally retarded. Basic rehabilitation services of all countries except Democratic Yemen cover the physically disabled. The mentally ill are covered by these services in Iraq, Kuwait, Oman and Saudi Arabia. Those with multiple disabilities are covered by basic services in Bahrain, Egypt, Kuwait and Saudi Arabia. As in the case of its vocational training services, Egypt provides basic rehabilitation services to those suffering from leprosy, tuberculosis, and cardiac impairment as a result of rheumatic fever.

C. Equality of opportunity

1. Civil rights legislation

The World Programme of Action pointed out in paragraph 110 thereof that

"in drafting national human rights legislation ... particular attention should be given to conditions which may adversely affect the ability of disabled persons to exercise the rights and freedoms guaranteed to their fellow citizens."

The national legislation of all the responding countries, except Jordan, guarantees that disabled persons enjoy the same rights and freedom as their fellow citizens. In addition, seven of the nine responding countries have passed specific legislation to protect disabled persons whose disabilities may impede the exercise of their civil rights: Bahrain, Egypt, Iraq, Oman, Democratic Yemen, Saudi Arabia and the Syrian Arab Republic.

2. Equal opportunity to work

(a) Vocational training

One of the most important fields for facilitating the employment of disabled persons is that of vocational training.

Most responding countries of the region provide in some way for the special needs of disabled persons in order to prepare them for gainful employment. Pre-vocational training, for instance, prepares a disabled person for work but is more general in character than vocational training. Five countries - Bahrain, Democratic Yemen, Iraq, Kuwait and Oman - report that disabled youth are able to participate in pre-vocational training programmes provided for youth in general. These same five countries, as well as Egypt, also report that disabled persons are able to participate in vocational training schemes provided for the general population.

In addition, there are vocational training and rehabilitation schemes specially designed for disabled persons. All responding countries of the region have such programmes, except for Oman, which is currently developing them.
(b) Types of disabilities covered by vocational training

Various categories of disability are covered by the vocational training programmes in urban areas. Vocational training and rehabilitation schemes in all countries except Egypt, for instance, include the visually impaired, the hearing impaired, and the mentally retarded. The schemes in all countries except Egypt and Democratic Yemen cover the physically disabled. Iraq and Saudi Arabia cover the mentally ill (psychologically impaired) in their training schemes; these same two countries, plus Bahrain, cover the multiply disabled as well. As mentioned above, Egypt reports that it has vocational training schemes for those suffering from leprosy, tuberculosis and heart rheumatism.

In rural areas, on the other hand, only Egypt and Jordan have special vocational training schemes for disabled persons aimed at creating employment. Egypt, for instance, reports that rehabilitation services are available throughout the country, and they provide appropriate training programmes to meet the needs of the local labour market (whether agricultural or industrial). The programmes focus on job placement in competitive open industry upon completion of the training. While only two responding countries report that such schemes are operative in the rural areas, six countries are considering the extension of such a scheme to rural areas as well: Bahrain, Democratic Yemen, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic.

(c) Incentives to employers

Even with the best of vocational training, there is no guarantee of an opportunity to earn a living, especially when the levels of unemployment are high for everyone. Various types of material incentives could be effective in facilitating the employment of disabled persons.

Six responding countries have adopted specific measures to promote the employment of disabled persons in the public sector: Democratic Yemen, Iraq, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic. Five countries have implemented measures to promote employment opportunities for disabled persons in the private and co-operative sectors: Democratic Yemen, Egypt, Iraq, Oman and Saudi Arabia. Such measures are being considered by Kuwait. In particular, Iraq, Oman and Democratic Yemen state they provide financial as well as technical assistance for job adaptation and transport and technical aids for disabled employees. Iraq and Democratic Yemen also give technical assistance for enterprises, co-operatives and self-employment, providing special incentives to enterprises, such as subsidies, tax concessions and exclusive contracts as well as quota schemes. Iraq, Oman and Saudi Arabia give loans or grants to enterprises, co-operatives and/or the self-employed. In Egypt there is a measure which states that in plants with 100 workers or more at least 5 per cent of them should be disabled persons.
(d) Sheltered employment

The World Programme of Action has emphasized the need for integration of disabled persons in all aspects of life, not the least of which is the workplace, where a large part of the time of an individual is spent. This, however, is not always either possible or appropriate.

Providing some form of sheltered employment to disabled persons is another way in which such persons can be gainfully employed. Such employment is designed for those disabled persons unable to be employed in the competitive open market. The demands on productivity and efficiency are reduced in comparison with employment opportunities generally available.

Five countries in the region have passed measures in this area. Iraq, Oman and Democratic Yemen give technical and financial assistance to enterprises which create "enclaves", i.e., small groups of severely disabled people employed in sheltered conditions within competitive industry. Egypt and Iraq give technical and financial assistance to non-governmental organizations employing disabled persons in sheltered workshops. As of the midpoint of the Decade, Bahrain reported that there are to date only two sheltered training workshops in that country and that so far no sheltered production workshops had been established. Bahrain noted, however, that a sheltered training centre would be established in 1986. Oman too noted that a project to establish a sheltered training school was under preparation.

3. Income maintenance and social security

Despite all efforts at encouraging the employment of disabled persons - vocational training, incentives to employers, etc. - it is probably reasonable to assume that there will always be some proportion of disabled persons who will be unable to work, and therefore will have to be dependent on either family or the community.

A social security system - whether social insurance and/or social assistance - can compensate for income loss or extra expenses due to factors such as illness, unemployment and/or disability. Six of the responding countries of the region offer social security benefits which are universal in coverage; that is, they cover all citizens of the country. These countries include Bahrain, Iraq, Kuwait, Oman, Democratic Yemen and Saudi Arabia.

Three additional responding countries of the region offer benefits to only limited groups of the population. The Syrian Arab Republic, for instance, offers social security benefits to those covered by the Workers' Social Insurance Act and the State Insurance and Pensions Act. Egypt mentions the following groups to whom benefits are given: Sadat Pension for the Impoverished Elderly; and a social security system for orphans, widows and divorced women and the disabled children of divorced women. Jordan reports that its social security schemes have only limited coverage.
The social security schemes of seven responding countries provide a disability pension to meet the special needs of disabled persons and their families: Bahrain, Egypt, Iraq, Kuwait, Oman, Democratic Yemen and Saudi Arabia. All of these countries also provide other forms of assistance under their social security schemes. The next most common form of benefit is assistance to families of disabled persons: Bahrain, Egypt, Kuwait, Oman and Saudi Arabia all provide such assistance. Four countries provide rehabilitation benefits (Iraq, Kuwait, Oman and Saudi Arabia) and four provide assistance to institutions working for disabled persons (Democratic Yemen, Egypt, Kuwait and Saudi Arabia). The social security schemes of Bahrain, Oman, and Saudi Arabia also have provisions for in-kind benefits.

For those disabled persons who are unemployed or who cannot expect to find gainful employment, six countries provide pensions: Egypt, Iraq, Kuwait, Oman, Democratic Yemen and Saudi Arabia. Kuwait and Democratic Yemen, as well as the Syrian Arab Republic, also have schemes for providing such persons with lump sum payments. There are, moreover, other measures in effect which meet the needs of disabled persons who are unemployed or who cannot expect gainful employment. Iraq mentions a residential welfare institution for disabled persons, as well as provision for a family care salary. Bahrain reports that monthly financial assistance is given.

4. Physical and functional integration

The measures relate to the right of disabled persons to live as normally as others in the society. Accessibility is a key concept in this regard: accessibility to schools, to transport, to public buildings, to suitable homes, to cultural activities, to their own organizations.

(a) Schooling

The World Programme of Action stresses in paragraph 120 thereof that the "education of disabled persons should as far as possible take place in the general school system". At the pre-school level, three countries of the region report that disabled children attend regular pre-school activities and programmes: Iraq, Democratic Yemen and the Syrian Arab Republic.

The process of integration, however, especially at higher levels of the general educational system, requires, according to paragraph 123 of the World Plan of Action, "planning by all parties concerned". In this respect, a wide range of methods exist which enable disabled persons, according to their individual conditions, to participate in the general education system including primary, secondary and higher levels.

In fact, most of the responding countries of the region have taken at least some steps to facilitate the integration in the general education system. Four countries, for instance, have adopted flexible procedures: Bahrain, Iraq, Kuwait and Democratic Yemen. Four countries make allowance for an increase in admission age: Bahrain, Iraq, Oman and the Syrian Arab Republic.
Republic. Iraq also provides auxiliary teachers. Bahrain reports that it equips the schools with special facilities for disabled persons and provides them with educational aids.

While seven of the nine responding countries state that they have compulsory schooling for all children (Egypt, Iraq, Jordan, Kuwait, Democratic Yemen, Saudi Arabia and the Syrian Arab Republic), only Democratic Yemen reports that children with disabilities may not be excluded from regular schooling. Several responding countries list the categories of disabled children which are excluded from regular schooling. One category embraces intellectual and psychological disabilities: the mentally retarded and children with learning difficulties. Children falling into one or more groups within this category are mentioned by Jordan, Kuwait and Saudi Arabia. Kuwait specifies that it excludes only the "severely" mentally retarded. Saudi Arabia also excludes children who are blind, deaf and mute, and those suffering from cerebral palsy. Three countries exclude children with multiple disabilities: Iraq, Kuwait and the Syrian Arab Republic. Other categories of disability mentioned include neuropsychological, as reported by Iraq, and children suffering from a "severe handicap", as reported by the Syrian Arab Republic.

The authority responsible for the decision to exclude a disabled child from regular schooling differs from country to country. The school makes the decision in Jordan, Saudi Arabia and the Syrian Arab Republic; the Ministry of Education is the deciding authority in Egypt, Kuwait and Democratic Yemen. In Iraq, the decision is taken by the Disability Diagnosis Centre.

(b) Special education

While the World Programme of Action is clear about the need to integrate disabled children into the regular school system, it also states in paragraph 124 that "if, for some reasons, the facilities of the general school system are inadequate for some disabled children, schooling for these children should then be provided for an appropriate period of time in special facilities". In fact, regardless of type of policy of exclusion, every responding country of the region has special schools for disabled children. In six countries – Bahrain, Democratic Yemen, Egypt, Kuwait, Oman and Saudi Arabia – all such special schools are under the responsibility of the educational authorities. When these schools are not under the responsibility of the educational authorities – as is the case of some of the special schools in Iraq and the Syrian Arab Republic, and all of them in Jordan – there is co-operation with the educational authorities to maintain the standard of these special schools and to co-ordinate with the general school system.

Severely disabled persons, in particular the severely mentally retarded, the mentally ill, or persons with multiple disabilities, are the subject of special educational provisions in all responding countries of the region, except for Saudi Arabia and the Syrian Arab Republic; the latter reports that it plans projects for the establishment of a special educational institution for these categories of the disabled.
The types of provisions vary. Jordan, for instance, reports that several governmental and private centres provide such educational services; Oman mentions schools that have been opened by the Ministry of Education and Youth Affairs, including the School of Mental Education for the mentally handicapped. There are welfare and educational institutions in Iraq, and special programmes are offered. Kuwait too mentions special educational institutes funded by the Ministry of Education; in addition, there are classes attached to the Home for the Mentally Handicapped and the Home for the Care of the Disabled, under the Ministry of Social Affairs and Labour. At the local level in Kuwait, the Kuwaiti Society for the Care of the Disabled operates an educational training scheme.

There are special institutions for the care and education of the mentally retarded in Bahrain as well: a home for the care of severely mentally retarded children and those with cerebral palsy and a sheltered day-care centre for the rehabilitation of severely mentally retarded youth.

Democratic Yemen reports the establishment of a treatment sanatorium and the "Salam" Sanatorium. It also notes that disabled children are sent to other Arab countries which offer advanced treatment and rehabilitation institutions, especially Kuwait.

(c) Living at home

To live autonomously, not only within the community but also within one's own home, may be difficult for many disabled persons. Extra resources are required to finance specially needed technical equipment, or to adapt furnishings.

Bahrain, Iraq, Kuwait, Oman and Saudi Arabia have adopted measures or programmes to help disabled persons to live with autonomy in their own homes. In addition, Kuwait has a law on this subject "under consideration".

Various approaches to this problem have been used. In particular, Iraq and Oman provide public financing for housing without physical barriers for disabled persons. Oman also gives financial support for required adaptations of disabled persons' own homes. In Bahrain, the Ministry of Housing has a programme for giving the disabled priority for obtaining housing services, such as loans and lower-floor housing units. In Saudi Arabia, annual financial grants are given to the families of disabled persons to provide for their care at home.

(d) Equal access to public buildings

To live a normal life in one's own community entails equal access to community facilities.

Five countries have adopted regulations to promote accessibility to already existing public buildings: Bahrain, Iraq, Kuwait, Oman and Saudi
Arabia. All five have reported passing regulations regarding the installation of ramps. Bahrain, Iraq and Oman have also passed regulations regarding the installation of special sanitary facilities. Regulations regarding the installation of chair-lifts or elevators have been passed in Bahrain and Iraq, and regarding the widening of doorways in Iraq and Oman. Both Oman and Saudi Arabia specifically note that action is being taken to implement regulations in this area.

(e) **Transport**

Even if the best of services for disabled persons are provided, and in buildings which are physically accessible to them, these services are useless unless the disabled person is able to reach them. Special measures should be taken to ensure disabled persons' access to transport to school, work places, health services, etc.

All responding countries of the region report having taken special measures to ensure transport access for disabled persons to schools, work places, health services or social life in general. The most common form is assistance for purchasing and utilizing individual means of transportation. Six countries provide such assistance: Democratic Yemen, Egypt, Iraq, Jordan, Oman and the Syrian Arab Republic. In addition to such assistance, the Ministry of Economic Affairs of the Syrian Arab Republic has taken a favourable decision concerning the import of specially designed cars for disabled persons. Bahrain gives free training in automobile driving.

(f) **Social integration**

According to the World Programme of Action, disabled persons suffer from a handicap not because of a disability per se, but because society has not provided the conditions within which functioning is possible on an equal basis with others. Effective measures should be taken to facilitate the participation of disabled persons in sports and cultural activities.

All responding countries of the ESCWA region have taken some measures to facilitate the participation of disabled persons in sports activities. All, except the Syrian Arab Republic, provide support for sports events for disabled persons. Bahrain, Egypt, Iraq, Jordan, Oman and the Syrian Arab Republic recognize and give support to sports associations for disabled persons. Bahrain, Iraq, Kuwait and Oman also have taken measures to ensure accessibility to buildings such as public sports halls and to swimming pools.

Bahrain provided a number of details with respect to its efforts in the area of sports; the country provides sports training to disabled persons and encourages organizations for the disabled to participate in international sports events. Bahrain also organizes sports training camps. It has promoted sports for disabled persons in the Gulf States, including the establishment of the Arab Federation of Sports for the Disabled.
Seven countries of the region have taken measures to facilitate participation of disabled persons in cultural activities. The most common measure has been the provision of communication aids, e.g. technical aids or sign language for hearing-impaired persons and/or Braille literature or cassettes for disabled persons. The seven responding countries which have provided such aids include Bahrain, Democratic Yemen, Egypt, Iraq, Kuwait, Oman and the Syrian Arab Republic. Bahrain, Iraq and Kuwait have also taken measures to make buildings such as libraries, theatres, and movie theatres more physically accessible. In addition, Iraq and Kuwait have given financial support to improve accessibility for disabled persons in cultural settings.

III. SOURCES OF SUPPORT

A. Sources of support

All the eight responding countries in the ESCWA region, except Kuwait, reported that they received support through international co-operation.

For the most part, support was channelled through various agencies of the United Nations. Five of the recipients received aid through such sources: Bahrain, Jordan, Oman, Saudi Arabia and the Syrian Arab Republic. Egypt and Democratic Yemen reported they received bilateral assistance; Egypt received aid from the Netherlands and the United States and Democratic Yemen from Kuwait, the United Arab Emirates and the German Democratic Republic. The Syrian Arab Republic reported it had received support from a non-governmental organization: Equality Society in Paris.

B. Areas of attention

Of the seven countries which received support through international co-operation, four (Bahrain, Jordan, Oman and the Syrian Arab Republic) reported having received such support in the area of employment. All four countries mentioned the area of skill development. Jordan and the Syrian Arab Republic mentioned the area of employment promotion and planning and the Syrian Arab Republic mentioned the area of conditions of employment.

Jordan, Oman and the Syrian Arab Republic received support in the areas of disease prevention and control, as well as comprehensive health services. Oman and the Syrian Arab Republic received support in the area of environmental health, Jordan and the Syrian Arab Republic in the area of family planning.

Two countries received support for education: Bahrain, for its educational system, and Jordan for non-formal education. Jordan and the Syrian Arab Republic also received support in the areas of general development issues, policy and planning as well as for protection of and assistance to refugees and displaced persons. Three countries received support for the advancement of women: Jordan, Oman and the Syrian Arab Republic.
Crime prevention and drug abuse received support in the Syrian Arab Republic. The areas of welfare and social security as well as communications and mass media received support in Oman. Saudi Arabia received support for the development and transfer of technology.

C. High priority areas

Regarding areas for future technical co-operation programmes, "training" was rated "high priority" by more countries of the region than any other area. All responding countries of the region rated it as high priority except for Egypt and the Syrian Arab Republic, which identified no high priority area. The Syrian Arab Republic assigned this area some priority.

Six countries gave high priority to two additional programme areas: development of national disability programmes and vocational rehabilitation. Bahrain, Iraq, Jordan and Kuwait gave both areas high priority. Democratic Yemen also gave high priority to the former; and Saudi Arabia to the latter.

Health, including medical rehabilitation and mental health, and community-based rehabilitation received high priority in five countries. Bahrain, Iraq, Kuwait, Oman and Saudi Arabia gave their high priority to health. Bahrain, Iraq, Jordan, Kuwait and Oman give high priority to community-based rehabilitation.

Research and public information also received high priority ratings from five responding countries. They include Bahrain, Iraq, Jordan, Oman and Saudi Arabia. These same countries also give high priority to monitoring and evaluation of policies concerned with disability and/or data collection and analysis.

The area of disability prevention received a rating of high priority from Bahrain, Iraq, Oman and Saudi Arabia. Four countries also give high priority ratings to technical aids: Bahrain, Iraq, Jordan and Saudi Arabia.

Other areas where high priority was indicated for future technical co-operation programmes include support to organizations of disabled persons (Bahrain, Democratic Yemen and Oman); education (Bahrain, Iraq, and Oman); and accessibility (Bahrain, Jordan, and Saudi Arabia).

D. Evaluation of the contribution of technical co-operation

Five of the recipients of support evaluated the contribution of technical co-operation to implement the World Programme of Action concerning Disabled Persons. On an ascending scale of 1 to 5, the Syrian Arab Republic, Oman and Bahrain all selected the highest rank of "5", thereby attributing to technical co-operation a value of "very important". Saudi Arabia ranked it "3", and Jordan "2". Egypt and the Democratic Yemen did not provide a ranking.
IV. THE ROLE OF THE UNITED NATIONS

In question 91 of the questionnaire, countries were asked for their views on the ways in which the United Nations system could best assist them in implementing the goals and objectives of the World Programme of Action.

Eight countries provided answers: Egypt, Oman, Iraq, Democratic Yemen, Jordan, Bahrain, the Syrian Arab Republic and Saudi Arabia.

Highest on the list of suggestions given by the eight Member States is the provision of the services of experts of various kinds to facilitate the formulation and implementation of policies and goals in the area of disability.

Research on the causes and prevalence of impairments, of the extent and nature of disability-related problems and of socio-economic consequences are second highest priority on the list of suggestions provided by Member States.

Thirdly, Member States suggest that the United Nations could help in the area of training.

The responding countries endorsed the idea of the United Nations facilitating international co-operation in the implementation of the World Programme of Action concerning Disabled Persons. They also suggested that the United Nations could help in the promotion of regional co-operation in the field of disability.

VI. MAJOR FINDINGS

The following summarizes the main findings that have emerged from the analysis of responses.

The World Programme of Action emphasized, in chapter III, section B, subsection 7, that information about the rights, contributions and needs of disabled persons should reach all concerned, including the general public. All the responding countries of the region have reported that actions have been taken to comply with this suggestion.

For instance, all responding countries of the region have promoted the formulation of programmes on disability prevention and rehabilitation. Six countries have had programmes about legal rights and services for disabled persons: Egypt, Iraq, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic. Six have also had programmes about the availability of technical aids and similar facilities: Egypt, Iraq, Jordan, Kuwait, Saudi Arabia and the Syrian Arab Republic.

In addition, Iraq, Kuwait, Oman, Saudi Arabia and the Syrian Arab Republic have had public information programmes aimed at changing attitudes. Iraq, Saudi Arabia and the Syrian Arab Republic have also had programmes about the equalization of opportunities.
All responding countries of the region are engaged in some form of research on disability. Government departments are doing such research in all the responding countries except Saudi Arabia, where universities undertake research on disability. Egypt, Iraq, Jordan, Oman and the Syrian Arab Republic also report that research is carried out by universities. Non-governmental organizations sponsor research on disability issues in Bahrain, Egypt, Iraq, Jordan and the Syrian Arab Republic.

Regarding specific topics of research, and the agencies undertaking the research, five countries of the region provided information. The most frequent topic mentioned was research on causes, types and incidences of disability. Jordan, Kuwait, Democratic Yemen and the Syrian Arab Republic all reported that they have undertaken research in this area. Kuwait and Democratic Yemen report that research is being carried out on the socio-economic situation of disabled persons. Jordan and the Syrian Arab Republic report research on the collection and development of disability statistics and indicators. In addition, the Syrian Arab Republic reports research on definitions and concepts relating to disability, and on special education issues.

Egypt has specified two topics on which research is being undertaken: assessment of rehabilitation services for disabled persons and identification of the factors that limit the chances of disabled persons to find employment.

All responding countries of the region have units within the Government which are responsible for monitoring and evaluating implementation of the national programmes related to disability. All, except Iraq, also have units which monitor and evaluate the implementation of the World Programme of Action concerning Disabled Persons at the national level.
1. "Implementation of the World Programme of Action concerning Disabled Persons: a profile of the ESCWA region." The draft was prepared by a consultant, Professor Satish Arora.


V. THE REALISTIC APPROACH OF THE WORLD HEALTH ORGANIZATION TO DISABILITY PREVENTION AND MANAGEMENT THROUGH COMMUNITY-BASED REHABILITATION
1. Overview of the problems related to disability and rehabilitation and approaches of the World Health Organization (WHO)

1.1 Number of disabled and number of people needing rehabilitation

Several large-scale surveys from industrialized countries indicate a disability rate affecting about 10 per cent of the population. In developing countries, some 100 studies (surveys, censuses, etc.) have been made. Comparing the outcome of these studies is difficult because different methods have been used. It would, however, be reasonable to assume that 5 to 7 per cent of the population in developing countries - or some 220 million people - are disabled. The largest group of disabled persons is made up of those with mobility difficulties (caused by poliomyelitis, cerebral palsy, muscle diseases, etc.). Next follow hearing/deafness and sight/blindness problems. Mental retardation and mental illness are currently less serious problems.

Based on field experience, it is estimated that about half the disabled in these countries, or about 100 million people, could benefit from rehabilitation. The number is increasing; by the year 2000 it is expected to include some 130-150 million persons. Only about 2-3 million currently receive rehabilitation treatment. This means that 97-98 per cent of all the disabled who could benefit from rehabilitation have no access to such services.

1.2 The WHO approach: community-based rehabilitation (CBR)

The large gap between the services needed and those provided presents a dilemma. Many years ago it was common to think that if one had just a little patience, one would be able to train rehabilitation professionals, build facilities for rehabilitation centres and "catch up" with the problem using the institution-based approach. It took some time to realize that this would not be possible for the following reasons:

- Developing countries are now, and will be for a long period in the future, short of trained rehabilitation manpower;
- Building, equipping and maintaining facilities and staff is very costly, especially if one uses teams of professionals;
- The population is growing at a very high rate in developing countries;
- When the exceedingly high death rate among children with disabilities is reduced, more children and adults with disabilities will survive, thus increasing the prevalence of disability.

In some countries it would take more than 100 years to "catch up" using institution-based or outreach service approaches.
WHO has advocated an innovative solution to this dilemma: the so-called community-based rehabilitation. This implies a large-scale transfer of knowledge about disabilities and skills in rehabilitation to people with disabilities, to their families, and to community members. Such a decentralized approach brings services to people who cannot afford to leave their communities. More importantly, it provides services where rehabilitation ultimately takes place - in the home and the community.

All needs cannot be met with services at the community level. However, as much as 70 per cent of needs could be dealt with in the community. This would be a major achievement compared with the 2-3 per cent of the needs which are now met in many countries. The remaining needs must be met through referrals to district, provincial and national levels. There should be adequate professional staff at those levels to deal with the problems which cannot be solved in the community.

WHO has produced a manual, "Training in the community for people with disabilities", which discusses in detail (700 pages) the procedures for rehabilitation in the family and the community. Family members train their disabled adults and children at home, using the same basic principles used by professionals.

The results are of excellent quality. About 85 per cent of all disabled persons will become independent, or greatly improve their ability in daily life activities, communication and mobility. This also means that disabled children can be integrated into local schools and, later on, as adults, into jobs. A scientific evaluation of the outcome of community-based rehabilitation was undertaken during the last year by external evaluators in the Philippines and Zimbabwe.

WHO strongly advocates that all countries should develop CBR as a priority and, for those who are interested in doing so, WHO can offer documentation and technical support.

1.3 New ideas related to orthopaedic workshops

Another areas of interest relates to orthopaedic workshops. WHO has recently started to promote a new concept: "the orthopaedic workshop without machines".

The "classical" orthopaedic workshop is mostly a large building full of machines for producing wood, metal and leather components of prostheses. Because of the high cost of such workshops and the requirements for highly trained personnel, these workshops are almost exclusively in large cities.

During the last decades there has been a trend in orthopaedic technology towards the use of more modern materials, namely thermoplastics, such as polyvinyl chloride (PVC), polypropylene and polyethylene. Almost all components of prostheses can now be made of such materials. The manufacturing procedures
are simple; only an oven and some tools are required. This means that such workshops can be set up at district level; each will only cost $US 5,000 – 10,000.

If this new idea can be implemented, workshops will be more accessible to those who need them, costs will be much lower and the products will be of better quality.

2. The major issues within the ESCWA region

Disability is more common in this region than in any other part of the world, because of war, hostilities and civil unrest in a large number of countries. This has caused an increase in the number of people with amputations, paraplegia, injuries causing mobility problems, brain damage and blindness. Thus rehabilitation services must be augmented in order to provide rapidly what is needed.

Another problem relates to the co-ordination of rehabilitation services. Many ministries, agencies and non-governmental organizations (NGOs) are involved, and at present co-ordination is for the most part inadequate.

3. Policies and measures in effect and those required to deal with the situation in the countries of the region

WHO policies are generally focused on achieving "Health for all by the year 2000". The primary health care approach is given priority in the organization's policies as well as in its responses to requests for funding.

Rehabilitation is seen as a component of primary health care, but so far only a few countries in the region have included it. It is hoped that more attention will be paid to the disabled population as primary health care develops.

4. The role of WHO in substantive or funding assistance to Governments and NGOs

WHO has a medium-term programme which contains programme objectives and activities both on a global and on a regional basis. This medium-term programme is discussed and approved by WHO member States. Both global and regional funds are allocated to countries after a thorough analysis of the needs of each country. Among these needs; rehabilitation of the disabled is an important area for consideration and collaboration.

WHO does not support NGOs. In the area of rehabilitation, a large number of NGOs now support the setting up of CBR programmes, most often in direct co-operation with WHO. However, the total regular budgetary funds allocated for rehabilitation activities in 12 out of the 23 eastern Mediterranean regional countries for 1988/1989 equals $US 906,600. In addition, $US 18,000 are allocated from the regular budget to inter-country activities and about
$US 600,000 are deposited as funds in trust to cover costs of WHO collaboration in rehabilitation in a 13th country. The 13 countries are Afghanistan, Egypt, Iran, Iraq, Jordan, Lebanon, Morocco, Pakistan, Saudi Arabia, Somalia, the Sudan, the Syrian Arab Republic and Yemen.
VI. SPECIAL EDUCATION FOR DISABLED PERSONS:
AN AGENDA FOR THE 1990s

by

UNESCO
Introduction

Within the framework of the overall action taken with and for disabled persons, education stands out as one of the keys to any serious programme. In preventing disabilities, in caring for those suffering from disabilities and in assisting them to lead an independent and active life, education plays a decisive role.

Naturally, the education and information in question is initially intended for all disabled persons, but it also concerns the whole population. Education is referred to here in its broadest sense and includes systematic, comprehensive information that the mass media is now capable of bringing to the attention of all sectors of society.

One of the main obstacles to achieving progress in this field is ignorance - from ignorance stems fear, fear of the unknown, and this in turn affects not only the attitudes of people, but also their actions. It is only when people are aware of something that they can begin to care and act.

The first form of educational intervention is education aimed at prevention. It is now known that many physical and mental impairments can be prevented or alleviated if families are aware of and observe certain health measures, assuming, of course, that these health measures are within their reach.

Similarly, many of the disabilities that result from work and traffic accidents can be prevented, provided that administrative regulations are put into effect and that people are informed of and educated to take precautionary measures.

This paper will focus on special educational provisions for the disabled. It will provide information on the current situation and highlight some of the gaps, obstacles, current trends and pressing issues that need to be addressed.

A. Special education - an overview

At UNESCO, education for disabled persons falls within a programme entitled "Education for All". Within the context of education for all, each individual's fundamental right to education is solemnly recognized. This right encompasses the right of disabled children and adults to an education that is suited to their individual needs, as stipulated in the United Nations Declaration of the Rights of the Child and the United Nations Declaration on the Rights of Disabled Persons.

Although these declarations have been a stepping stone for the many countries that have made major strides in this domain, in most developing countries the reality is somewhat bleak both in terms of the quantity and quality of the education of disabled persons.
In 1986-1987 UNESCO carried out a review of policies, legislation, administration, financing and the provision of education for disabled persons. Eighty countries were contacted and replies were secured from 75 per cent, namely 58 countries. Some of the findings of this review will be discussed in the present paper. Although the limitations of such a study have to be recognized, nevertheless the review provides an overview of practices world-wide and helps to pinpoint trends across countries.

The information provided reflects the discrepancies in the level of progress made in the different regions and in individual countries. This ranges from a series of individual unco-ordinated developments to an experimentation stage where more structured and planned action towards reform and development is being taken. In short, it can be said that special education is currently in a transitional stage and that it is moving towards the clearer affirmation of education for all.

B. Comments on some of the issues

1. Legislation

There has been a marked increase world-wide in the number of countries that have enacted legislation concerning the right and access of disabled persons to education. Such legislative initiatives are beginning to appear in countries of the region. Until recently, most of this legislation was based on the extent to which disabled children and young people differed from their peers and needed legislative support for the introduction of any appropriate action. The categories assigned to the different forms of disability were generally enshrined in this legislation.

A number of benefits are clearly associated with legislative activity: legislation can establish the rights of individuals to equal opportunities, to the assessment and identification of individual needs, to the securing of resources, to the legitimization of provisions, etc.

However, such legislation is not always enforced. The implementation of legislation is far more taxing than its actual enforcement. Another potential drawback is that when legislation is based on out-moded concepts and inappropriate models of provision, this tends to create barriers rather than open the door to wider opportunities.

Pressure groups such as parent associations and associations of the disabled have an important role to play in the development and monitoring of legislation to ensure that the core of the legislation upholds the holistic attributes of the human rights of all citizens.

2. Access to education

Access to education varies widely and can be related to national development factors, as well as to specific handicap factors. When provisions
are limited, children with physical handicaps are more likely to be served than those with severe and complex learning difficulties. There is a need to ensure that all children form part of the state education system, whatever their handicap conditions. The establishment of universal compulsory education is a first step, but this also entails transferring responsibility for certain groups of disabled children from health, social services and youth ministries to education ministries. There is a further need to increase provisions for those who are currently poorly served.

3. A matter of conceptualization

One of the main features of current thinking and of recent developments are the changes that have taken place in the conceptualization of handicaps. In 1980 the World Health Organization (WHO) revised its definition of disability and a distinction was made between impairment, disability and handicap. The main concern here relates to the distinction between the effects of disability and handicap. There is a move away from the categorical view of disability where the focus is placed on "within child" factors to that of an interactive concept based on the relationship between the resources of the child and those of the environment. This came about after an examination was made of the effects of environmental resources and deficiencies upon the social and intellectual development of all children. The special educational needs of children are conceptualized as part of a continuum of educational needs where ordinary schools can constitute either a resource or a constraint.

The term special educational needs which now forms part of the vocabulary of this field is used to signify needs which call for special educational provisions. Special educational provisions refer to educational provisions which are additional to or different from general provisions.

4. Types of provision

Besides having different rhythms, educational provisions also have different organizational patterns. Concurrent with the conceptualization of a range of educational needs for children, there is also a continuum in the range of options or patterns of provision. This varies considerably between countries depending on the policies adopted, the interpretation of the individuals involved and on social, cultural and economic factors.

Educational provisions for disabled persons today can be viewed on three parallel levels:

(a) Integrated educational provisions in ordinary schools;
(b) Special educational provisions in special schools and day centres;
(c) Community-based services - either centre or home-based.
5. The role of special schools

Special schools have been and continue to constitute a common form of provision in most of the countries represented at this Conference. At this point, two questions can be posed:

(a) When is there a need for a special school or centre, and when should an alternative model(s) be sought?

(b) How can the use of existing special schools as resource centres be extended and how can the situation in existing special schools be improved?

The experience gained from special schools and centres has been rich; knowledge and expertise have both been developed. Special schools have served to demonstrate to the authorities, to communities and to parents the potential and possibilities of disabled persons.

In new communities where there are no initiatives for disabled persons and their families, a centre is often needed to develop expertise and to demonstrate and initiate new programmes. An out-reach service should always be integrated into a community from the very beginning.

Special schools, however, can now provide a wider service. They can be used as resource centres for out-reach programmes such as the provision of in-service training for ordinary teachers, out-reach support for families and disabled children, or the provision of educational support for pupils with special needs in an ordinary school.

In a number of countries the establishment of school clusters has proved to be a useful strategy for mobilizing educational support resources for special needs. Resource personnel such as advisory teachers, educational psychologists or teachers in special units or special schools can organize out-reach support more effectively through the establishment of close links with a cluster of schools.

C. An agenda for the 1990s

Before addressing the actual issues, it may be useful to outline some of the major obstacles to the development of special educational provisions that were highlighted during the UNESCO Consultation on Special Education in 1988:

(a) The inadequacy of perceptions in policy formation, which is closely linked to attitudes (cultural, religious and political) and to the lack of information and awareness;

(b) The absence of planning for special education at the national level;

(c) The rigidity in legislative and administrative provisions. The allocation of resources in the different categories often fails to match individual needs;
(d) The discrepancy between the current knowledge of existing provisions and those which are needed. This reflects the poor dissemination of knowledge;

(e) The continued perception in some countries of special education as a charitable venture - a welfare programme. Responsibility for special education does not always lie with educational authorities;

(f) The administrative and professional separation that divides the educational community into "special" and "regular" components which are isolated from each other.

In order to face the wider range of challenges now confronting the region, it will be necessary to reconsider global strategies for the provision of services.

1. Planning

The progress in planning for disabled persons has been slow in most of the countries of the region, especially when the enormous needs facing the region are considered. While undoubtedly much of the action that has been initiated has had a beneficial effect, it has generally been conceived on a micro-scale. Scant consideration has been given to the additional variables, constraints and resources that must be taken into account when the macro-dimensions of planning are brought into focus. Planning has often been sporadic and has not been envisaged as an integral part of the education system. Nor has it been carried out in collaboration with the other partners directly concerned with the delivery of services to disabled persons, including the consumers themselves.

In view of the magnitude of the needs of disabled persons and of the shrinking resources available for education in general and for special education in particular, the initial strategy to be considered is the development of appropriate national plans that adopt suitable organizational and management structures in order to ensure the better utilization of resources and the quality of service. One of the major obstacles to the development of service provisions is the absence of realistic planning. This was stressed during the UNESCO Consultation on Special Education (1988) and the United Nations Mid-decade Global Meeting of Experts (1987).

Realistic national plans, however modest they may be, should be based on a clear statement of resources, including personnel. They should also be matched with a national commitment at the highest decision-making level. This commitment constitutes the most significant determinant in the success of the programme.

Choices have to be made about the kinds of needs that are to be met first, as it is unlikely that resources will be available to do everything at the same time.
2. Interdisciplinary collaboration

It is now time to promote interdisciplinary collaboration at all levels. For too long specialists in the field of special education have worked solely with each other, closed within their circles of excellence (such as special schools). If progress is to be made, it will be necessary to broaden the base of collaboration by establishing links with other fields, professions, universities, etc. The input of specialists in other disciplines and fields can enrich and develop work with the disabled. It is time for those who work with the disabled to integrate themselves into the professional community. This would increase the potential to bring about changes in development, policies and attitudes.

Special and general education have much to offer each other. There should be a constant search for ways to strengthen this collaboration. Countries entering this field for the first time have the chance to make a fresh start.

3. Educational implications of different handicapping conditions

If there is a sincere desire to determine the "shape of services in the future", it is necessary to look closely at budget priorities and to institute changes that will meet the challenges and responsibilities according to a correct interpretation of the "profile of the consumers". The building up of provisions is important, but equally important, certain considerations should be taken into account. Many handicapping conditions have far less bearing on education than they are generally credited with, and they are used inappropriately to limit the educational opportunities of children. A physical handicap, for instance, may have little bearing on a child's education, and two children with similar physical handicaps may have quite different educational needs. The actual educational implications of different handicapping conditions should be put into perspective and services should be planned accordingly.

4. Integrated education and community-based rehabilitation (CBR)

Integration is now a central issue in the provision of special education around the world. It appears in policy statements, research and in aspirations for the future.

In many developing countries, a large number of pupils with mild and moderate learning difficulties were placed, and in some countries continue to be placed, in the mainstream of education. They constitute a hidden population with special needs. At no time are these needs identified or attended to. With the current pressure for the universalization of education and the demands this places on teachers and on curricula, most of these children drop out of school in the primary cycle. A parallel system then develops both in terms of administrative structures (special education units or sections with their own personnel and service delivery outside the mainstream of education).
The issue that needs to be addressed today is how to maintain this population with special needs in regular schools, and how to identify the school reforms, flexibility of curricula, teacher preparation and support services that are needed to create schools that serve all children.

It is necessary to look beyond the slogans and rhetoric at the issue of integration, and beyond the simplistic argument that regular schools are good and special schools are bad. Integration should be seen as a dynamic process in terms of school reform, where the goal is the creation of a common school that offers different provisions for all its pupils within the framework of a single curriculum.

Conscious of the magnitude of the demand and the limited resources available, and bearing in mind the principles of normalization, integration and participation, the UNESCO Consultation on Special Education considered a number of alternative strategies to enhance the provision of special education. There would appear to be general consensus that the education and training of the majority of disabled children and youth cannot be met by special schools alone.

The UNESCO Consultation recognized that integrated education and CBR are two complementary approaches to providing cost-effective and meaningful education and training for the disabled. Both measures aim at reaching out to the greatest number of disabled persons and their families. They constitute two vital components of a comprehensive global strategy.

This paper will not elaborate on CBR, as this issue will be covered by WHO. However, UNESCO is an advocate and promoter of CBR.

5. The training of personnel

If it is accepted that at least 10 per cent of children have special needs, and not just the 1-2 per cent that are catered for in special schools, it follows that the preparation of teachers to educate children with special needs cannot be separated from the preparation of teachers for all children.

The orientation of training programmes should match the trends in the provision of education (in terms of integration and community-based services). The content of training programmes should also match the new conceptualization and thinking with respect to the wide needs of children and the importance of adapting curricula to suit their needs. The action that is currently being taken to reform the education of teachers must take into consideration the relationship between programmes that prepare teachers of the handicapped and those that prepare regular classroom teachers.

A new teacher profile is needed, and the role of special teachers should be reconsidered. Special teachers must not be treated as people apart who have superior knowledge and skills, thus creating an elite. The aura surrounding the skills of those who work with disabled children should be
removed, as many of these skills can be learned by members of the local community — parents, volunteers, older children and people without formal qualifications. Of course, skilled professionals will still be needed to provide training, leadership and support.

At a recent Arab meeting on the Training of Special Education Personnel, one of the salient points to emerge from the discussions, and one which training institutions will need to bear in mind, is that a balance must be struck between the content and orientation of training programmes. This will accommodate existing patterns of service delivery and ensure the appropriateness of training programmes for the future.

6. Parent participation

From being simply on the "receiving end", having little or no support, the parents of disabled children have mobilized and become advocates of their children's rights. In many countries they have become the initial organizers of the provision of education. Today it is recognized that parents can and should be encouraged to take an active role in the assessment, training and education of their children. To accomplish this they need the support of professionals who till now have failed to show sufficient commitment to the involvement of parents. Parental involvement gives the family confidence that their child can learn and that they, too, can contribute to his learning. Moreover, in the absence of adequate staff support, families can constitute a resource. Few will argue against increased parental involvement. The challenge is now to translate this knowledge into practical action.

C. Conclusion

The persistence of the "language of handicap" in activities, documents, plans and legislation continues to be a matter of deep concern, as the focus of the language is on disabilities, rather than on abilities. Such negative and pejorative language implies the use of a mistaken model of the causes of children's difficulties in learning. They are seen as being purely rooted in the individual, irrespective of the environmental factors which in reality are major contributors to learning difficulties.

The reason why the old language persists is that it is embedded in a particular way of regarding children and young people whose learning fails to follow normal patterns.

Rejecting the "language of handicap" is much more than a matter of linguistic ritual or pedantry. What is at stake is an adequate regard for the individual, without which special educational provision will continue to be misconceived; integration will be little more than a token gesture, and those who are different will still be marginalized.

The challenge that must be faced is to forgo the pretentious precision of the language of handicap and to favour a form of discourse that avoids
unnecessary negativity, one which is relevant to educational needs and which leaves room for the individuality and common humanity of all children.

Programmes and activities that cover different aspects of the life of disabled persons are obviously more difficult to implement than to express on paper. The countries in the region must have confidence in their own initiatives and must not feel that their efforts have to follow the patterns established by the industrialized countries. If innovation in meeting special educational needs is to be effective, it cannot be imposed from outside.

Nevertheless, there is much that can be learned from the experiences of countries that are ahead of the region in this domain. In particular, it is important to avoid making the same mistakes or to repeat unsuccessful experiments which are apt to be costly both in material and human terms.

Armed with the right basic knowledge, with co-operation, leadership, management and a sense of commitment, the region can make substantial progress in this field.

Bibliography


Annex

SPECIAL EDUCATION: UNESCO DRAFT PROGRAMME
1990-1991

The proposed UNESCO programme for the next biennium will address the special educational needs of children and young adults with disabilities through an integrated education approach and community-based programmes.

The proposed action will centre on three main areas:

1. **Planning, organization and management of the provision of special education.** Under this activity, technical assistance will be given to eight Member States from the different regions in order to assist them in the elaboration of national action plans for the provision of special education. The modest input of UNESCO into this activity is to be considered as seed money in the initiation of this exercise, on the understanding that UNESCO, together with the identified Member States, will seek to mobilize funding for the implementation and evaluation of national plans.

One of the prerequisites for Member States in entering into this activity is a clear commitment of the country to a programme. This will involve a stated policy related to special education and a agreement to support and provide personnel for the programme.

2. **Teacher training for special needs.** With the aim of promoting the integrated education of disabled children in ordinary schools, UNESCO will develop a teacher education "resource pack" of materials on meeting the special needs of children in ordinary schools. The pack is for use during pre-service and in-service teacher training programmes. The material, which will consist of a manual for teacher trainers and a "pack" for trainees, will be field tested in a number of countries. Later it will be translated and disseminated.

3. **Young children and the family.** Within the framework of this special project, the issue of childhood disabilities will be addressed. Through the identification and development of video training programmes on childhood disability identification, assessment and intervention, activities will aim at creating awareness and developing the skills of parents, volunteers and community workers to meet the needs of disabled children at the community level.
Table A1. **Number of countries where children with handicaps are excluded from education**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education compulsory for all</td>
<td>32</td>
<td>55</td>
</tr>
<tr>
<td>Education compulsory – some children with handicaps excluded</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>Education not compulsory</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes: Of the 32 countries confirming compulsory education for all, a few confirmed that no children with handicaps were excluded. Of the 19 countries acknowledging exclusion, this was related to the severity of handicap. In six of the 19 cases, scarcity of resources was given as a reason for excluding certain children.

Table A2. **Ministries responsible for special education**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>48</td>
<td>83</td>
</tr>
<tr>
<td>Social affairs(^a/)</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
<td>100</td>
</tr>
</tbody>
</table>

* The information on hand from 19 Arab States shows that in ten of these the ministry of education was responsible for special education, while in the other nine it was the ministry of social affairs.

\(^a/\) Encompassing ministries with various titles - health, social affairs, social protection, social development, and (in two cases) the ministry of population, youth and sport.
Table A3. Number of pupils enrolled in special education as a percentage of the school age population

<table>
<thead>
<tr>
<th>Range (percentage)</th>
<th>No. of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0.1</td>
<td>10</td>
</tr>
<tr>
<td>0.1-0.4</td>
<td>13</td>
</tr>
<tr>
<td>0.5-0.9</td>
<td>9</td>
</tr>
<tr>
<td>1.0-1.9</td>
<td>6</td>
</tr>
<tr>
<td>2.0-2.9</td>
<td>6</td>
</tr>
<tr>
<td>3.0-3.5</td>
<td>5</td>
</tr>
<tr>
<td>More than 3.5</td>
<td>2</td>
</tr>
<tr>
<td>No information provided</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>58</strong></td>
</tr>
</tbody>
</table>

Notes: In 32 countries less than 1 per cent of pupils were enrolled in special education programmes; in 10 countries, less than 0.1 per cent.

The highest level ranged from 3.5 per cent to 13 per cent (the last refers to all pupils receiving special education support in special schools and regular schools).

Table A4. Pre-school and post-school provision

<table>
<thead>
<tr>
<th></th>
<th>Pre-school</th>
<th>Post-school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Limited or no provision\a/</td>
<td>28</td>
<td>48</td>
</tr>
<tr>
<td>Good provision for some\b/</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>Good provision for all\c/</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>58</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

\a/ Very limited provision at the pre-school and post-school level.

\b/ Good provision, on a selective basis, was for the physically disabled and visually impaired, and at the pre-school level for the hearing impaired.
Gaps in provision

1. Little or no pre-school and post-school provision.
2. Exclusion of some disability groups from access to education.
3. Role of parents in the education of their disabled child still limited.

Major obstacles to the development of special education provision

1. Inadequacy of perceptions in policy formation, which is closely linked to attitudes (cultural, religious and political), and to a lack of information and awareness.
2. Absence of planning for special education at the national level.
3. Rigidity in legislative and administrative provision; the allocation of resources by categories is often not matched to individual needs.
4. Discrepancy between what exists and the current knowledge of what should exist - poor dissemination of knowledge.
5. Special education in some countries is still perceived as a charitable venture - a welfare programme. Responsibility for special education does not always lie with the educational authorities.
6. Administrative and professional separation, dividing the educational community into "special" and "regular" components which are isolated from each other.
VII. FUTURE TRENDS IN SPECIAL EDUCATION PLANNING, ORGANIZATION AND MANAGEMENT

by

UNESCO
Introduction

During the United Nations Educational, Scientific and Cultural Organization (UNESCO) Consultation on Special Education held at UNESCO headquarters in Paris from 2 to 6 May 1988, a number of proposals which UNESCO could carry out in the field of special education during the period covered by the third medium-term plan (1990-1995) were agreed upon.

Priority at the Consultation was given to four areas which the participants regarded as being worthy of special attention, namely: information, special education planning, organization and management, personnel training and resource mobilization.

The present paper presents some of the central issues that can serve as a basis for dialogue and discussion in one of the areas of concern, namely that of special education planning, organization and management.

It is a well known fact that a large number of countries, including many of those participating in this Conference, lack national integrated plans for special education. On this basis it may be useful to establish some guidelines for drawing up plans for special education in the future. The following areas will be discussed in this paper:

(a) The components of special education and their relationship with other service systems;

(b) The means of integrating special education into other service systems;

(c) The total matrix of services for the disabled and their style of management;

(d) An outline of the future picture of special education in the 1990s;

(e) Future trends in special education planning.
A. Components of special education and their relationship with other service systems

Special education in its simplest form is a system of services that permits the provision of education in appropriate forms through special methods and techniques to alleviate or avoid the effects of disability and growth problems in learners - both young and adult - in order to make learning and social development possible.

Special education does not represent an isolated service system. On the contrary, in its most effective form it interacts with various disciplines of special education. Special education has a scientific and practical common basis in the sciences of education and human growth. Within this context, special education is a field of study contributing to the scientific structure of education and psychology. Thus it should not have an isolated educational identity or an independent professional status.

The components of special education encompass the following:

(a) Service programmes applied through regular or special schools; general programmes of a social nature; internal and daytime programmes; programmes for other situations to cover entertainment and other aspects;

(b) Education and professional training programmes to prepare qualified personnel at universities, higher education institutes and other institutions and centres;

(c) Governmental and private organizations and associations, including parent associations, legislative committees and professional groups.

Special education, at present, is not provided through good co-ordination with other service systems in many communities. On the contrary, special education, to a large extent, is independently financed and managed and it is often imposed on general education and health services. Such a situation tends to project special education as an addition to a range of services with a special course. As a matter of fact, there is no harmony or real integration of special education into available services.

The future of special education - in the next decade - will take the form of the successful integration of the above components of special education in the general course of the service programmes, resources and policies of the human service systems in any community. This requires the adoption of new approaches, as well as the implementation of more effective strategies if special education is to coexist and cope with the new phenomenon of retrenchment.

B. Means of integrating special education into other service systems

If special education is to be integrated into other service systems, various meaningful changes should take place. It can be said, in general,
that special education should contribute to the development of the main features of any integrated system. This means that special education should involve well-qualified personnel and provide cost-effective, appropriate services.

In addition to this general framework, there is a need to change the current situation in the following ways:

(a) Special education needs to be rebuilt within the framework of its basic discipline, namely education. In order to do this, the strategies of special education services need to be integrated into the framework of strategies and buildings linked with general education.

Just as special education endeavours to achieve a kind of emphasis on integrating its clients, it also needs to integrate itself into the scientific framework of education in its original home, the higher education institutions.

(b) Special education should seek to improve the interaction of its internal system through the provision of strength and legality to its research basis and by enhancing and consolidating its gains as a legitimate and genuine service system.

Research on special education needs to achieve the distinction it enjoys in other scientific fields, both main and secondary.

(c) Special education should prove to be an effective activity so that its effects appear in the form of positive changes in the performance of its beneficiaries in various positions (for instance, in schools, child-care centres, daytime care centres and others). In this field nothing can replace statistics and information established on the sound and firm basis of real achievements and the gains of performance resulting from special education inputs.

A long-range view confirms that schools, parents and others will not be satisfied with anything less than tangible, positive results in the individual’s conduct.

(d) Special education should concentrate on the integration of its services, the strengthening and consolidation of its sources of finance and the expansion of the range of these sources.

If special education can re-establish itself within a scientific educational framework and the university environment without reducing its effectiveness in general schools, if it can consolidate and strengthen its interrelationships with both service systems and vocational training, if it can continue to improve its ability to clarify and present the effectiveness of special services, and if it enhances and expands its financing basis from various sources, then special education can be expected to have sufficient power to integrate itself effectively and peacefully into other service systems.
C. The total matrix of services for the disabled

Planning the strategies of special education requires that three major dimensions necessary to draw up a service system for the disabled be employed. These dimensions are as follows:

(a) The type of services provided;
(b) The nature of the disability;
(c) The severity of disability.

The above three-dimensional matrix is a model giving the opportunity to verify the presence of the full aspects of a system of appropriate services along the growth and age-line of disabled persons.

The first dimension, the type of services provided, encompasses health and educational services, social rehabilitation, entertainment and other fields of significance.

The second dimension, the nature of the disability, covers a wide range of cases of disability which are relatively easy to define such as physical disability, mental retardation, behavioural disorders, sensory disability (aural and visual), as well as aspects of impairment which can be easily defined.

The third dimension, the severity of the disability, involves the variation of service activities according to the severity of disability, from light levels to quite severe levels. All this is linked, in turn, to the extent of the spread of disability cases in society.

The above matrix of services will allow the distribution of various types of services into general categories according to the type and degree of the severity of the disability for the assessment and planning of service extension systems. On the other hand, this matrix will help to organize the public and private service establishments needed to provide special education services.

The effective delivery of services is a circular and continuous process. The services cycle can be divided into six vital activities. The cycle starts by identifying the needs. This is followed by a comprehensive assessment of the identified needs. This assessment, in turn, is followed by the drawing up of alternative strategies for the provision of services. The fourth activity is the provision of services, and the fifth is the continuous assessment of these services in the light of their appropriateness, quality and economic feasibility. The sixth and final aspect in the services cycle is the use of assessment data to evaluate and assess needs which have been primarily identified for the purpose of analysing existing needs. The identification of new needs and the development of alternative services.
D. Features of the future picture of special education

When identifying the most important features of special education, some major points should be taken into account, especially the following:

(a) The need to increase planning, co-ordination and assessment of special education needs;

(b) The need to translate studies in the field of special education into a continuous and increasingly effective social policy;

(c) The need to introduce tangible improvements and to renew the development of effective leadership in the field of special education;

(d) The need to place emphasis on increasing effectiveness in developing equal educational opportunities and access to such opportunities and, consequently, cultural and social enrichment within the framework of the general education system.

In one way or another the 1980s can be regarded as a zenith as regards the attention that has been paid to the disabled and the provision of the necessary services for them. It appears that the 1990s will be a period of evolution, with emphasis being placed on quality and productivity.

The expected historic turning-point demands that an accurate review be made of the future alternatives of special education. The following question then arises: What changes in special education can be expected in the next decade and what implications will these have for practitioners?

The expected changes and modifications need to be linked to the direct functions of changes in the general education system. It is expected that changes will mainly affect the following:

(a) Teacher training;

(b) In-service training and continuous education, as well as the content of training programmes;

(c) The need to achieve integration between sciences and arts in educational curricula;

(d) The need to provide greater opportunities for educational research.

The fuel which feeds such changes and pushes them forward is the extensive mass attention given to the quality and effectiveness of special education.
E. Future trends in special education planning and management

The first step needed is to provide a more systematic examination and better-documentated data on the ways programmes work and the manner in which they affect disabled children. The profile of special education is becoming more complicated and the importance attached to its policies have transcended our knowledge of the way in which special education undertakes its functions, especially the way through which special education interacts with other programmes designed to help disabled children.

The second step represents the change which needs to be introduced into the training programmes of special education teachers. Training programmes should seek to provide these teachers with knowledge about the other service systems that aid disabled children. Only a limited number of school teachers have an understanding of the functions of institutions such as those concerned with psychological health, vocational training and other related service systems. Teachers and administrators may have some knowledge of the way in which reference to such services systems is made. However, they rarely know how these programmes can best serve a certain child. In the absence of such understanding there is little hope that educators in the domain of special education can achieve the objective of co-ordinating their programmes with other essential service systems.

The third step demands that a realistic view be taken of the choices to be made during the process of change. This step requires maximum creative perception and the highest degree of skills in policy-formulation.

The solution to problems in the field of special education cannot be met by short-term proposals. On the contrary, any solution for the current problems in special education systems and policies requires that a delicate balance be struck between corresponding interests in the following areas: (i) identification of the aspects of using rare or scarce resources; (ii) identification of priorities ranging from individual rights to the public interest; and (iii) serious investigation of the level of administrative competence.
VIII. TRAINING AND DEVELOPMENT OF WORKERS WITH DISABLED PERSONS

by

UNESCO
This part of the paper will focus on the training of workers in the field of disability and the development of their capabilities. In order to obtain a clearer idea of the issue, and for purposes of consistency, the following fundamental concepts must be defined:

1. Disabled children

These are children who have been assessed as mentally retarded, hard of hearing, deaf, suffering from speech or articulation difficulties, weak of vision, blind, emotionally disturbed, suffering from a physical or/and health impairment, deaf-blind, suffering from a multi-disability, from difficulties limiting their education and who, as a consequence, need special education and other supportive services (Meyen, 1982, p. 41).

2. Workers with the disabled

They are generally psychiatrists, neurologists, orthopaedists, ophthalmologists, ENT doctors, rehabilitation specialists, teachers of special education, speech therapists, audio-metricians, optometrists, psychologists, recreational therapy specialists, physiotherapists, occupational therapists, assistant professors and vocational training specialists.

3. Methods of providing services to the disabled

This signifies the method by which special education and other supportive services are provided to disabled persons. Methods differ according to the type and degree of the disability and the availability of human, technical and material resources. They also differ according to the philosophy adopted by a State or a country in dealing with disabled persons. However, regardless of these differences, ways of providing services to the disabled fall into one of the following patterns:

(a) General education schools

This means that a child goes to an ordinary school along with his able-bodied colleagues and is provided with the necessary services at school. If the child's condition requires a certain intervention or assistance, this is provided to him according to a schedule determined by the nature of his case at a certain place and for a certain duration by trained specialists in, for example, physiotherapy, speech therapy, psychology, social work, etc.

(b) Special schools

These schools offer their services to certain groups of disabled persons such as the blind and weak of vision, the deaf and hard of hearing, and the mentally retarded. This method of providing services is falling into disuse as it entails isolation of the disabled from the environment in which they should grow up. This method is also costly.
(c) Boarding institutes and foundations

These provide comprehensive full-board services to a single group of disabled persons. This approach is characterized by isolation of the disabled persons, high cost and ineffectiveness.

(d) Rehabilitation centres

These offer their services mainly to disabled adult persons either to train or rehabilitate them. They are usually joined by persons with serious or permanent impairments. This approach often includes sheltered workshops and/or sections for the employment and follow-up of disabled persons. It also includes residential sections.

SITUATION OF THE DISABLED IN THE ARAB COUNTRIES

There are no statistics, not even crude ones, that can be relied upon to determine the total number of disabled persons or the types of their disabilities. Previous studies have therefore resorted to estimates based on global rates. The Arab League Educational, Cultural and Scientific Organization (ALECSO), for example, determines the percentage disabled at 10 per cent of the total population of the Arab countries (ALECSO, p. 20). In other words there are approximately 20 million disabled persons in the Arab countries if it is assumed that their total populations amount to 200 million. Inaccurate as this estimate may be, it can be utilized (with some reserve) to determine the Arab problem of disability. The picture appears bleak, considering that the number of disabled persons in the Arab countries who are covered by services of any type or standard does not exceed 15,885 (ALECSO p. 66). Should we endeavor to investigate the underlying causes of this situation, we find that they boil down to one or another of the following:

1. The concept of rehabilitation of the disabled is only recent and the Arab States' preoccupation with other priorities, such as education for ordinary persons, have contributed to delaying the initiation of services for the disabled in the Arab countries.

2. The provision of services is based on philosophies that are outmoded and governed by a "sheltering" attitude without consideration for the economic or developmental returns that can be gained as a result of educating and rehabilitating the disabled.

3. The absence of co-ordination between government agencies that could play a role in providing services for the disabled has precluded the existence of concerted and integrated efforts.

4. The fact that the curricula of universities and higher institutes include no provision for the training of workers in the fields of rehabilitation of the disabled has established a "home" and "charity", rather than a vocational outlook. Those working with disabled persons, as a result, suffer from an
inferior quality of training and are ignorant of modern theories and techniques concerning the education and care of disabled persons.

Since in this part of the paper attention will be focused on the training and development of workers with disabled persons as defined above, our discussion will centre on point 4 (of the causes mentioned above), which can be considered the corner-stone for any development or positive change in the field of education and care for the disabled.

**SITUATION OF WORKERS WITH THE DISABLED IN THE ARAB COUNTRIES**

Although only a few studies have been carried out on the situation of workers in the field of care for the disabled in the Arab countries, a review of these studies reveals that they all report problems in this field, not only with respect to inadequate numbers of workers but also as to their quality and composition (Al-Imari, 1989).

A survey conducted by ALECSO has revealed that the total number of workers in the field of care for the disabled in the Arab countries does not exceed 2,689 specialists (ALECSO, p. 68).

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jordan</td>
<td>131</td>
</tr>
<tr>
<td>2</td>
<td>Bahrain</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>Tunisia</td>
<td>233</td>
</tr>
<tr>
<td>4</td>
<td>Algeria</td>
<td>146</td>
</tr>
<tr>
<td>5</td>
<td>Saudi Arabia</td>
<td>400</td>
</tr>
<tr>
<td>6</td>
<td>Sudan</td>
<td>41</td>
</tr>
<tr>
<td>7</td>
<td>Syrian Arab Republic</td>
<td>115</td>
</tr>
<tr>
<td>8</td>
<td>Somalia</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>Iraq</td>
<td>195</td>
</tr>
<tr>
<td>10</td>
<td>Kuwait</td>
<td>479</td>
</tr>
<tr>
<td>11</td>
<td>Lebanon</td>
<td>454</td>
</tr>
<tr>
<td>12</td>
<td>Libyan Arab Jamahiriyah</td>
<td>429</td>
</tr>
<tr>
<td>13</td>
<td>Yemen</td>
<td>25</td>
</tr>
<tr>
<td>14</td>
<td>Democratic Yemen</td>
<td></td>
</tr>
</tbody>
</table>

*Source: ALECSO, p. 68.*

Another survey conducted by the Arab Education Office for the Arab Gulf countries indicates that the total number of workers in the field of care for the disabled in the Office's member countries (viz. the Federation of Arab Emirates, Bahrain, Saudi Arabia, Qatar, Iraq, Kuwait and Oman) does not exceed 1,256 specialists (Arab Education Office for Arab Gulf Countries, p. 191).
It should be pointed out that the two above-mentioned surveys date back to the beginning of this decade. However, reports presented by representatives of Arab countries in periodic conferences and meetings that are held to discuss issues concerning disabled persons and their needs indicate that the situation is improving, though improvement is relative and very slow.

It should also be noted that the above-mentioned surveys did not deal with the category of workers in the field of care for the disabled in a comprehensive manner as defined at the beginning of this section, but confined their discussion to workers in the fields of education and psycho-education, leaving out other disciplines whether medical or paramedical. This may be attributable either to the fact that workers specialized in disciplines other than education are not available or that their participation in work in institutes and schools for the disabled is not on a full-time basis and they are thus not included among such workers. No matter what the reasons are, it must be explained that the nature of disabilities and the ways to address them require the combined efforts of several scientific disciplines and the workload in a school, institute or centre should not necessarily be of such a magnitude as to require the allocation of a full-time specialist. The usual practice is to obtain the services of specialists in hospitals and health centres. This confirms the necessity of working with the disabled according to the concept of a team whose members complement one another. Otherwise it is next to impossible for rehabilitation centres to aspire to embrace under one roof all the workers needed under the care programme.

Regarding the standard of training and efficiency of workers, the above-mentioned studies indicate that it is low in the Arab countries as a whole and that the varying periods of training courses have adversely affected workers' capabilities and skills, particularly when the training has been largely theoretical. The studies show that the training programmes give no attention to field training.

The fact that the workers training programmes fail to provide the trainees with the necessary skills appropriate to the type and degree of the disability which they will work with after graduation compels the majority of workers to assume a sheltering approach towards the disabled. Instead of investigating the capabilities and potentialities of disabled persons and endeavouring to refine and develop them, attention is focused on aspects of disability and weakness. The role of the centres for the care of the disabled and the workers in them is thus confined to protecting disabled persons from the sight of their parents and society.

It is to be concluded from the above that workers in the field of care for the disabled suffer, both in number and quality, from a bad state of shortage and inadequacy. This has in turn affected the quality of programmes for the care of disabled persons in the Arab countries and limited their geographical expansion and coverage. It is to be noted that the majority of care programmes exist in large urban centres, leaving rural and remote areas
with little services if any. Within the framework of this view, it must be
stressed that first priority should be given to the issue of workers with
disabled persons (i.e., with regard to their number and the development
of their capabilities). Signs of interest began to appear with the establish-
ment of the Arab Committee for Supporting Training Programmes for
Workers with Disabled Persons. However, results that would satisfy aspira-
tions and meet the urgent needs are not to be expected from this Committee
unless it becomes independent and secures the support of ALECSO member
countries.

Recommendations for the development of workers with disabled persons

Undoubtedly, intervention to develop the status of workers with disabled
persons and enhance their extensive capabilities requires movement in more
than one direction in view of the intricate nature of the problem. The
following are some basic suggestions which may help in achieving positive
results with regard to developing the skills and capabilities of the actual
work-force in this field, utilizing the existing work-force in hospitals and
health centres or expanding the pre-service training and rehabilitation
programmes. It should be pointed out that applicability of these
recommendations differs from one Arab country to another according to
available means.

A. Utilizing specialists from outside centres for
the care of the disabled

We have already stated that care for disabled persons requires the
combined efforts of a number of specialists, particularly with regard to early
intervention programmes which provide their services to disabled young persons
of pre-school age. The responsibility for detecting these persons and
diagnosing their cases rests primarily with a physician rather than any other
specialist. Therefore, building a strong liaison between centres for the care
of the disabled and selecting medical specialists who are at the same time
interested in disability and the disabled constitute a priority which should
be given due consideration. It is noteworthy that many Arab countries have
gone a long way towards providing medical services. However, medical interest
in disability cases (medical rehabilitation) requires further co-ordination
efforts between rehabilitation centres and hospitals. The main medical or
paramedical specializations which may be useful in the care and rehabilitation
of disabled persons are paediatrics, prosthetics, audiometry, optometry,
physiotherapy, psychiatry and neurology.

B. Training of volunteers to utilize their services

By volunteers is meant persons who have the time and desire to work for
programmes providing care for the disabled free of charge. These are often
university students of various disciplines, retired professionals or parents
willing to work with disabled children and who are without a scientific or
field background. Experience in developed countries (such as the United
States) points to remarkable contributions made by voluntary work in
programmes for the care of disabled persons. Voluntary and charitable societies in all the Arab countries have also proved that their contributions in many social and educational projects have been effective.

For contributions by voluntary societies or individuals to be more profitable, the beneficiaries should undertake to organize training courses in order to supply these institutions with the necessary skills to address disability groups. Such courses can be arranged through co-operation between the care centres and the appropriate departments in universities. Care centres should at the same time be urged to use and encourage volunteers to contribute to services for disabled persons.

C. Training parents (family)

It is not surprising that parents should be deeply concerned about their disabled child because they are the people closest to him and the most profoundly aware of the circumstances of his condition. For this reason parents have played a fundamental and historical role in the enhancement of services provided to disabled persons both through their demand for services from the appropriate authorities or through their efforts in bringing up their disabled children at home or at centres for the care of the disabled. In the light of this, it must be stressed that parents should be looked upon as a tremendous force that can be utilized to improve the quality of services provided to the disabled in the Arab countries and expand their coverage. In order to achieve this, training courses should be organized to provide parents with the necessary skills. Parents should also be induced to participate in assessing their children and in making special programmes for them and asked to follow up their performance at home to achieve the greatest measure of co-operation between school and home (Reynolds, 1977, p. 188).

D. In-service training of workers with disabled persons

Care for disabled persons, like many other fields of knowledge, is constantly in a state of renewal. Therefore, the pre-service training of workers, no matter how intensive and comprehensive it is, must be supplemented by a briefing on new techniques and approaches in the field of caring for the disabled. In-service training programmes should also cover workers in ordinary schools, particularly teachers, to enable them to deal with disabled children if integrated into ordinary schools. Organizing in-service training programmes is the responsibility of educational authorities, who are also responsible for plans, controls and incentives to develop the capabilities of workers in this field.

E. Envisaged expansion in instituting worker training programmes

Universities and specialized colleges are regarded as the main source of a work-force to meet the needs of the labour market for various disciplines and professions. However, it is to be noted that few universities in the Arab countries have programmes for the training of workers in the field of care for
disabled persons. The shortage of higher-degree specialists in disciplines related to the care for the disabled is probably the main reason for deferring initiation of such programmes. This shortage can be met by engaging foreign experts even on a temporary basis until Arab universities manage to prepare national specialists by sending students abroad for higher studies. Thus, the noticeable shortage in qualified workers cannot be overcome except through a planned expansion initiating worker training programmes in universities or institutes to produce the required work-force in this field. The following are a few essential points to be taken into consideration before initiating programmes for the training of workers with disabled persons in the Arab countries:

1. Previous experience in the field of training of workers with disabled persons, especially in developed countries, should be investigated and studied with a view to benefiting from some experiences and avoiding those that proved to be of no avail. In this respect, the particular features of the Arab countries should be taken into consideration.

2. Attention should not be focused on a single type of professional (e.g., teachers). Programmes should be formulated to cover all required types of workers with disabled persons. This factor makes it necessary to initiate programmes in conjunction with colleges of various disciplines related to disabled persons such as Colleges of Education, Applied Medical Sciences and Medicine.

3. In accordance with recent trends in caring for disabled persons, which adopt the integration approach in the provision of services, and in view of the close resemblance of characteristics among the various types of disabilities, particularly among the moderate and mild types, training, especially for teachers, should be of an unclassified nature, as this approach is becoming prevalent because of its effectiveness and usefulness (Christoplos, 1972, p. 115; Al-Sartawi, p. 118).

4. Attention should be given to field training as a vital part of workers' training programmes so as to put theory into practice. To achieve this, liaison with nearby centres should be established or practical classes attached to training programmes.
References


الجاجي، محمد وعباس، عبد الرزاق. 1982. دراسة حول تربية المعوقين في البلاد العربية. المنظمة العربية للتربية والثقافة والعلوم، تونس.


المبادي، جهيل. 1989. ورقة عمل يعنوان من أجل تعاون أفضل بين الجامعات في مجال التربية الخاصة. قدمت في الندوة الثانية لمسؤولي برامج اعداد العاملين مع المعوقين في الجامعات والمعاهد العربية، جامعة البحرين، الامارات العربية المتحدة.

مكتب التربية العربي لدول الخليج العربي. 1983. واقع مؤسسات رعاية المعوقين في الدول الأعضاء في مكتب التربية العربي لدول الخليج، الرياض.
IX. UNICEF-ASSISTED PROGRAMMES AND GLOBAL STRATEGY ON
CHILDHOOD DISABILITY PREVENTION AND REHABILITATION

by

UNICEF
Introduction

In accordance with the United Nations World Programme of Action concerning Disabled Persons, the principles of primary health care, and other basic health services, the United Nations Children's Fund (UNICEF) is a strong promoter of the concepts of prevention, early detection, early intervention and community-based rehabilitation. In 1980 this approach was further reinforced through an expanded strategy for childhood disability prevention and rehabilitation adopted by the Executive Board of UNICEF. Three essential elements of this strategy, adopted as part of UNICEF policy, are:

(a) Effective prevention of childhood impairments through immunization for infectious diseases, nutritional supplements to reduce vitamin A deficiencies and iodine deficiency disorders, and measures to reduce pregnancy-, birth- and accident-related injuries;

(b) Early detection and intervention to reduce the effects of disability;

(c) Use of the family and community as primary vehicles for delivering services to those children who are already disabled.

UNICEF advocates better monitoring and screening procedures during the pre-natal, peri- and post-natal periods through primary health care (PHC) and other basic service structures. Prevention means not only proper nutrition and health services, including immunization to reduce the incidence of illness or other disabling conditions, but also early intervention before conditions lead to physical or mental disabilities and handicaps.

Through a programme of technical co-operation with the non-governmental organization Rehabilitation International, UNICEF produces and disseminates information materials to all of its field offices and others interested in the area of disability prevention and rehabilitation. Among the documents produced by this joint Technical Support Programme are the UNICEF Programme Guidelines on Childhood Disability Prevention and Rehabilitation, an information kit on childhood disability and publication of a newsletter, One in Ten, in Arabic, English, French and Spanish.

In 1988, with UNICEF assistance, training of community workers in prevention, early detection and appropriate community-based intervention was made possible in 37 developing countries in Asia, Africa, Latin America and the Middle East. With regard to programmes in these countries, the following points should be noted.

I. Reduction of infant and child mortality has continued to be a dominating priority and concern of most individual country programmes. The overall programme strategy of Child Survival and Development has been promoted in all country programmes, although emphasis appeared to vary in different regions as well as within regions. It is hoped that by 1990 the lives of up to 5 million children will have been saved and that disabilities will be
avoided for millions of children through accelerated Child Survival and Development assistance, particularly through Universal Childhood Immunization programmes.

2. The nutritional status of infants and children is closely linked to their physical and mental development. Realizing this important link, many country programmes have reported that they have been able to control iodine deficiency disorders and alleviate deficiencies of micro-nutrients such as vitamin A.

3. Prevention also includes intervention to diminish the consequences of disabling conditions before they lead to physical or mental disabilities and handicaps. Through the PHC services and community-based rehabilitation approaches, low-cost measures have been developed to assist disabled children within the family and the community.

4. Improved and expanded prevention, early detection and rehabilitation activities in the context of basic services require increased and more relevant education aimed at the family, especially mothers. In some countries, community and family-oriented advocacy and awareness programmes aimed at early detection and rehabilitation have begun, with wide coverage at affordable costs. Utilization of different channels, involving both advanced and traditional approaches, for reaching the family and the communities is being promoted.

5. In accordance with the decision of the Executive Board in 1986, some country offices have become more involved in the development of specific activities, especially for disabled children and refugee children in unusually difficult circumstances. The focus in this area has been on identification of affordable and sustainable means to reach the most disadvantaged members in this group.

6. Studies on the incidence and prevalence of disability among children, which are needed in the development of national plans, have been supported by UNICEF in a number of countries.

7. Preparation of training materials for community-level workers and parents, as well as training of different levels of personnel in prevention, early detection, early stimulation and rehabilitation as part of the primary health care system, is being supported by UNICEF.

A. Prevention of disability

Visible success in control of iodine deficiency and vitamin A deficiency disorders has been reported, particularly in Asia where the majority of the affected population live. These efforts are being further strengthened through supplementary funding in a number of countries. Apart from the more obvious effects of iodine deficiency such as goitre and cretinism, subnormal mental development caused by neonatal hypothyroidism is known to be widespread, particularly in the "goitre belt" countries.
1. Control of iodine deficiency disorders

India has adopted the goal of eliminating iodine deficiency by 1990. Disabilities resulting from lack of iodine affect the lives of at least 40 million people in India, including 16 million children under 15. Public awareness of the seriousness of the problem is increasing. Fifteen million people in severely affected areas will receive iodized oil injections. To solve the problem in the long term, a campaign is being waged to iodize all edible salt in India by 1990.

Iodine deficiency disorders have been recognized as a major public health problem in Burma. In addition to the estimated 4 million people in the hilly regions of Burma, recent studies have revealed a high incidence of this disorder in various pockets in the lowland and coastal areas. As a logical consequence of previous interventions, the project will be continued during the period 1988-1990.

Iodine deficiency disorders are highly endemic in much of Ethiopia, with one quarter of the population affected. Projects will attack iodine deficiency disorders at national level through the expansion of iodized salt production and through the use of iodized oil injections in the most affected areas.

In the Central African Republic a national programme is being organized to combat the problem of iodine deficiency disorders through: (a) a nation-wide study of the prevalence of iodine deficiency; (b) development of appropriate educational methods; (c) provision of the needed supplies for selected preventive and curative interventions; and (d) evaluation of the impact of activities on the progressive elimination of goitres and the impact of iodine deficiencies on child development.

In the mid-hill areas of Nepel goitres affect 80 per cent of the population and cretinism affects 10 per cent. The Government has launched a Goitre and Cretinism Eradication Project to provide all persons from one month to 45 years of age in 28 districts with injections of iodized oil.

The northern areas of Pakistan are among the most seriously affected in the world with regard to iodine deficiency disorders. These disorders, in addition to being related to other serious health problems, have been linked to endemic cretinism and a composite syndrome involving mental retardation, dwarfism, deafness and spastic diplegia. Under a short-term plan, iodized oil will be administered to children under 19 and women of child-bearing age. A long-term strategy includes production, marketing and distribution of iodized salt to all affected areas.

Viet Nam is focusing on areas where there is a high prevalence of goitres (more than 50 per cent) or moderate prevalence (15-50 per cent). An estimated number of 200,000 people per year in goitre-endemic zones will receive iodized oil injections. In addition, 10 production plants will produce 4,500 tons of iodized salt per year.
The iodized oil injection programme in Bangladesh is targeted for completion by 1990. The programme is aimed at 1 million people with the highest risk of developing goitres. Thirty to 70 per cent of the population in the country are affected by this deficiency.

An assessment of the iodine deficiency disorder was conducted among 2,300 women and 1,200 children attending the Kabul mother and child health (MCH) clinics and primary schools in Afghanistan. The results showed that 25 per cent of women, 11 per cent of school-age children of both sexes and 16 per cent of pregnant women had endemic goitres. The study recommended immediate measures for pregnant women through the provision of iodized oil injections or iodized capsules. For a long-term solution, the study recommended that all salt consumed by the population should be iodized.

2. Control and prevention of blindness

More than 33 per cent of pregnant women in Mauritania are anaemic and many suffer from vitamin A deficiency. In Ethiopia the project aims at reducing the high rate of night blindness and other forms of vitamin A deficiency.

Following the results of a field assessment for identification of high-risk children under 10 years of age and mothers in three drought-affected provinces in Burkina Faso, a two-year pilot project has been developed and is being implemented through existing primary health and nutrition centres, schools and village women's groups.

Vitamin A deficiency is the leading cause of childhood blindness in Bangladesh and Viet Nam. Projects are focusing on early detection, treatment and training of health personnel in addition to the provision of vitamin A capsules. Health education and public information activities are planned for parents and day-care and pre-school staff. Pregnant women and children suffering from vitamin deficiencies in Bhutan receive supplies of vitamin A and other essential vitamins through basic health units.

From 1988–1992, UNICEF co-operation in Colombia will support activities aimed at eliminating the following: perinatal mortality due to preventable causes; the reduction of morbidity and mortality among children under five years of age due to preventable diseases; malnutrition and other deficiency-related disorders; household accidents; development retardation, learning difficulties, and psychological deprivation in children in general.

B. Community-based rehabilitation (CBR)

The vast majority of disabled children in developing countries do not have access to rehabilitation services of any kind owing to the lack of resources. The World Health Organization (WHO) estimates that these services reach less than 2 per cent of needy children in most developing countries.
The overall UNICEF policy for community-based rehabilitation in Kenya has been to strengthen the responsible agencies already assisting the disabled population. Up to January 1988, UNICEF supported only one non-governmental organization (NGO) - Action Aid - and the Kenya Institute of Special Education. Action Aid has received assistance for training materials and low-cost aids and workshops for parents and child-to-child approaches. The Ministries of Culture, Health and Education also received UNICEF assistance for planning, monitoring and co-ordination of CBR meetings; for production of a CBR manual and management of a training course for the staff of CBR projects and for training of parents of handicapped children. In order to get more quantitative and qualitative information and data, UNICEF is now partly funding a survey of about 2,000 children under the age of 15. UNICEF sponsored a representative to participate in the Rehabilitation International 16th World Congress held in Tokyo to present a case-study of the community-based rehabilitation programme in Kenya. The Rehabilitation International 17th World Congress will take place in Nairobi in 1992.

The Morocco project on childhood disability is designed for the following purposes: (a) to identify and rehabilitate victims of polio; (b) to establish a social and legal service within a national institution in charge of informing mothers of their rights and problems; and (c) to establish foster homes for those children in difficult social situations.

Funds are sought to implement a community-based programme for disabled children in Democratic Kampuchea. The aim of the programme is to assist disabled children in selected districts in order to establish a national policy. The project will promote prevention and early detection in the community, support community-based rehabilitation and empower the community leaders and parents to improve the situation of disabled children through village-level training and information activities. UNICEF will provide technical guidance as well as information and training materials. Support will also be given to encourage local production of simple rehabilitation equipment.

Most of the disabilities affecting an estimated 12 million children in Brazil are preventable, with causes ranging from pre-natal and birth-related problems to malnutrition, accidents and drug abuse. While most of these disabilities can be prevented, this is often not the case among low-income groups. In many cases, potential disabilities become real and real handicaps worsen owing to the lack of preventive services, early detection and rehabilitation facilities.

Broad-based community programmes in poor sectors to prevent physical and mental disabilities will be promoted through a supplementary funded project. Youth-to-youth and youth-to-child services will be emphasized with support from both governmental agencies and non-governmental organizations. The specific objectives of the project are: to prevent disabilities by monitoring pregnancies and childbirths, with follow-up of infants and young children; to identify children at risk to prevent disabilities from worsening; to educate
families and communities on the importance of prevention and early attention to disabilities; to integrate the disabled child into society and protect his/her right to health care, education, rehabilitation and meaningful work; and to monitor the rehabilitation of disabled infants and children, orienting therapy towards the use of low-cost technologies.

Reliable statistical information on the extent of disability is not currently available for Viet Nam. Nonetheless the high morbidity levels of potentially disabling diseases in the country would suggest that actual levels of disability are most probably much higher than studies conducted so far have shown.

The UNICEF approach to childhood disability is particularly oriented towards prevention through immunization of children, control of vitamin A and iodine deficiencies, and the promotion of home- and community-based rehabilitation particularly for those with motor handicaps. During 1988 UNICEF supported the Government of Viet Nam in raising popular awareness of the need for social integration of handicapped children. Supplementary funds are sought for establishment of six community-level centres for disability rehabilitation in 1988 and 1989. UNICEF is also actively seeking the involvement of specialized non-governmental organizations to take over this area of co-operation for the longer term.

In India, the UNICEF response to childhood disability is directed mainly towards services for prevention, early detection and rehabilitation. The activities supported are at present less important per se in statistical terms than for their potential for dissemination as socially viable approaches in the Indian context. The limited capacity of UNICEF is therefore being used to promote or try out ideas, without missing opportunities to help in strengthening programme planning, development, implementation and monitoring capacity at central and State levels, through professional channels in and outside government and voluntary groups.

There has been considerable progress in the development of programmes for disability prevention, early detection, intervention, treatment and rehabilitation. Ten pilot District Rehabilitation Centre Schemes have been established as an innovative response to needs of the rural population for delivery of a comprehensive package of services through district-based approaches utilizing PHC institutions in the rural areas. Besides community participation, involvement of NGOs is also stressed. About 50 NGOs continue to implement several innovative projects for disabled children with assistance from UNICEF. Some of the most innovative and applicable projects are being documented for replication and wider usage. An evaluation of these projects is under way. On the basis of its results, the Planning Commission intends to undertake a phased coverage of the entire country.

Within the National Information and Documentation Centre on Disability, a Media Cell is being established with assistance from UNICEF. The main objectives of the cell will be to operate a data bank on all communications and media materials related to awareness creation and training that have been
produced so far and are available in the country. Training activities for screening the existing media as well as development of new proposals are currently under way.

There are approximately 300 million children under age 14 constituting about 33.6 per cent of China's population. On the basis of global estimates of 10 per cent, China has reported 30 million disabled children below age 14. Based on recent estimates in the country, it is reported that 740,000 children below 6 years of age are profoundly deaf. Seventy per cent of these cases were caused by misuse of pharmaceutical products.

The situation of disabled persons in China is made difficult by lack of access to services. Eighty per cent of China's disabled population live in the rural areas where services are non-existent. Less than 2 per cent have access to assistance such as educational, medical, rehabilitation and social services.

UNICEF co-operation over 1983-1989 has focused on hearing disabilities, learning disabilities, support to regional rehabilitation centres, training of rehabilitation workers and assistance in exchange of information and experience to update knowledge of concerned personnel in the field of disability prevention and rehabilitation.

Prevention of disability, early detection and rehabilitation of disabled children in China is a challenge for the future. China has a well-organized structure, operational at central, provincial, municipal, country and township levels. Other mass organizations such as the All China Women's Federation and the China Disabled Persons Federation are also operating at all levels and provide a great opportunity to reach out to the grass-root level. Education of parents and dissemination of information to the community at large on the causes and prevention of disabilities can be promoted through 500,000 Women's Federation units existing nationwide. This can be reinforced by radio, television and other media facilities. UNICEF has been invited to assist with a family/community education programme in 24 of the 30 provinces in China.

In collaboration with the Chinese Ministry of Health and the United Nations Population Fund (UNFPA), UNICEF will be supporting 299 counties in the country in developing and extension of MCH programmes to remote areas using simple observation and detection techniques. UNICEF will also support training of community workers, health workers, rehabilitation workers, primary and secondary level and special education teachers. UNICEF will be assisting the Ministry of Civil Affairs and the China Disabled Persons Federation with six projects aimed at promoting community-based rehabilitation for disabled children.

In the West Bank, UNICEF assisted in the establishment of four prototype child development centres for the prevention and early detection of the most common childhood disabilities. UNICEF also assisted in providing guidance for treatment and rehabilitation and in training pre-school teachers and upgrading
facilities. The most visible UNICEF assistance to Gaza is the physiotherapy project which began as an emergency humanitarian initiative. Rapid survey and project design consultation with the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) in Gaza were followed by successful fund-raising and recruitment of physiotherapists. In mid-1988, a joint UNICEF/UNRWA Physiotherapy Project started in five health centres covering eight refugee camps with a total population of 400,000. A total of 13 Palestinian physiotherapists have been recruited and eight trainees from Gaza from the Ramallah Women's Training Centre have been included in this project. By early October this project had treated more than 800 children and young people who had suffered limb trauma and would otherwise have been permanently disabled or disfigured.

To develop a national plan for handicapped children and design appropriate intervention programmes, a study of the situation of handicapped children in Oman is planned for 1989. The study will also examine the severity, types and prevalence of mental and physical handicaps and their causes.

Accidents involving children at home and outside, attributed to carelessness and modern development, are becoming a serious problem in Oman. There is an urgent need to create proper awareness to prevent accidents and to inform parents and publicize the types of first-aid necessary for accidents caused by automobiles, chemicals, pollution and other environmental conditions. The causes of these accidents can also be identified and brought to the attention of parents to help them to take the necessary precautionary measures to prevent accidents. There is an acute shortage of relevant materials that can be used in Oman.

To determine the extent and severity of childhood disabilities, causes and management in the Yemen Arab Republic, a study of situation analysis is planned for July 1989. Based on the results, a plan of action for combating the problem in the country will be prepared.

Efforts in the area of childhood disabilities continue to focus on the development of alternative models of family and community-based action including prevention, early detection and intervention through parent orientation. Intensified intersectoral efforts were undertaken during 1988 in Belize, Honduras, Nicaragua and Costa Rica.

During 1988, UNICEF technical and financial support further focused on the development of project support materials, local training and institutional capacity-building for in-service personnel preparation, country-level supervision and evaluation. Increased emphasis was placed on operational analyses, including studies of local characteristics of target populations in Honduras and Guatemala, evaluation of special education services and UNICEF-supported community-based projects in Nicaragua, development of community-based action in Costa Rica, and the availability of support services for disabled children in Central America. In addition, increased efforts were
made to use regional resources for technical support through technical co-operation among developing countries (TCDC) and progress was made in the establishment of national technical assistance and training units for support of early childhood development and disability action in Honduras and Guatemala.

In combination with further development of TCDC activities in Central America, significant progress has been made in implementing joint activities and policies with the Pan American Health Organization (PAHO) Technical Advisor for Rehabilitation Projects in the promotion of community-based rehabilitation were implemented in Costa Rica and Nicaragua with combined UNICEF and PAHO support, while the UNICEF Area Office assisted PAHO in the introduction of the "participatory methodology" as the primary methodology for future training courses in community-based rehabilitation.

Continuing emphasis has been placed on integrating disability components within other UNICEF-supported projects including Child Survival, Rural and Urban Development, and Early Child Development. Increased attention is also being directed to the monitoring of child development at the community and operational levels to facilitate early detection of disabilities.

Some difficulties were encountered during 1988 which affected the development of project actions in El Salvador, Guatemala and Panama. In El Salvador, efforts to integrate childhood disability components within the Integrated Child Development project were delayed owing to changes in operational agencies and the technical limitations of national staff in disability-related fields. The political situation in Panama caused a significant delay in the initiation of project actions in indigenous areas of the country. In Guatemala, frequent changes in both the Health and Social Welfare ministries affected negotiations regarding the location of the national technical assistance and training unit for support of early intervention and disability projects.

In Mauritius, an estimated 12.2 per cent of all 3-5 year olds are at risk of physical, sensory or mental impairment. The project for early detection of disability has moved forward with adaptation of screening tools, pre-testing and the organization of two training modules. The project is being funded by the UNICEF British National Committee.

Burundi is currently assisting handicapped and traumatized children on a small scale. Additional financial assistance is being requested to provide the necessary rehabilitation services for this population.

Disability among children in Nepal derives from many causes. Lack of iodine causes some children to be born deaf, mute or suffering from the more severe signs of cretinism. Nepal, being in the heart of the Himalayan Goitre Belt, has one of the highest incidences of endemic goitres and cretinism in the world. Poliomyelitis is one of the most common causes of disability in this country. Infants weighing less than 2,500 grams at birth are at greater risk from diseases leading to disabilities. Twenty-five per cent of children
with low birth weights may have a minor cerebral dysfunction. Children who
are malnourished in the first two years of life may also suffer permanent
mental and/or physical impairment. Deafness is the most common form of
disability in the country and is associated with iodine deficiency during
pregnancy or chronic ear infection, measles and continual colds. Children may
also become mentally disabled following high fevers associated with meningitis
and mumps or because of accidents. Children who are mentally impaired are
generally at high risk of becoming physically disabled.

Services for children with disabilities are extremely limited in the
country as a whole and even in the capital city, Kathmandu, only a few hundred
children benefit from services. Less than 1 per cent of disabled children in
need of rehabilitation receive any services owing to lack of resources. The
challenge of "reaching the unreached" is an immense one. With so many
pressing problems, the important question raised is how can the existing
resources within the community be properly utilized to establish inexpensive
but effective rehabilitation services? In recent years the need for low-cost
family and community-based rehabilitation programmes has been emphasized,
since it is not only economically realistic to have services provided by the
disabled person's family but also a means of fully involving disabled persons
in activities.

The goal of the UNICEF-assisted CBR project in Nepal is to implement an
ongoing community-based programme through the PHC system to assist families of
children with disabilities and to prevent the occurrence of disabilities among
the healthy children of the community. Specific objectives of the project are:
(1) to provide family support services for children with disabilities;
(2) to train community rehabilitation workers and volunteers in planning and
implementation of home/community-based services for disabled children; and (3)
to establish linkages between the CBR project and local health and education
services and to have all disabled children in project families who are able to
attend school enrolled in school. (This project, accompanied by audio-visual
aids, will be presented in detail at the ESCWA Conference in Amman in November
1989).

Special education programmes for disabled children within the system of
primary education in Sri Lanka have been successful - including the training
of teachers in screening for disabilities and providing referral and follow-up
services to disabled children. This links with community-based rehabilitation
activities in Anuradhapura district.

As part of UNICEF assistance to primary education, activities have been
supported in early detection, prevention and control of disabilities in
primary school children and educational rehabilitation of disabled children in
schools in Kalutara, Anuradhapura and Kurunegala districts. The activities
include training primary school teachers in techniques of detecting
disabilities as well as methods of teaching disabled children. In 1988 a
total of 2,200 teachers were trained in all three districts, making it
possible to identify a total of 23,300 children with disabilities ranging from
minor hearing impairments to severe disabilities.
One of the positive outgrowths of the special education programme has been the evolving of community-based rehabilitation in Anuradhapura district. The experience gained through this pioneering effort was presented at the above-mentioned Rehabilitation International 16th World Congress.

Also during the same year (1988), surveys were completed in 19 divisions covering approximately 8,000 families; of these 45 per cent were children under age 14. Deficiencies in vision, hearing, moving and mental capacity were among the most frequent disabilities detected.

In July 1988, the then President of Pakistan signed the document for creation of the National Trust for the Disabled, including a commitment of 40 million Pakistan rupees. This trust will absorb the federal Directorate General of Special Education and several other newly established federal bodies. It is expected that, through the Trust, greater flexibility in programme and service development will be possible.

A Rehabilitation International/UNICEF media consultant, together with staff of UNICEF and national counterparts, developed five public service announcements for Pakistani TV, outlines of mini-books, posters and other media ideas as prototypes for the Government. The book Disabled Village Children (by David Werner) is now being adapted and translated for national use.

At the provincial level, several new activities have been initiated. In Sind, training of 400 school health medical officers in the detection of disabilities among schoolchildren in Karachi and development of a referral and community follow-up programme covering initially 50 schools in Karachi are under way.

In collaboration with Operation Handicap International (OHI), a Belgian-based NGO which has been working primarily with disabled Afghan refugees for several years, a proposal to implement the OHI methodology of low-cost therapy and manufacturing of prosthetic appliances using locally available materials, within the Haluchistan Special Education Complex, has been accepted by the Government. As one of the collaborating parties, UNICEF will support the training component.

In Peshawar, the first meeting of the five community-based centres for physical rehabilitation, established with UNICEF assistance during the previous programme cycle, was held. These units, which provide rehabilitation services mainly to polio and cerebral palsy (CP) cases, work closely with parents to encourage follow-up at home level. UNICEF visits to the centres indicated that further technical assistance is required. Among the issues raised at these discussions was the need for more training and for development of outreach services to remote villages. In Punjab, support for a community-based programme for rehabilitation, run by the Salvation Army, is under negotiation.
In August, a senior government delegation visited Indonesia to observe a comprehensive programme of community-based rehabilitation in central Java. Another group of senior officials represented the Government of Pakistan at the 16th World Congress of Rehabilitation International in Tokyo. In addition, UNICEF supported the participation in the Congress of a delegation of six persons representing four NGOs.

At the request of the UNICEF Regional Office for the Middle East and North Africa, a Rehabilitation International/UNICEF consultant undertook a mission to Bahrain to study the rehabilitation facilities in that country and make recommendations. Preliminary recommendations included the development of (1) an early intervention and treatment programme for young handicapped children and (2) a long-range national training and job placement plan for the older population.

UNICEF was represented at the above-mentioned 16th World Congress of Rehabilitation International held in Tokyo, Japan, in early September by the Special Advisor to the Executive Director. More than 2,800 participants from 90 countries attended the Congress. The theme of the Congress was "Realistic approaches: looking ahead towards comprehensive rehabilitation". A one-day workshop on childhood disabilities was organized at the Congress by the Rehabilitation International/UNICEF Technical Support Programme. A complete report of the Congress and the UNICEF workshop is published in the One in Ten newsletter.

At the Rehabilitation International Arab Regional Meeting in Jordan, the CP Foundation reported a high incidence of cerebral palsy among young children. It was recommended that: (a) the growth charts being used at the MCH centres should include milestone screening and early referral; and (b) assessment for early detection should be included in the MCH training curricula.

Uganda conducted a study to examine the situation of disabled children in order to identify the estimated numbers of disabled children and their particular needs in nutrition, health and education. The existing facilities in children's institutions were also examined. The report of the study is intended to be used in planning strategies for effective intervention programmes for children in particular need.

C. Children caught up in armed conflicts

At the 16th World Congress of Rehabilitation International in Japan, two case-studies were presented on refugees from Afghanistan and Somalia. Both studies were on the theme of War Trauma and Psychological Aspects of Refugee Children and Women. Approximately 50 per cent of the world's 12 million refugees are children, living under very difficult circumstances. Children are particularly vulnerable in situations of war, natural catastrophe or long-term residence away from their homeland. Denied the security which promotes natural childhood development and subjected to sustained periods of
stress over a prolonged period of time, many children expressed feelings of sadness and anxiety and behavioural disorders of various levels of intensity were observed. Two presentations on refugees from Afghanistan (a total of more than 5 million) and Somalia (a total of 850,000 refugees), described children who, because of concern about family members left behind, suffered psychological effects from a decade long trauma which had been a tragic disruption of their lives. As a result, many children had assumed the functions of lost parents and suffered depression and anxiety, a sense of homelessness and loneliness. Given their uncertain future, these children had chronic dependency needs and a low sense of self-esteem. The recommendation made was that the psycho-social needs of these children must be cared for. The future of millions of children who survive war and disasters could be drastically improved if their psychological needs were addressed and educational support systems were developed for them.

D. Advocacy and public awareness

Advocacy and public education for social mobilization are integral and absolutely necessary parts of progress. Awareness of disability is growing. There is a change in public perception of disability. At the global level, there are markedly positive attitudes towards integration, full participation, equality, prevention, community-based rehabilitation and, most important, recognition of the human rights of disabled persons.

In order to reach families of disabled children with useful information which would benefit the child and the entire family, a programme of information collection and dissemination must be launched at the country level. Appropriate materials providing practical and positive information on disability prevention to parents and the community at large are needed for a successful community-based rehabilitation programme.

Keeping the above objectives in mind, the Rehabilitation International/UNICEF Technical Support Programme organized a one day workshop on the theme of Disabled Children: Survival and Development at the 16th World Congress of Rehabilitation International. Three sub-themes were presented as part of the main theme. The first sub-theme, The Link Between Child Survival and Development, covered topics on UNICEF-assisted projects in India, China, seven Central American countries and Pakistan. The second, War Trauma and Psychological Aspects of Refugee Children and Women, covered presentations on Afghan refugee children and Somali refugee women and children. The third, Community-Based Rehabilitation, covered five UNICEF-assisted CBR experiences in Nepal, India, Sri Lanka, Kenya and Thailand. Ten UNICEF programme and project officers from India, China, Guatemala, Pakistan, Somalia, Nepal, Sri Lanka and Kenya, as well as representatives of many governmental and non-governmental organizations working in prevention, early detection, community-based rehabilitation and other related fields, attended. A total of 16 UNICEF-assisted childhood disability prevention and rehabilitation projects were presented at the day-long workshop.
X. VOCATIONAL REHABILITATION AND EMPLOYMENT OF THE DISABLED

by

International Labour Organisation
Men and women with any kind of disability in the ESCWA region still face some hardships. There are no exact statistics available on the number of disabled persons in the countries of this region. However, The World Health Organization (WHO) estimates that about 10 per cent of the population in this region suffer from a physical or mental disability. In most cases, these disabilities have serious consequences for the vocational, social and economic aspects of disabled persons' lives, which could be reduced or overcome through appropriate rehabilitation services, if they were available.

The overall situation of vocational rehabilitation programmes in the Arab States was reviewed during the past two years by the ILO Regional Adviser on Vocational Rehabilitation as well as by International Labour Organisation (ILO) consultants. All information and personal observations referred to the lack of qualified rehabilitation staff and to the needs within the region for intensified training and upgrading of the existing rehabilitation staff. This would be as a first step to mobilize rehabilitation services leading to the reintegration of the disabled into active and independent social and economic life.

In most countries of the region, services for the disabled are provided through educational, medical and social welfare systems rather than vocational training and employment systems. The potential of the disabled to participate in economic activities remains largely unrecognized. The disabled person is thus seen as a receiver of welfare benefits, rather than as a potential contributor to the national development process.

Some of the countries of the region have embarked on the implementation of pilot rehabilitation programmes to cope with this problem, while others are still struggling to seek training opportunities of their disabled in neighbouring countries. The ILO tries to support the most promising of these approaches, namely, the integration of disabled persons in income-generating activities in their own countries.

In Jordan, an ILO Vocational Rehabilitation Expert has advised the Ministry of Social Development on Vocational rehabilitation services through the development of rehabilitation staff training programmes and maximum utilization of existing vocational rehabilitation services for the creation of income-generating activities for disabled men and women. The expert will soon conclude two final consultancies on assessment and placement and will conduct a workshop to summarize activities.

An ILO expert on vocational rehabilitation is providing technical assistance to the Sana'a Vocational Rehabilitation Centre for deaf and mildly mentally retarded persons. It should be noted that the fact that this expert is Arab highlights two important points. First, there are already some highly qualified experts living and working in this region who are prepared to share their expertise with professionals from other countries; secondly, the ILO is very much interested in identifying and recruiting experts who know the region, the people and their culture and customs.
This is the case with the Jordanian expert, who is currently working for the ILO in Oman. The expert is developing a vocational rehabilitation staff training programme which would use an existing vocational rehabilitation centre to create income-generating activities, mainly for men and women with hearing impairments or physical disabilities.

In addition to providing technical assistance to the Vocational Rehabilitation Centre in the United Arab Emirates, the ILO currently has two active programmes in Iraq. A staff training programme is being developed for fuller and more adequate utilization of existing vocational rehabilitation services, and assistance is being provided to improve the quality of prosthetic/orthotic services. In connection with the latter, the ILO is assisting the concerned authorities of the Foundation of Technical Institutes to prepare for an International Conference for Arab States on Prosthetics and Orthotics, which will give the chance to all countries of the region to benefit from the experiences of the Iraqi project.

The title of the latest project "Development of rehabilitation staff training capacities in Arab countries" which is financed by the Arab Gulf Programme for the United Nations Development Organizations (AGFUND), could be seen as programmatic for the work of the International Labour Office in the field of vocational rehabilitation of disabled persons. Why does the ILO in general put so much emphasis on the training of staff and why particularly in the ESCWA region? There are various reasons for this.

Facilities for the training of rehabilitation personnel in the region are very limited; thus a number of specialized staff such as rehabilitation counsellors, vocational guidance and job placement personnel, sheltered workshop managers and vocational instructors for the visually impaired, the hard of hearing, the mentally retarded and other disabilities are not available. To compound the problem, graduates in other rehabilitation fields are not being trained in sufficient numbers.

There are hardly any training programmes for rehabilitation specialists and virtually all Arab States still depend on overseas training for their supply of specialists. Such overseas training, however, is often found to be inappropriate and does not correspond to the cultural values and established services in the Arab countries. In addition, such training is costly and often leads to a brain-drain of well-educated people to industrialized countries.

The ILO therefore believes that it is in line with present natural development priorities that vocational rehabilitation workers at all levels acquire their certificates and degrees in appropriate institutions in the Arab region.

Consequently, it is the aim of the ILO to identify existing training institutions in the region which would have the capacity, the competence and the interest to develop and offer rehabilitation staff training programmes for students and rehabilitation staff from all countries in the region.
Provisions have been made under the above-mentioned project to provide the expertise and other inputs required to assist these training institutions to take over these new tasks.

Thus, collaboration at the subregional and regional level will be required to tackle those tasks which exceed the means and possibilities of an individual country. This would require that the Arab countries co-operate in developing a more global strategy, working out common approaches, as well as practical guidelines for the co-ordination and implementation of those programmes which lend themselves to subregional and regional co-operation. It is therefore planned to establish a network of national training facilities which will supply the countries of the region with trained rehabilitation workers in various areas of rehabilitation work. Not only would this help to overcome the dependence on Western concepts and resources, but it would at the same time contribute to the Arab countries' self-reliance and independence in the social field. This co-operative approach would also lead to an exchange of ideas and mutual assistance which would inevitably bring about immediate benefits for the disabled and the promotion and reinforcement of the needed national rehabilitation programmes in various parts of the region.

A substantial amount of research, logistic planning and development of training and support services will be necessary and close collaboration with and support of Governments, non-governmental organizations and international agencies is required in this endeavour.

It is the final aim of the ILO to assist the countries of the region in developing their own rehabilitation staff training in various fields in a self-reliant manner. This implies that diploma and degree programmes will have to be developed by universities and other comparable training institutions in a co-ordinated manner. However, this project, as the first phase of a long-term programme, will focus on the training and upgrading of personnel who are or who will be exercising rehabilitation functions and consequently concentrate on short-term certificate courses only. It will thus contribute to the gradual development of staff trainers, in particular by creating a core of lecturers. They would eventually become part of the faculty of the proposed Arab League Educational, Scientific and Cultural Organization (ALESCO) Institute for Special Education and Rehabilitation.

The development of training for rehabilitation staff and a community-based programme necessitates the development and organization of special courses, seminars and workshops suitable to the needs of the subregion. Rather than establishing one regional training centre in one country, the programme will have a truly regional character by utilizing existing training institutes and/or rehabilitation facilities in several countries.

The ILO needs the continuing support of ESCWA and ALESCO to achieve these goals. This co-operation can be manifold. The current Conference is a wonderful example of a joint effort to enhance the status of the disabled men
and women in the region. Co-operation with other international agencies can make it possible to address in a co-ordinated way the needs for research, special education, medical services, vocational training and employment.

Disabled women and men are motivated to work and to earn their own income to their maximum potential. From its experience around the world the ILO knows that the disabled can make it when they only have the chance to participate in productive activities, be it in formal employment, in self-employment or in co-operatives. ILO Convention No. 159 concerning Vocational Rehabilitation and Employment (Disabled Persons) states that the purpose of vocational rehabilitation is "to enable a disabled person to secure, retain and advance in suitable employment and thereby to further such a person's integration or reintegration into society". Thus, community integration is the final aim to all efforts, an integration from which the community as well as the disabled person will benefit, the former gaining a member who will contribute as an income-earner instead of being dependent on the support of others.

Thus, employment is one of the major steps in achieving integration into the community. As with non-disabled persons, men and women with disabilities should be considered for the widest possible range of jobs, preferably in open employment. Disabled persons can be considered for every conceivable occupation, and they can be productive in all kinds of occupations when they have received appropriate training. Open employment is the most promising way towards community integration, offering the perfect environment for the interaction of disabled and non-disabled persons.

Self-employment may be the best form of employment for disabled persons who live in areas where open employment opportunities are limited, or for those who have difficulty in travelling to work. A recent ILO publication entitled "Self-employment for disabled people - Experiences from Africa and Asia" gives numerous examples of disabled men and women who made it successfully on their own in areas as varied as tailoring, shoe-repair, dairy-farming, watch-repair, dressmaking, butchery and handicrafts.

Working at home is another possible employment outlet for seriously disabled persons or those who live in areas beyond reasonable daily travelling distance from other employment options. Care has to be taken, however, that disabled people are not exploited or segregated through such a scheme.

Co-operatives can be useful. Ideally, efforts should be made to integrate disabled men and women with non-disabled persons into co-operative work.

Sheltered employment might be a last alternative for those disabled persons who, because of the severity of their disability, the lack of adequate training and the shortage of other employment options, cannot make it in the open market. Because of the isolation of disabled men and women in sheltered settings this employment option should be seen as a last alternative. Furthermore, this type of employment has not been effective in other regions.
Recent developments in the employment of disabled persons include the enclave approach. Here, a small group of (mostly severely) disabled persons is working—without or with special guidance or supervision—in an otherwise ordinary work setting offering the possibility of interacting with non-disabled colleagues as much as possible.

As can be seen, the theoretical possibilities for employment of disabled persons are numerous. However, determination and creativity are needed to exploit them.

The importance of work for the achievement of community integration cannot be overemphasized. Special attention should be given to the needs of vocational rehabilitation in the ESCWA region.

Education (either special education or integrated education) for disabled children should incorporate the pre-vocational training component which will lead to vocational training. Self-confidence and motivation are the key to success and the foundations of success or failure in the world of work are laid in school.

Attention should also be given to the need to include vocational rehabilitation in the curricula of the universities. The goals of the above-mentioned regional staff training programme can only be reached when the colleges and universities of the region pick up the message.

Disabled people need our support. The most important support is to acknowledge and enforce the right of disabled persons to exercise their full citizenship in the communities. ILO Convention No. 159 is an international document which serves as a practical guide to secure the rights of disabled persons to vocational rehabilitation and employment. So far, no country in the ESCWA region except Egypt has ratified this Convention. The ratification by the Governments of the region would serve as a public statement of support of the rights of disabled persons and could enhance their status considerably in the region.
XI. INTERNATIONAL DEVELOPMENT OF DISABILITY STATISTICS: ACCOMPLISHMENTS AND GOALS

The United Nations Department of International Economic and Social Affairs Statistical Office
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.
CONTENTS

Summary ................................................................................................................. 146
Introduction........................................................................................................... 147

Chapter

I. THE PROBLEM................................................................................................. 147

II. TYPES OF DATA COLLECTION PROGRAMMES ........................................ 148
   A. Population and housing censuses .............................................................. 148
   B. Sample surveys.......................................................................................... 152
   C. Registration systems................................................................................ 153

III. DEFINING DISABILITY FOR USE IN SURVEY RESEARCH..................... 153
   A. Example of a disability (D code) survey screen ..................................... 154
   B. Example of an impairment screen............................................................. 157
   C. How screening strategies influence survey estimates of disability.... 158
      1. The percentage disabled (or the crude disability rate)..................... 158
      2. Choosing between I codes or D codes in the screening process........ 159
      3. Consequences of screening techniques............................................. 161

IV. FUTURE GOALS OF SURVEY RESEARCH ON DISABILITY: WHERE DOES ONE GO FROM HERE?...................................................... 163

TABLES

1. Percentage disabled by the data collection year and type of data collection programme and sex.............................................................. 149
## FIGURES

1. Percentage disabled by year of data collection.................. 160

2. Percentage disabled by year and type of screen.................. 162

3. Ratio of percentage disabled males to percentage disabled females........................................ 164

References........................................................................................................... 166
This report reviews national disability statistics of 55 countries. These national statistics have been compiled in the newly produced United Nations Disability Statistics Data Base (DISAB). The purpose of this report is to assess how disability concepts and definitions currently used to identify disabled persons in surveys affect survey results. To summarize, this study found that estimates of the percentage disabled ranged from 0.2 to 20.9 per cent for the 63 surveys of the 55 countries. The high degree of variability in disability rates is partly determined by whether impairment or disability definitions and codes are used to identify disabled persons. This study found that survey estimates of the percentage disabled are lower when impairment questions rather than disability questions are used to identify disabled persons. In addition, when impairment questions are used for screening purposes, the resultant disability rates of men are generally higher than those of women. In contrast, when disability screening questions are used, rates are similar for women and men, and in some cases disability rates for women are higher.

Another consequence of the different approaches to screening techniques is that developing countries, which generally use impairment screens in their surveys, report lower rates than do developed countries, which generally use disability screens to identify disabled persons. This suggests that comparisons of disability rates may be very misleading unless the methodological differences between surveys are clearly stated.

These findings emphasize the necessity of international guidelines and survey standards for data collection on disability so that rates may be comparable, and more meaningful, both within and across countries.
INTRODUCTION

The Statistical Office of the United Nations Secretariat has been developing a system for monitoring national progress in the production and use of disability statistics. It has produced, in the process, several reports addressing methods of data compilation and analysis of disability statistics from population and housing censuses, household surveys and population and civil registration systems. One of the reports contains the case-studies of five developing countries of the ESCWA region including details of national definitions and concepts of disability used by these countries for the study of disability since the early 1900s (1). The case-studies report offers concrete examples using demographic methodology for the study of disability. In the case-studies, 45 statistical tables are presented from the five countries and ways to standardize and summarize the findings are suggested.

Since the case-studies were first prepared in 1984, the Statistical Office has produced the United Nations Disability Statistics Data Base (DISIAT) for use with microcomputers on an experimental basis and began disseminating the experimental data base to researchers worldwide in 1988. DISIAT compiles detailed national disability statistics from 63 population census, household survey and registration programmes in 51 countries (2). Preliminary reports using national statistics from DISIAT were submitted for review at the Global Meeting of Experts to review the implementation of the World Programme of Action concerning Disabled Persons at the Mid-Point of the United Nations Decade of Disabled Persons, held in Stockholm from 17 to 22 August 1987 (3). The Global Meeting of Experts recommended that the United Nations publish the statistics in DISIAT and widely disseminate the results (4).

In response to the request of the experts, national statistics from DISIAT are being produced in a statistical compendium for publication by the United Nations, to be completed in 1989.

The Statistical Office has also recently conducted two international workshops on the development of disability statistics and is in the process of preparing a third (5).

I. THE PROBLEM

In the process of conducting these diverse methodological and training activities, the Statistical Office has identified an aspect of survey-taking that is critical to the development of disability statistics. The problem is that there is no agreed upon strategy for identifying disabled persons in household surveys in an acceptable and reasonably standardized fashion.

This paper addresses the specific methodological problem of objectively identifying people who are disabled through the use of survey research methods. It offers suggestions for improved methods for screening of disabled persons in surveys through the use of standardized survey instruments.
For all practical purposes, once disabled persons are identified, survey interviews of people who are disabled are no different than are survey interviews of any other population group. Questions of socio-economic status, school attendance, labour force participation, family and household status are the same for people who are disabled as they are for any other person being interviewed. The one major exception is that specific questions may be added when interviewing disabled persons and their families concerning questions about the cause of the disability, the age at onset of the impairment and special aids used to reduce disability.

II. TYPES OF DATA COLLECTION PROGRAMMES

The three major types of data collection systems used to collect disability data are: (1) population and housing census programmes; (2) household survey programmes; and (3) disability registration systems. As of yet, there is no intergovernmental data collection system that requests countries systematically to submit national disability statistics from censuses, surveys and registration systems for international use. In the absence of such an international data collection system, the Statistical Office has initiated a world-wide review of published reports available in statistical libraries. The Statistical Office has also communicated directly with national statistical offices and other governmental ministries in order to locate published national statistics.

Strengths and weaknesses of censuses, surveys and registration systems as sources of statistical information on disability are discussed in detail in the case-studies (1). Table 1 below shows the 63 national sources of disability statistics identified in the 55 countries and areas of DISTATI according to the type of data collection programme and the year that the data collection on disability was completed.

Each of the three data collection systems is briefly described below.

A. Population and housing censuses

Population and housing censuses have as their goal the coverage of entire populations of countries. When a question about disability is asked in a census programme, it is intended that every household in the country will be asked about the presence of persons with a disability. This is a very large task, yet it has been done in 32 of 55 countries included in DISTATI. One way to ask about disability in a census is to record information on disability for each member of the household e.g. Bahrain, 1981; Kuwait, 1980. An alternative way is to ask special questions about disability of a sample of households, e.g., every tenth or twentieth household, thereby reducing the amount of work required of enumerators during data collection.

In some cases, disability is asked only as part of a census question. For example, it may be offered as a reason for economic inactivity along with other possible reasons, such as being a homemaker, student, or retired person (this example is found in the following censuses: Burma, 1983; Central African
<table>
<thead>
<tr>
<th>Country or area</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys sexes</td>
<td>Males</td>
</tr>
<tr>
<td>Censuses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bahrain</td>
<td>1981 Total</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Comoros</td>
<td>1980 Total</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Egypt</td>
<td>1976 Total</td>
<td>3.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1981 Total</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>1980 Total</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>1980 Total</td>
<td>3.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Mali</td>
<td>1976 Total</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Neth Antilles</td>
<td>1981 Total</td>
<td>2.9</td>
<td>3.3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1981 Total</td>
<td>3.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Panama</td>
<td>1980 Total</td>
<td>3.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Peru</td>
<td>1981 Total</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>1978 Total</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1981 Total</td>
<td>3.4</td>
<td>0.6</td>
</tr>
<tr>
<td>St. Helena</td>
<td>1976 Total</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1975 Total</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1984 Total</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>1975 Total</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>United States</td>
<td>1980 Total</td>
<td>6.3</td>
<td>9.0</td>
</tr>
<tr>
<td>Population not economically active</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belize</td>
<td>1980 15+</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Burma</td>
<td>1980 15+</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>1980 15+</td>
<td>4.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Canada</td>
<td>1975 15+</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>China</td>
<td>1980 15+</td>
<td>1.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Malawi</td>
<td>1980 15+</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>1980 6-16</td>
<td>1.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1980 15+</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>1980 Total</td>
<td>5.1</td>
<td>6.3</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Both sexes</td>
<td>Males</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>1980</td>
<td>15+</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1981</td>
<td>12+</td>
<td>3.8</td>
<td>8.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Both sexes</td>
<td>Males</td>
</tr>
<tr>
<td>Jordan</td>
<td>1983</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surveys</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Both sexes</td>
<td>Males</td>
</tr>
<tr>
<td>Canada</td>
<td>1983</td>
<td>Total</td>
<td>11.2</td>
<td>10.6</td>
</tr>
</tbody>
</table>
| Egypt           | 1979-81 | Total                                    | 1.5      | 1.8   | 1.2     | Disability rate by type of disabilities only.
| United States   | 1982  | Total                                       | 11.3     | 11.2  | 11.4    | Montevideo, chronically ill. |
| Uruguay         | 1984  | 45+                                         | 11.3     | 11.2  | 11.4    |           |

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Both sexes</td>
<td>Males</td>
</tr>
<tr>
<td>Denmark</td>
<td>1976</td>
<td>20-69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1978</td>
<td>15+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>1980</td>
<td>15+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>1983</td>
<td>16-79</td>
<td>15.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>1980-81</td>
<td>16-84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>1981</td>
<td>Total</td>
<td>0.8</td>
<td>0.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Both sexes</td>
<td>Males</td>
</tr>
<tr>
<td>China</td>
<td>1983</td>
<td>0-14</td>
<td>1.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1979-81</td>
<td>Total</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Fiji</td>
<td>1982</td>
<td>Total</td>
<td>0.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Swaziland</td>
<td>1983</td>
<td>Total</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>1983</td>
<td>6-24</td>
<td>2.2</td>
<td>2.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Type of data collection and age range covered</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Both sexes</td>
<td>Males</td>
</tr>
<tr>
<td>Australia</td>
<td>1981</td>
<td>Total</td>
<td>13.2</td>
<td>19.9</td>
</tr>
<tr>
<td>Austria</td>
<td>1976</td>
<td>Total</td>
<td>20.9</td>
<td>19.9</td>
</tr>
<tr>
<td>Canada</td>
<td>1906</td>
<td>Total</td>
<td>13.2</td>
<td>13.7</td>
</tr>
<tr>
<td>China</td>
<td>1987</td>
<td>Total</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Country or area</td>
<td>Year</td>
<td>Range of age</td>
<td>Type of data collection and age range</td>
<td>Percentage disabled</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------</td>
<td>--------------</td>
<td>--------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Both sexes Males Females</td>
</tr>
<tr>
<td>Germany, Fed.R.</td>
<td>1983</td>
<td>Total</td>
<td></td>
<td>11.8 9.8</td>
</tr>
<tr>
<td>India</td>
<td>1981</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>1980</td>
<td>18+</td>
<td></td>
<td>2.4</td>
</tr>
<tr>
<td>Nepal</td>
<td>1980</td>
<td>Total</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>1980</td>
<td>Total</td>
<td></td>
<td>4.4 5.1 3.7</td>
</tr>
<tr>
<td>Spain</td>
<td>1986</td>
<td>Total</td>
<td></td>
<td>11.0 14.8 15.7</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>1982</td>
<td>3-16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1985-86</td>
<td>16+</td>
<td></td>
<td>11.5 12.1 16.1</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1981</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Registration and other types

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Range of age</th>
<th>Type of data collection and age range</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Both sexes Males Females</td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td>1978</td>
<td>4-11</td>
<td></td>
<td></td>
<td>Disabled children only, no total population given.</td>
</tr>
</tbody>
</table>

General non-probability survey

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Range of age</th>
<th>Type of data collection and age range</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>1981</td>
<td>15+</td>
<td></td>
<td></td>
<td>Disabled persons only, no total population given.</td>
</tr>
</tbody>
</table>

Registration campaign

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Range of age</th>
<th>Type of data collection and age range</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>1981</td>
<td>0-14</td>
<td></td>
<td>1.4 0.2</td>
<td>Disabled persons only, no total population given.</td>
</tr>
<tr>
<td>Jordan</td>
<td>1979</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>1980</td>
<td>3-60</td>
<td></td>
<td></td>
<td>Disabled persons only, no total population given.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1978</td>
<td>Total</td>
<td></td>
<td></td>
<td>Northern Ireland only, no total population given.</td>
</tr>
</tbody>
</table>

Disability registration

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Year</th>
<th>Range of age</th>
<th>Type of data collection and age range</th>
<th>Percentage disabled</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1985</td>
<td>Total</td>
<td></td>
<td></td>
<td>Disabled persons only, no total population given.</td>
</tr>
</tbody>
</table>


* Rate of disability among not economically active population.
** Percentage of total population that is not economically active and disabled.
*** Rate of disability among children not attending school.
Republic, 1975; Venezuela, 1981). Another possibility tried by some
countries is to ask whether disability is a reason for not attending school
among children and youth (this example is found in the following censuses:

8. Sample surveys

Sample surveys, unlike censuses, are not intended to enumerate every
household or individual in the country; however, they are designed to be
representative of the total population. Using scientifically designed sample
selection procedures, the responses of selected households or individuals are
intended to be statistically representative of the answers one would get from
the total population, even though only a small number of people (as few as one
per 100 or even one per 1,000 of the population) are actually contacted and
interviewed during a survey. Surveys are more flexible than censuses and are
often conducted on an annual, quarterly or even monthly basis by countries in
order to take into account seasonal and other cyclical differences. They
cover many different topics, such as health, welfare, labour force,
agriculture, and other socio-economic issues.

Using the survey method to collect information on disability, questions
of disability may be "piggy-backed", that is attached as a special module, on
to sample surveys that are focused on some other specific topic, i.e., labour
force, health and medical, living conditions surveys. In such cases, a
national health, medical, or labour force survey, for example, is used as an
avenue for screening for disability, e.g., Canada Labour Force Survey, 1981;
Egypt Health and Medical Profile Survey, 1979-1981. Once a household is
included in this category, an in-depth survey of disability is conducted in
that household, thereby reducing the amount of detailed questions on
disability required in the larger national household survey programme. This
design offers the opportunity to train certain members of the team to
interview households having a disabled person and to concentrate usually
limited resources on fewer households or individuals. In some surveys, the
person selected for the special interview on disability is a lay interviewer
or a paramedic or social worker who receives special training on how to
conduct the interview. In some cases, a medically trained individual such as
a nurse or physician conducts the interview. When the second alternative is
used, survey costs increase substantially because of the costs of utilizing
highly trained professionals as interviewers.

Additional design considerations include such issues as to whether to
stratify the selection of households before sample selection, thereby ensuring
sufficient selection of households with certain characteristics necessary for
the analysis, for example, rural, urban, living in certain unique environments
such as mountain areas or plateaux, households with small children, households
having an elderly person, and so on. Cluster techniques may also be used in
the sample plan, grouping the sample selection of households so that
interviewers have less distance to travel between interviews. Each of these
decisions has statistical implications and the effects of the design on the
statistical analysis are usually estimated by survey sampling techniques.
C. Registration systems

Population registration systems, birth registration, social security systems, health reporting, industrial recording of occupational injuries and other registries do have potential for being utilized along with census and survey data for statistically assessing disablement. The development of a national disability registration system is another method that information on disablement may be collected.

In general, there are two major approaches to disability registration. The first approach is to institute an ad hoc one-time national campaign where disabled persons and their families are registered and then interviewed for further information. For example, a door-to-door campaign and survey which canvassed houses in order to find disabled residents was conducted in the United Kingdom (Northern Ireland) in 1978. Once identified, all disabled persons or members of their families were interviewed. In several national examples, families were asked to come to the centre and register disabled family members (e.g. Lebanon, 1980; Jordan, 1979). A survey questionnaire was then filled out which described the situation of the disabled person identified. In another case, community leaders were asked to identify disabled persons known to them in the community. Then both community leaders and parents or guardians of disabled persons were interviewed (e.g. Ethiopia, 1981). Since it is a one-time registration campaign, no attempt is made to continue the registry beyond the time period of data collection.

The second approach is through sampling an ongoing civil registration system (e.g., Austria, Federal Republic of Germany and Singapore). In this case, disabled persons who were registered in the national registration system as disabled are selected for inclusion in the survey through sample selection of registered persons, and then the data of the registry are analysed.

III. DEFINING DISABILITY FOR USE IN SURVEY RESEARCH

In this paper, the words "disability", "disabled persons", and "disablement" are utilized to describe the generic situation of being "disabled", implying that one is part of a special population group of persons broadly referred to in the United Nations World Programme of Action concerning Disabled Persons. All references to impairments as I codes, disabilities as D codes and handicaps as H codes specifically use the definitions and codes applied to these terms in the WHO/ICIDH (World Health Organization/International Classification of Impairments, Disabilities and Handicaps) classification relating to the consequence of disease. Briefly, an impairment or I code is: "any loss or abnormality of psychological, physiological, or anatomical structure or function"; a disability or D code is a "restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being"; and a handicap or H code is a "disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the
fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual" and is a classification of "circumstances in which disabled people are likely to find themselves" (6).

One important distinction in the way that data collection programmes differ is according to whether disabled people were screened into the survey through the use of a disability or an impairment screening question. In order to see the distinction more clearly in survey application, two national examples are provided below.

A. Example of a disability (D code) survey screen

The example is Canada. Canada combined census and survey activities in order to assess disability. It implemented in the 1986 population census a question about activity limitations (7). The census question, which was very broad, was broken into four major parts, and asked of each person in the household the following:

"Q. Are you limited in the kind or amount of activity that you can do because of a long-term physical condition, mental condition or health problem:

(a) At home? (No I am not limited, Yes I am limited);

(b) At school or at work?

(c) In other activities, e.g., transportation to or from work, leisure time activities? (No, I am not limited, Yes, I am limited);

(d) Do you have any long-term disabilities or handicaps? (No, Yes)."

The above question was used to develop a sampling frame for the Canadian Health and Activity Limitations Survey (HALS), which was fielded immediately following the 1986 Census of Population. HALS was a national multi-stage stratified sample of Canada, which used geographic and other demographic information from the 1986 census questionnaires for planning the sample. Personal interviews were completed with 120,000 persons who responded "Yes" to some part of the disability census question and with 80,000 persons who responded "No" to all parts of the census disability question.

This census question was followed up with detailed disability screening questions in HALS:

"I would like to ask you about your ability to do certain activities, even when using a special aid. Please report only those problems which you expect to last six months or more" (8).

1. Do you have any trouble hearing what is said in a normal conversation with one other person? (At what age did you first have trouble doing this? Are you completely unable to do this? What is
the main condition or health problem which causes you trouble hearing what is said in a normal conversation with one other person? These questions were followed by a check-list of selections for best describing the condition, which lead to determining the underlying impairment associated with each disability reported.

2. Do you have any trouble hearing what is said in a group conversation with at least three other people? (All the screening questions were followed by a series of questions similar to the ones shown in parentheses in item 1, yet were modified to take the specific disability into consideration.)

3. Do you have any trouble seeing clearly the print on this page?

4. Do you have any trouble seeing clearly the face of someone from 12 feet/4 metres (example: across a room), with glasses if normally worn?

5. Do you have any trouble speaking and being understood because of a condition or health problem?

6. Do you have any trouble walking 400 yards/400 metres without resting (about a quarter of a mile)?

7. Do you have trouble walking up and down a flight of stairs, that is about 12 steps?

8. Do you have any trouble carrying an object of 10 pounds for 30 feet/5 kg for 10 metres (example: carrying a 10 pound bag of flour)?

9. Do you have any trouble moving from one room to another or moving about in a room?

10. Do you have any trouble standing for long periods of time, that is, more than 20 minutes? Remember, I am asking about problems expected to last 6 months or more.

11. When standing, do you have any trouble bending down and picking up an object from the floor (example: a shoe)?

12. Do you have any trouble dressing and undressing yourself?

13. Do you have any trouble getting in and out of bed?

14. Do you have any trouble cutting your own toenails or tying your own shoelaces?

15. Do you have any trouble using your fingers to grasp or handle, for example using scissors or pliers?
16. Do you have any trouble reaching in any direction (example: above your head)?

17. Do you have any trouble cutting your own food?

18. Because of a long-term physical condition or health problem, that is, one that is expected to last 6 months or more, are you limited in the kind or amount of activity you can do...at home...at school, at work or supporting yourself by such activities as fishing, trapping or crafts?..in other activities such as travel, sports, or leisure? (Yes or no to each question).

19. Has a school, or health professional ever told you that you have a learning disability?

20. From time to time, everyone has trouble remembering the name of a familiar person, or learning something new, or they experience moments of confusion. However, do you have any ongoing problems with your ability to remember or learn?

21. Because of a long-term emotional, psychological, nervous, or mental health condition, are you limited in the kind or amount of activity you can do?

The crude disability rate of HALS, or the percentage disabled, was 13.3 per cent. Children were asked somewhat different questions than adults. There was also a second part of HALS that was a survey of disabled persons who resided in institutions and this part was conducted in 1987 (9).

The 21 disability screening questions were grouped according to seven broad disability categories in the analysis of the data. They were:

1. **Mobility**
   Limited in ability to walk, move from room to room, carry an object for 10 metres, or stand for long periods;

2. **Agility**
   Limited in ability to bend, dress or undress oneself, get in and out of bed, cut toenails, tie shoes, use fingers to grasp or handle objects, reach or cut own food;

3. **Seeing**
   Limited in ability to read ordinary newsprint or to see someone from four metres, even when wearing glasses;

4. **Hearing**
   Limited in ability to hear what is being said in a conversation with one other person or two or more persons, even when wearing a hearing aid;
5. Speaking
   Limited in ability to speak and be understood;

6. Other
   Limited because of learning disability or emotional or psychiatric
disability, or because of developmental delay;

7. Unknown
   Limited but nature not specified.

Multiple disabilities were estimated by producing cross-tabulations which
grouped two through six types of disabilities into multiple disability
categories.

B. Example of an impairment screen

The second example is the Philippines. It is based upon the 1980
National Disability Survey of the Philippines conducted by the National
Commission Concerning Disabled Persons in collaboration with the Ministry of
Health (10). The survey included 33,278 persons or 0.8 per cent of the 1975
Philippine population. One respondent was interviewed in each selected
household; all information about the household including data on impairments
was obtained from respondents by public health nurses. Of all the 33,278
persons covered in the survey, 1,470 or 4.4 per cent, were found to have
impairments.

In this survey persons were screened according to their impairments. A
respondent from each sampled household was asked to enumerate all members of
the household and then to identify among them which person had an impairment.
A general question was asked about the presence of an impairment, and then all
persons who reported having an impairment were coded into the survey.
Essentially the question asked was: "Impaired? Yes or No". Once persons were
identified as impaired, special interviews were conducted with them.

The survey instrument used to interview impaired persons then followed up
the general impairment question by asking details about the type of
impairment, as listed below:

"Physical handicap/disability"

1. Missing limbs
2. Unequal length of limbs
3. Deformity of limbs
4. Deformity of spine
5. Joint/muscle pain
6. Weakness/paralysis of limbs
7. Impairment of sensation
8. Abnormality in limb tone
9. Abnormal movement of limb
10. Weakness/paralysis of face
11. Impairment of bowel/urinary control
12. Impotence
13. Hearing disorders
14. Speech disorders
15. Visual disorders
16. Disfigurement
17. Chronic respiratory disorders
18. Mental impairment (followed by a check list of signs and symptoms)."

Additional sections of the questionnaire asked impaired persons about functional limitations of daily life activities including feeding, dressing, bathing, toileting, sexual performance, household activities, communication, manual dexterity, mobility and endurance. These functional limitations or disability questions were not used, however, as screening devices. They were asked only of impaired persons who were screened into the survey.

The examples of Canada and the Philippines give two different ways to collect disability information. When people are screened into a national disability survey according to their impairments as listed in the I codes, impaired persons are usually followed up in the interview for descriptions of their disabilities as listed in the D codes (e.g. Philippines, 1980). Likewise, disability surveys that screen persons according to their disabilities usually follow up with specific impairment questions in order to understand the underlying problems influencing the reported disability (e.g. Canada, 1983). In population censuses, questions are usually either solely impairment-oriented (see the following population censuses: Bahrain, 1981; Egypt, 1976; Hong Kong, 1981; Mali, 1976; Pakistan, 1981; and Peru, 1981) or are solely disability-oriented (see the following population censuses: Canada, 1986; Mexico, 1980; Poland, 1978; and the United States of America, 1980). This is because of both time and space limitations in the questions asked at the census level.

C. How screening strategies influence survey estimates of disability

Screening strategies appear to influence the results in a number of important ways. The examples below discuss how screening strategies affect the percentage disabled for males, females and total population.

1. The percentage disabled (or the crude disability rate)

Probably the most frequently asked question about disability, is "What per cent of the population is disabled?" Table 1 and figure 1 show the percentage disabled among the 63 published reports of the 55 countries of DISIATI. The crude disability rate, or the percentage of the population that is disabled, varies from 0.2 to 20.9 per cent of the surveyed populations (11).
This very wide range of disability rates reflects not only the level of disability but also the measurement of disability among countries. Even within nations, disability prevalence estimates are found to widely vary in magnitude primarily because the estimates are sensitive to specific survey conditions. Work disability prevalence estimates in the United States, for example, have been shown to vary between 8.5 and 17 per cent of the population, depending upon differences in survey methods and data collection techniques used (12).

Differences in the percentages disabled are also partly attributable to such factors as: (a) differential chronic and infectious disease patterns; (b) differential life expectancies; (c) the age-structure of populations and population composition; (d) differential nutritional status; (e) differential rates of exposure to environmental, occupational and traffic hazards; and (f) variations in public health practices.

2. Choosing between I codes or D codes in the screening process

Disability questions using D codes for identifying disabled persons in surveys lead to higher rates of disability than do impairment questions using I codes (see figure II). This is because a single question assessing functional limitation, or disability, typically embraces behaviour associated with a broad range of impairment conditions. "Difficulty climbing stairs", for example, may be because of musculo-skeletal, visceral, disfigurement or other impairments. Impairment screening questions, in contrast, are more directly related to specific conditions. For example, "profound visual impairment of both eyes", or blindness, as well as "profound hearing loss in both ears", or deafness, are all highly specified descriptions of unique impairment conditions. It appears to be easier for individuals initially to discuss whether they have difficulty climbing stairs, or hearing conversations across a dining table, than it is to describe specific impairment conditions. In addition, disability questions seem to throw out a wider net which captures more reports of mild and moderate disablement. In order to cover the same ground that one or two disability questions can cover during a survey interview, one must cover a number of detailed impairment questions.

Nevertheless, both impairment and disability questions are needed in order to fully understand the dynamics of disablement. It is insufficient, for example, to know only that a person has difficulty walking upstairs. It is also imperative to ascertain the underlying reason why the person cannot walk upstairs. Is it, for example, because the person has severely limited vision and cannot see where he or she is going, and has not been trained to be mobile with limited vision? Or is it that the person is paralysed in both lower limbs, does not climb stairs and uses a wheelchair in order to be mobile? Certainly, such distinctions are imperative for programme planning and also for comprehending the nature of the disability. What is suggested by these findings, is that when screening for disabled persons through census and survey questions, one would begin by identifying disabled persons by using a disability question, followed by specific details about the underlying reason for the disability through the use of carefully selected impairment questions.
Figure I. Percentage disabled, by year of data collection

<table>
<thead>
<tr>
<th>Countries or areas</th>
<th>Year</th>
<th>Countries or areas</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>1981</td>
<td>P. Thailand</td>
<td>1983</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1981</td>
<td>Q. Guyana</td>
<td>1980</td>
</tr>
<tr>
<td>Egypt</td>
<td>1981</td>
<td>R. Japan</td>
<td>1980</td>
</tr>
<tr>
<td>Burma</td>
<td>1976</td>
<td>S. Greenland</td>
<td>1983</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1983</td>
<td>T. Belize</td>
<td>1980</td>
</tr>
<tr>
<td>Kuwait</td>
<td>1981</td>
<td>U. Mexico</td>
<td>1980</td>
</tr>
<tr>
<td>Kiribati</td>
<td>1978</td>
<td>W. Nepal</td>
<td>1980</td>
</tr>
<tr>
<td>Panama</td>
<td>1980</td>
<td>X. Mali</td>
<td>1976</td>
</tr>
<tr>
<td>Thailand</td>
<td>1981</td>
<td>Y. Ireland</td>
<td>1981</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1975</td>
<td>Z. Venezuela</td>
<td>1981</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1981</td>
<td>a. Cape Verde</td>
<td>1980</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1984</td>
<td>b. Philippines(S)</td>
<td>1980</td>
</tr>
<tr>
<td>Fiji</td>
<td>1982</td>
<td>c. China</td>
<td>1987</td>
</tr>
<tr>
<td>Bahrain</td>
<td>1981</td>
<td>d. Spain</td>
<td>1981</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>1980</td>
<td>f. Poland</td>
<td>1978</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1983</td>
<td>g. USA</td>
<td>1980</td>
</tr>
<tr>
<td>Philippines(C)</td>
<td>1980</td>
<td>h. Canada</td>
<td>1983</td>
</tr>
<tr>
<td>China</td>
<td>1983</td>
<td>i. Uruguay</td>
<td>1984</td>
</tr>
<tr>
<td>Turkey</td>
<td>1975</td>
<td>j. Australia</td>
<td>1981</td>
</tr>
<tr>
<td>Egypt</td>
<td>1976</td>
<td>k. Canada</td>
<td>1986</td>
</tr>
<tr>
<td>Cuba</td>
<td>1981</td>
<td>m. Spain</td>
<td>1966</td>
</tr>
<tr>
<td>Comoros</td>
<td>1980</td>
<td>n. Austria</td>
<td>1976</td>
</tr>
</tbody>
</table>

Source: Table 1.
3. Consequences of screening techniques

The type of screening techniques used by countries appears to influence the findings in some unexpected ways. For example, because of the way in which survey screens have been implemented, disability rates are usually higher in developed countries, e.g. Australia, 1981; Austria, 1976; Canada, 1983; Poland, 1978; Spain, 1981; United Kingdom (Northern Ireland), 1985-1986; United States, 1980; than in developing countries, e.g. China, 1987; Egypt, 1979; Ethiopia, 1979-1981; Philippines, 1980; Sri Lanka, 1981. The percentage disabled ranges from 8.5 to 20.9 per cent for the developed countries mentioned above (see table 1). The one exception is Japan, 1980, which has a disabled percentage of 2.4 per cent. Japan utilized an impairment screen using I codes in its disability survey rather than a disability screen using D codes, which is one likely explanation for the lower crude disability rate. In addition, Japan's survey covered only the population aged 18 and over.

Developing countries of Africa and Asia have more often identified disabled persons through the use of impairment screens (e.g. China, 1987; Egypt, 1976; Ethiopia, 1979-1981; Philippines, 1980; Sri Lanka, 1981). The percentages disabled among these developing countries range from 0.3 to 5.5 per cent. One exception is Uruguay, 1984, which has a disability rate of 11.3 per cent. This is because it was a sample of adults over the age of 45 who were chronically ill even though Uruguay did utilize an impairment screen.

Another unexpected consequence of survey screens is that differences in the percentage disabled for males and females is partly determined by whether impairment I codes or disability D codes are initially used in screening questions to identify disabled persons in surveys (see table 1).

This is shown graphically in figure III, which plots the ratio of male percentage disabled to female percentage disabled. In general, when a disability question is asked, the male to female ratios of the percentage disabled are either slightly below or are very close to 1.0. This would indicate that when D codes are used, in general, for every man identified as disabled, a woman is also identified. In contrast, when I codes are used, they often result in male/female ratios of percentage disabled greater than 1.0, indicating a predominance of disabled males having been identified in the survey. Given the nature of I code questions, i.e., blind, deaf, leg amputated, mentally retarded, etc., one might conclude that severe impairments are male-dominated, whereas mild to moderate impairments are not. It might also be the case that survey reporting of impairments of women requires additional survey probes in comparison with those required for men.

Disability rates from diverse national data collection sources are not yet comparable, especially given all the differences in survey design, definitions, concepts and methods. However, it is important to note that when comparing disability rates within national data sets, according to age or residence, for example, the relationships found between disability and other demographic and socio-economic variables are reasonably consistent, even though the magnitude of the relationships may vary from one survey to another.
Figure 11. Percentage disabled, by year and type of screen

Source: Table 1.
For example, a large proportion of surveys indicate that disabled persons are on average less educated, have lower socio-economic status and tend to reside in rural or poor areas more than do able-bodied persons (1 and 12). In addition, it has been pointed out in several studies that survey data on disability have been found to be reasonably internally consistent and reliable and competitive in quality with other types of survey data such as survey estimates of educational attainment data or marital status (13).

IV. FUTURE GOALS OF SURVEY RESEARCH ON DISABILITY: WHERE DOES ONE GO FROM HERE?

There has been a steady increase in the statistical study of disability by Governments and other organizations in the region, and a substantial increase in the application of national disability statistics for policy formulation and programme planning. Because of this, international methodological studies and guidelines are clearly needed to assist disparate national strategies. In order to address this and related methodological problems, a programme of monitoring, compilation and evaluation of national disability statistics has been established by the Statistical Office.

Resources permitting, the Statistical Office also envisages continuous support of national and regional work in the following areas:

(a) Further implementation of training workshops and international conferences to promote the policy-oriented scientific study of disablement through exchange of technical materials and survey research experience;

(b) Continued development and regular updating of DISTAT to the extent resources permit. The co-operation of other interested organizations is needed in this area so that disability statistics can be submitted at regular intervals by Governments to the Statistical Office in a comparable format;

(c) Monitoring national use of ICDH in various data collection activities;

(d) Promoting the inclusion of disability topics in national surveys and national survey programmes carried out as part of programmes such as the PAPCHILD programme or the National Household Survey Capability Programme (NHSCP);

(e) Achieving, through systematic methodological monitoring and analysis of survey results, general agreement on the underlying principles of survey screens used to identify persons with disabilities, ultimately resulting in methodological guidelines on the identification and assessment of disablement in censuses and surveys, in co-operation with WHO, ESCWA and other regional organizations;

(f) Expanding interregional technical advisory services to work with developing countries, ESCWA and other international and regional organizations in the production of disability statistics within the existing statistical
Figure III. Ratio of percentage disabled males to percentage disabled females

Greater than 1
Percentage disabled males is greater than percentage disabled females

Less than 1
Percentage disabled males is less than percentage disabled females

Selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Impairment screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>1983</td>
<td>8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1985-1986</td>
<td>9</td>
</tr>
<tr>
<td>Canada</td>
<td>1983</td>
<td>0</td>
</tr>
<tr>
<td>Austria</td>
<td>1976</td>
<td>A</td>
</tr>
<tr>
<td>Canada</td>
<td>1986</td>
<td>B</td>
</tr>
<tr>
<td>Spain</td>
<td>1986</td>
<td>C</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1984</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>1983</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1983</td>
<td></td>
</tr>
<tr>
<td>Germany, Fed. R.</td>
<td>1983</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>1981</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>1980</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>1979-1981</td>
<td></td>
</tr>
</tbody>
</table>

Source: Table 1.
systems and through appropriate government offices and programmes, as requested by the World Programme of Action.

There are other activities that can be launched by various international and regional agencies, research institutes and interested organizations. For example: it would be very useful to generate a short list of impairments, disabilities and handicaps for more systematic and streamlined national and international application of ICDH concepts and codes in survey work. It is also important to develop university curricula and training manuals for demographers, epidemiologists, statisticians and survey researchers interested in the study of disability, and a curriculum for training programmes to address the needs of professionals already working on national data collection, analysis and policy formulation in this area.

International and regional programmes should be encouraged to include, at all times in training programmes and conferences on the development of disability statistics, opportunities for discussion and participation of disabled persons, their families, and programme staff concerned with disablement. This includes opportunities to observe the various dimensions of their environmental conditions so as to make survey methods more accommodating, appropriate and realistic with regard to the needs of disabled persons and to the general description of disablement.
References


7. Statistics Canada, 1986 Census of Canada (Ottawa), (Form 2B, Question 20).


9. Details of the data collection programme on disability in Canada may be acquired by contacting the Programme Manager, Health and Activity Limitation Survey, 209, Jean Talon Building, Tunney's Pasture, Ottawa, Ontario, K1A 0T6, Canada.


11. The crude disability rate is the prevalence rate of disability per total population, expressed as per 100, per 1,000 or per 100,000 population in various reports.

XII. ADAPTATION AND TRANSFER OF NEW TECHNOLOGIES DESIGNED FOR THE DISABLED IN THE ESCWA REGION
INTRODUCTION

The transfer of technology from industrial countries to non-industrial countries, as envisaged within the framework of the new international economic order, as well as other provisions for strengthening the economies of non-industrial countries, would be of benefit to all people in these countries, including disabled persons.

For able-bodied people, technology makes things easier. For disabled persons, technology makes things possible. Development of bio-engineering and micro-electronics aids have resulted in the production of equipment and appliances which have a tremendous positive impact on the life of disabled persons.

The major positive implications of the transfer of new technology to disabled persons' daily living include: development of independent living skills, improvement of communication skills, improved mobility, increased job opportunities through training and through job adaptation, development of skills to maintain positive mental health and improved medical management of the disease process.

Diagnosis, physical and psychological treatment and therapy are relying more and more on technological advances. New applications are being developed in the fields of education, training, rehabilitation services and employment. Computer and electronics innovations provide enhanced capabilities of mobility and communications, thus contributing to the independence of the disabled and facilitating their integration in the daily life of society around them regardless of the nature and degree of disability.

Computers and electronics applications have special advantages in vocational rehabilitation and job preparation, and facilitate the integration of the disabled into productive life. Employment opportunities are of particular concern for the disabled in order for them to achieve independent and productive lives and thus maintain their human dignity. Fortunately, owing to the advancement of new technologies (particularly computer-based technologies), projections on employment of the disabled seem to be quite optimistic mainly for the following reasons:

- The shift from work requiring physical strength and manual dexterity to work requiring more intellectual skills removes a major barrier for even severely disabled persons. Although new technologies may pose a threat to some disabled persons, such as mentally retarded persons, others will have new opportunities.

- The nature of computer and telecommunications technologies and of informatics permits greater flexibility in regard to where, when and how much people do. Freedom from the work-place and rigid schedules is a benefit to people with a disability.
New technical aids are being developed continually which reduce the impact of disability dramatically, so that in some case workers are essentially non-handicapped in the work context.

The transfer of new technology among nations, within the context of the World Programme of Action concerning Disabled Persons, should concentrate on methods that are functional and related to prevailing conditions in a particular country or region. Although the new technology for preventive and remedial control of most disabilities has been strengthened by recent progress in bio-medical and bio-engineering research, it is still a fact that many countries, including countries in the ESCWA region, lack the technology to produce the technical aids required by disabled persons. New technologies developed in industrial countries should therefore be adapted to meet the local needs and then be transferred to the region, through training of trainers. This process includes two levels of customization; one is usually performed at the laboratory or the factory and requires technological innovations to adapt the technology to meet local needs and the other is applied by the training personnel and requires some adaptation for each individual case with regard to specific aids.

The aim of this background paper is to provide a brief overview of the latest technologies (for various categories of the disabled) which have been recently developed and are available in the market. These technologies are described in easy-to-understand, non-technical language, with particular emphasis on the following two major points:

1. Current status of new technologies designed for particular sub-groups of disabled persons as well as major trends of new developments of such technologies in industrial countries;

2. What has been done so far in the region and/or what still needs to be done in the near future in order to transfer such technologies to the ESCWA region.

In view of the complexity of the situation, and particularly the rapid developments in the field, this paper should be considered provisional rather than final. Its main purpose is to serve as a basis for discussion at the Conference. It is expected that a comprehensive approach to technology transfer will be initiated by ESCWA as a result of the Conference.

A few practical examples of technical innovations will be selected and presented for each category of disabled persons (visually disabled persons, persons with aural disabilities, and physically disabled persons). Although the systems and devices explored in this paper are only a small part of what is proving to be an expanding field of achievements and technological advances, this will present an overall picture of future projection in the field as well.
A. New technologies for visually disabled persons

In an overview of technical aids, the visually handicapped can be divided into two broad sub-categories -- Braille readers and print readers. A variety of creative technical aids and informatics are now available for both categories of visually handicapped persons. Major technical developments currently taking place in industrial countries can be categorized into the following areas:

1. Computer applications and other informatics;

2. Portable technical aids;

3. Magnifiers, closed circuit TV and overhead projectors for partially blind persons.

1. Computer applications for the blind

In order to communicate with computers and other informatics, a blind person must rely on his/her other senses. Braille printing and tactile display use the sense of touch and synthesized speech explorers the sense of hearing.

Micro-computers with enhanced applications such as tactile/speech output, Braille printing, Braille input keyboard and speech synthesizer output are providing visually disabled persons with newly acquired independence.

Blind individuals, including those who have no problem with data entry and use a standard keyboard and those who use a tactile input keyboard, may require alternative means of access to the output information which is normally displayed visually on a monitor screen or in printed text format. The most common alternative means of output system are Braille display/printing and synthesized speech output. For example, a totally blind programme may use Braille or another tactile keyboard (a peripheral keyboard adapted for data input), generate the output with a speech synthesizer or on a tactile screen or employ a Braille printer (Braille embossor).

In the field of output peripherals, the speech synthesizer is probably one of the most well-known output devices for the blind. The user listens to the output in the form of synthesized speech. Several of these devices exist in the market. For instance, the Votrax "Type 'n' Talk" system is one of the first possible-to-afford devices with an unlimited vocabulary synthesizer. This produces speech of slightly robot-like quality but covers pronunciation of any word.

In the market, there are many software programmes for the Braille translator which produce texts processed on word-processing systems into various standard Braille texts. The user may select a printer from various Braille printer machines available in the commercial market.
"VISIOBRAILLE" is a good example of an available comprehensive system for full utilization of personal computers (PCs) by the blind, which includes an IBM-PC (or compatible) running under an MS-DOS system, with a non-permanent display and a Braille terminal connected to the PC through RS 232 interface and a standard Braille printer.

The "VersaBraille" system, developed by Telesensory System Inc., is a powerful touch-oriented terminal for the blind. Using a special set of keys, the "VersaBraille" can build a new text file of WANG. Using a touch-pad which displays up to 20 Braille characters with pins which are raised and lowered, the user can read the existing text file.

As one of the most innovative alternatives to a Braille keyboard or standard keyboard input system, a voice recognition system is currently under development for a wide range of uses. The system can understand and distinguish between a number of words in the user's voice pattern, act upon spoken commands and generate the output (print the texts). However, at this stage, a normal microcomputer-based system can only discriminate between 150 and 200 words. Special systems which upgrade the function of discriminating to up to 10,000 words have been developed by the Kurzweil Company, but they are only available at very high cost.

It can be concluded that the development of peripherals and input/output devices for adaptation of the PC for the blind would normally include the following major steps;

1. Development of hardware devices such as:
   - Speech recognition device for input;
   - Braille keyboard for input;
   - Speech synthesizer for output;
   - Braille/tactile display for output;

2. Development of software that drives the specialized hardware to enable it to interface with the rest of computer (e.g. Braille translator software programme);

3. Development of software interface to translate the form of information used by the special peripheral devices into a form used by the packed software.

2. Portable aids for the blind

The use of communication aids in everyday situations is also very important. The portable text reader devices translate instantaneously into Braille any document printed in standard Latin characters read by its microcamera. The processor analyses the image received by the microcamera, extracts out of it the image received by the camera and displays these on the Braille tactile displays board. The "DELTA" developed by the SYSTEC company is one of these portable text reader devices. AV24(RS 232C) interface allows
"DELTA" to be connected with peripheral equipment such as micro-computers, Braille print-out, etc. A buffer memory with an 8,000-character capacity allows for storing and redisplaying characters previously read.

The "Kurzweil Reading machine", introduced in 1975, converts printed texts into synthetic speech. It provides access to a great deal of printed material previously unavailable to the blind.

The talking calculator with synthesized speech output provides more independence for numerical recognition and numeration-related daily activities, and thus increases employment opportunities, in particular self-employment possibilities. For daily social activities such as shopping, it is necessary to provide for the blind these portable assisting devices. Computers are becoming more powerful and smaller, making it easier to produce a computer-based portable communication aid for the blind.

3. Mobility aids

To improve the mobility of the blind, it is necessary to produce a better mechanical system of transport. During the last few decades, approximately 30 models of mobility aids for the blind have been developed (see table below).

Sonic-Torch, Sonospect, Pathsounder, Mowat Sensor, Nottingham Obstacle Detector and Laser Cane are obstacle detectors which let the user know whether or not there is an obstacle in his/her course. Sonicguide is an environment sensor which can search for obstacles in many directions at the same time. These sensory devices can be used as complements to an ordinary long cane or guide dog, as the searching scope of these sensors is very much limited.

4. Magnifiers, TV and overhead projectors for the partially sighted

People with partial vision should maximize their residual vision with various assisting devices. The partially blind and the text readers might choose a magnifier from one of the following types: a magnifier attached to eyeglass frames; a stand magnifier; a hand-held magnifier; telescopic aids or a television viewer which magnifies print and projects it on the TV screen. As a conventional hand-held magnifier (which magnifies over 30 times) reduces field vision tremendously, closed circuit television, which only magnifies text several times but gives much wider field vision, has recently come into frequent use.

5. Adaptation and transfer of new technologies for the blind in the ESCWA region

The above-mentioned new technologies designed for the blind have promoted greater equality between the blind and the sighted in industrial countries. In particular, these devices allow the blind greater equality in regard to education and employment in tasks requiring access to written information.
No doubt, the countries of the ESCWA region have also benefited or will easily benefit from new technologies such as mobility aids or magnifiers, as these devices would require very little or almost no adaptation or modification for local use.

However, in the field of information and computer adaptations, the aided system for the blind in the region (or other Arabic-speaking countries) still faces a lot of difficulties. First of all, Arabic processing of textual and spoken language has to overcome many technical problems including oral, spoken, scanning and other forms of processing of the language. In addition, basic software packaged programmes should be Arabized. In order to do this, it would be necessary to Arabize the software programmes which drive the specific hardware peripherals to interface with the rest of the computer.

To ensure the development of efficient output printing devices, the terminology and symbols used in Arabic Braille, including the numerical symbols, should be continually reviewed with a view to achieving regional standardization.

**B. New technologies for persons with hearing impairments**

For the purpose of this study, the technologies for this category of disabled persons are classified into two areas based on type of function:

1. Diagnostic
2. Therapeutic and rehabilitative

**1. Diagnostic and rehabilitative devices**

The available diagnostic technologies in industrial countries include microprocessor audiometers with cathode ray tube console (with video monitor and print-out), ERA (Evoke Response Audiometer), VRA (Visual Reinforcement Audiometer) and various forms of sound level meters. In the field of rehabilitative devices, there are many new technologies such as tape recorders with the facility for speech compression and speech expansion, various types of calibration equipment, an artificial electronic larynx, canal type hearing aids, cochlea implants and wearable vibro-tactile aids and speech syntheses.

Various speech synthesizers have been developed. One type has a limited output by vocabulary size but a clear and distinguishable vocalization and the other has unlimited vocabulary devices. Portable communication aids with speech aids with speech output such as “Light Talker” or “Touch Talker” (both manufactured by Prentke Romich and used in conjunction with a software package “Minspeak”) are available on the market. “Touch Talker” has a guarded keypad finger operation, and “Light Talker” can be used in association with an optical head pointer or switches. Both of these devices have practical applications.
Development of micro-computer systems also has a great impact on rehabilitation techniques for the deaf and mute. One recent application is the data processing and analysis of speech signals for the training of hearing-impaired and mute persons. Hearing-impaired persons, particularly those who were deaf at birth, may not speak properly because they cannot hear their own voice. The IBM Centre in France has developed a system that visualizes the user's voice with a PC. Voice parameters such as intensity and pitch are extracted from the speech signal and displayed in graphics and plots. This voice training system will help to show the deaf and mute voice characteristics and provide some sense of spoken words and feedback pronunciation trails.

2. Adaptation and transfer of new technologies for the deaf in the ESCWA region

The above-mentioned IBM PC-based voice training system has been already tested for adaptation in Arabic. The pilot project was conducted by the Kuwait Institute for the Handicapped, with the financial assistance of the Kuwait Federation for the Advancement of Science. The adaptation schemes are Arabization and development of new software applications for training purposes. The first scheme included Arabizing the software's English text, by using the "BASIC" editor along with IBM Arabic utility software and the Enhanced Graphic Adapter Card. In addition, a new voice-controlled game using the same voice pitch parameters, but a different style in character mobilization, has been developed.

Most of the bio-medical aids for deaf or/and mute persons such as hearing aids, cochlea implants and calibration equipment can be used without adaptation in the region.

All equipment, including the micro-computer and the micro-processor system, have to go through a similar adaptation process including Arabization. Speech synthesizers in an Arabic version should be developed, including sophisticated unlimited vocabulary synthesizers and portable touch talk type devices.

C. New technologies for physically disabled persons

For the purpose of this study, orthopaedically and neurologically disabled persons are categorized in the same group: the physically disabled. This category of disabled is one which has benefited most from the new technologies. The most important new technological developments for this group are prosthetic devices (artificial substitutes for a malfunctioning part of the body), computer applications and computerized wheelchairs.

1. Prosthesis

One of the most significant developments in this field is the myoelectric prosthesis. The concept of myoelectric prosthesis is very simple, involving the use of an electric signal from the muscle to control the flow of energy
from a battery to a motor. In a myoelectric prosthesis, the control signal has normal innervation and is subject to voluntary control. A controller is a switch which controls the flow of current to an electric motor according to the amount of myoelectric signal. Advantages of this type of prosthesis are that the movement of the artificial legs/hands can be controlled by extensors and flexor muscles and that no auxiliary suspension device is necessary.

2. Computer applications

The adaptation of the computer for physically disabled persons also involves hardware, at the input and output levels, and software applications. The physically disabled can use the computer, if special input and/or output peripheral devices are attached for user-machine communication. The appropriate software programme to filter the incoming coded system of information or generate the outgoing stream of information to be adapted for the specifics of the output device is necessary. The difference between visually impaired persons and this group is that adaptation of hardware at the input level is much more important than at the output level for physically disabled persons as they are most likely able to read normal printed texts. The details of this innovation have been already described above (see section A).

3. Computerized wheelchair

A great variety of powered wheelchairs is available in industrial countries. One of the most promising products is the computerized wheelchair. Applied artificial intelligence work is currently being developed, which may in the near future make it possible to command orally very complex movements of such wheelchairs. The currently available computerized wheelchair is activated by voice control or by manual control. It can be moved, steered and raised using these controls. It also stops automatically when the microcomputer senses barriers ahead.

4. Adaptation and transfer of new technologies for physically disabled persons in the region

There is no great need to adapt some of the new technologies developed for physically disabled persons since, to cite an example, a prosthetic device or other medical aids can be used without any adaptation at all.

However, in the process of informatics, the adaptation process of Arabization is crucial owing to the fact that Arabic is the official and only widely understood language in the ESCWA region. The introduction of a peripheral input device (such as foot-operated shift control or speech recognizer) need the specialized software which will enable it to interface with the computer. Arabic processing, textual, oral and spoken language, has to go through complete analysis in terms of oral, spoken, scanning and other forms of processing of Arabic. Furthermore, for the development of a speech
recognizer, research on artificial intelligence and linguistic research on limited grammar language should be continued to be developed simultaneously in both industrial countries and in the region.

D. Conclusions and recommendations

The evolution of various new technologies is laying the foundations for innovative devices which reduce the effect of biological, remedial and psychological disabilities. Humanity is reclaiming the capabilities which have been limited by disabilities in the past.

The technologies covered in this paper represent only a small portion of the achievements currently being expanded. Research, development and production of new technologies should be based on purely humanitarian needs and the value, in terms of social progress, to which the disabled could contribute and from which they could benefit.

However, it is important to note that, although the technology offers a great opportunity, it could also threaten the disabled. For instance, many simple repetitive jobs, ideally suited to some categories of disabled persons, have been eliminated through automation and robotization. An effort should be made to find out whether those with cognitive limitations such as mental retardation can enter the new technology work-place.

Another important issue is that technologies are progressing and changing rapidly with such speed that what is applicable today may be out-of-date in the very immediate future. Therefore, it is important to direct greater efforts towards seeking long-term and flexible approaches rather than short-range possibilities in terms of introduction, adaptation and transfer of new technologies in the region.

To sum up, the following specific conclusions on the adaptation and transfer of technologies in the region can be summarized from the above:

- Adaptation of the computer (in particular for visually impaired and physically disabled persons) should be promoted in the region. The process involves hardware adaptation and development of a software program which drives the specialized hardware to enable it to interface with the rest of the computer. It also needs provision of a software interface to translate the form of information used by the devices into a form used by the standard packaged software. The adaptation process might start with system Arabization.

- In order to develop a speech recognition system, artificial intelligence (such as artificial intelligence for the computerized wheelchair) and other computer-aided systems, Arabic processing, textual and spoken language should undergo a lot of analyses in terms of spoken language, scanning and other forms of processing of the language.
- The terminology and symbols used in Arabic Braille, including the mathematical terminology, should be critically reviewed, taking into account the progress made in the field and to prepare the ground for regional co-ordination and standardization.

- There are so many new technologies such as sophisticated mobility aids, amplifiers, magnifiers, prosthetic devices (artificial arms and limbs), a computerized wheelchair with manual control, etc., which require minimal or no adaptation. Governments may provide the equipment at subsidized prices or undertake a pilot project on the establishment of a suitable rehabilitation industry in the region.

- Computers and electronic applications have special advantages in rehabilitation efforts. Special attention should be given to these applications which offer easy adaptability, enhanced capabilities and realistic employment opportunities in the labour market, thus encouraging reintegration of the disabled in the productive life of society.

- To keep up-to-date with new innovations, Arab experts should participate in seminars, exhibits and events at both regional and international levels.

- ESCWA should develop a programme aimed at continuously monitoring new technologies designed to assist in the integration of the disabled, locating the most relevant ones, promoting their adaptation to local needs and helping in their expedient transfer through training of trainers utilizing existing institutions. A pilot regional rehabilitation centre might be identified which could provide up-to-date information, experience and training opportunities about innovations in this field to concerned institutions in the region.
Table 1. **Some mobility aids in practical use**

<table>
<thead>
<tr>
<th>Name</th>
<th>Developed in</th>
<th>Developed by</th>
<th>Obstacle detection method</th>
<th>Display method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonic Torch</td>
<td>1965</td>
<td>Lasley Kay (England)</td>
<td>Transmit FM-ultrasonic burst and detect beat sound between emitted and reflected sounds</td>
<td>Display beat sound of which frequency is proportional to the distance of obstacle</td>
</tr>
<tr>
<td>Sonosoeq</td>
<td>1965</td>
<td>Toshin Electric Co. (Japan)</td>
<td>Transmit ultrasonic pulse and detect time delay of reflected sound</td>
<td>Display sound of which frequency is proportional to time delay</td>
</tr>
<tr>
<td>Pathsounder</td>
<td>1966</td>
<td>Lindsay Russel (USA)</td>
<td>Transmit ultrasonic pulse and detect time delay of reflected sound</td>
<td>Display sound and vibration of which frequency changes at two levels according to time delay</td>
</tr>
<tr>
<td>Sonicguide</td>
<td>1969</td>
<td>Lasley Kay (New Zealand)</td>
<td>Transmit FM-ultrasonic burst and detect sound by using two receivers with different directivity</td>
<td>Display two beat sounds binaurally</td>
</tr>
<tr>
<td>Mowat Sensor</td>
<td>1972</td>
<td>Geoff Mowat (New Zealand)</td>
<td>Transmit ultrasonic pulse and detect time delay of reflected sound</td>
<td>Display sound or vibration of which frequency is proportional to time delay</td>
</tr>
<tr>
<td>Nottingham</td>
<td>1974</td>
<td>J. Armstrong (USA)</td>
<td>Transmit ultrasonic pulse and detect time delay of reflected sound</td>
<td>Display sound of which frequency changes at 8 levels corresponding to time delay</td>
</tr>
</tbody>
</table>

*Source: "A design of blind mobility aid modelled after echo location of bat", by Tohru Ifukube, Research Institute of Applied Electricity, Hokkaido University, Sapporo, Japan.*
BIBLIOGRAPHY


SYSTELEC. DELTA-The electronic text reader for the blind. Palaiseau, France.

UNESCO. New information technology in special education. A study prepared for UNESCO by Jørgen Hansen, Denmark.

VISIOBRAILLE. Description of a Workstation for the Blind. Zygote, France.

XIII. THE DISABLED: THE BLIND AND PROSPECTS OF MODERN TECHNOLOGY

by

Nazeh al-Qadamani
Director of the Computer Department
Regional Bureau of the Middle East Committee
for the Welfare of the Blind
The disabled, including the blind, are a group of people who need to lead a normal life. In other words, a disabled person or a blind person has personal capabilities that assist him in his daily activities. He wishes to and is capable of carrying out a normal life as a productive member of society. To achieve this and to obtain his social, economic and political rights, he must have an educational, training and rehabilitation base, as well as a base for participating in work and production since he needs, for the first base, a proper place and developed curricula, it is necessary to provide him with modern scientific tools and easy-to-reach technology for technical and vocational training appropriate to the type and degree of disability. With regard to requirements for establishing the second base, those who plan to develop technical curricula and tools for the training stage should participate in building a campaign to create awareness and provide directives on the necessity of providing such a technical background for the disabled-blind in professional life.

Since this paper deals with modern technology and technological devices available for the blind, it is necessary to outline the following main points addressed therein:

1. Modern technological requirements;

2. A summary of the experience of transferring computer-aided Braille printing technology;

3. Efforts to Arabize systems and a simple explanation of some modern technologies for the blind;

4. The processes of adapting and transforming technological systems: training, acquisition and utilization;

5. Psychological and social prospects for the utilization of technology and providing work opportunities for the blind in technological fields.

A. Modern technological requirements

During the past few years, computer-based technology has been adopted as an advanced technological tool to facilitate technical and administrative work. It has been used by travel agencies, tourist agencies and airline offices as well as public lending libraries and even in printing personal letters through an advanced word processor. A simple definition of the components of computers is that they consist of an input unit, a disc drive and printing and output terminals. Computers have been used in car parks, electronic transfers from commercial banks, or the so-called cash machines. In developed countries, the computer has entered most fields if not all of them.
The utilization of computer technology involved major technological requirements which are:

1. Training in using computers;

2. Training for maintaining computers;

3. Training in programming computers which involves using technical language such as BASIC and COBOL in order to design frameworks and models for receiving information. Using such technological skills has become a sine qua non for those who wish to keep abreast with modern developments in technical and administrative fields.

B. A summary of the use of Braille printing computer-aided technology (embossed writing)

As indicated in section A above, the world around us is using computers in a number of printing and publishing tasks, and the use of out-of-date machines and equipment gives rise to frustration. For example, while the machine Boma requires one to two hours to print one page of Braille, centres for the blind in both England and the United States produce 200 pages of Braille every hour. Hence, compared with the standards maintained in 1982, the Regional Bureau of the Middle East Committee for the Welfare of the Blind has taken a gigantic stride by introducing this technology, which is based on the following:

1. A sighted person who is not familiar with the Braille system feeds the information in a normal manner into the computer through the keyboard and the screen.

2. The computer translated the ordinary files into Braille files unabridged at the first level and abridged at the second.

3. Braille typewriters (LED) connected to the system type a copy of the files in Braille on cardboard for revision;

4. Braille typewriters (PED) connected to the system type an original copy from Braille files on zinc plates for use in traditional printshops;

Naturally, this experiment did not prove to be easy at first, but was fraught with difficulties, especially when using the Arabic version of the Braille system and mobilizing Arabic characters. Yet the Regional Bureau succeeded in evolving the system for Arabic usage and during the past five years, the production of the Regional Bureau was 100 times its production over the preceding five years. Its major achievements are the following:

1. Printing all material pertaining to educational curricula in Bahrain and the United Arab Emirates;

2. Printing the journal Al-Fajr and Alam Al-Katif in English;
3. Printing the Holy Quran in six complete parts.

The Regional Bureau also established a small research unit within the computer centre affiliated to it in Riyadh and kept abreast with new developments in the world of Braille and attempted to acquire new modernized units.

C. Efforts to Arabize systems and a simple explanation of some modern technologies for the blind

The experience of the Regional Bureau in establishing a computer-aided Braille system for the blind has prompted it to acquire an Arabized version of the Braille translation programme. This was the first breakthrough in Arabic in this respect. It was preceded shortly before that, by an agreement with Telesensory Corporation in Mountain View, California to Arabize talking computers. Some major developments ensued therefrom including the establishment of a special follow-up unit for technology and providing for the development of technical Arab personnel concerned with this type of application. Further efforts were made to achieve Arabization, chief of which was that the National Group for Computers hastened to connect the VersaBraille machine with an Arabic translation system for typing reports of the blind with script that can be seen on electronic typewriters. Other modern technologies exist which could be of benefit to the blind. Efforts should be exerted to Arabize or transfer these technologies which consist of the following:

1. Mini Braille typewriters, based on a micro-computerized Braille translation system which was evolved by Petersman company in the Federal Republic of Germany. The translation system therein is based on feeding the information by a sighted operator who gives orders for operation in more than one language: Arabic, English, German or French. The main advantage of this device is that the text file is translated with the languages included therein. If an English word, for example, intervenes in an Arabic line of text, the programme translates the English word using the Braille method and continues translating the Arabic text into the first language. Some of the leading micro-computerized typewriters are Index and Telebeta X. This system is characterized by its ability to utilize a tactile system by which the blind person can use this system to type and publish independently.

2. The invention of the electronic Braille Piezo-window:

This window, which is mounted on the keyboard of the personal computer, can display 80 Braille characters on the board, Hence, any information appearing on the screen can be read simultaneously on the electronic window for modification and revision purposes. Its applications include operating electronic switchboards, making travel reservations, and typing personal material.
3. A host of inventions including:

(a) Elinox: a temporary storage unit provided with six keys in addition to a key to the right side and another one to the left. This unit can store 50 pages (30 lines to a page with 42 Braille characters each). It can be operated through voice control and can be connected to any system through a 232 interface which is available in all mini and large typewriters. This unit is light and only weighs half a kilogram;

(b) Blista M.B.6: A Braille personal typewriter with six keys, two control keys on both sides and a spacebar. This device weighs five kilograms. A blind person can use it to write letters in Braille;

(c) Elitype: This device weighs eight kilograms and has a type 232 interface monitor; it can type on cardboard in Braille and can be connected to a computer for storing the information;

(d) Brillo 400: a two-directional printer which can type 400 characters every second; it is one of the technological acquisitions of the computer centre of the Regional Bureau. It can type in two directions: up and down;

(e) Galexy Nero: a computer with an electronic window that displays figures and outputs in Braille. It can add, subtract and do square roots.

D. The process of adapting and indigenizing technological systems: training, acquisition and utilization

Based on our experience at the Regional Bureau, it can be concluded that the acquisition of technology is not an end in itself. Some technologies require intensive training and one must prepare technical personnel and engineers to maintain these devices. The place where these devices were made is fairly remote from the working station, and under no circumstances is it possible to maintain lines of communication between the exporter (the party that sells the device) and the production site (the location of the buyer). This requires support and a budget to train the users of technology, in addition to establishing a training unit to train the blind person himself on using this advanced technology.

The attempt of regional offices for the welfare of the blind to provide rehabilitation services should include a strategic solution for attracting the sector of qualified local people to participate in conducting specialized studies and research on modern types and modes of technology that could be provided for the blind. For example, a number of technical and engineering colleges have workshops for training and maintenance that could function within the framework of a well-conceived plan for repairing the equipment of the blind or the disabled damaged during usage. This specialized personnel could also take charge of maintenance and training programmes for a major sector of the students. These students would participate in voluntary work in the future to assist the blind by repairing their equipment and training them to use it optimally.
The educational, industrial and business sectors also play an important role in acquiring technical units that assist the blind in benefiting from services rendered to others. For example, the banking sector could mount voice-controlled units on cash machines or, at least, write the instructions thereon in embossed letters (Braille). These economic institutions should also allocate a small portion of their profit to acquiring units that could assist the blind in performing small tasks that are, nevertheless, useful and productive.

The acquisition of technological devices and training for using them does not suffice in itself. Motivation should be provided and special attention should be given at the outset in terms of using these technologies regardless of obstacles.

The utilization of modern technology, both at the office and the factory, is self-intimidating. It sets the boundary between traditional manual methods of work and the use of technical machines, beginning with the calculator and ending with the sophisticated use of computers. Hence, it is necessary to examine the psychological and social implications of each sector that employs technology until a scientific base is established that provides a climate of peace and security for workers. Thus, we can understand that the fear of a disabled person to use such technologies does not stem from his own lack of confidence; rather, it is common to all those who deal with such technologies. Actually, experience shows that the disabled have remarkable abilities to deal with these devices and to respond to them. Hence, attempts should be made to provide real work opportunities and jobs that depend on the participation of the disabled person and his production. With the development of a computer technologies programme for Braille typewriters, it is possible for a blind person, for example, to work on computer terminals connected to electronic switchboards. And with the invention of Samba control machines, a blind person can work at airline administrative offices in the booking and traffic departments. With the development of Braille typewriters, the blind can read a number of magazines and journals. In Europe, research on telebraille is under way; it aims at communicating data bank software and other software to the residence of a blind person through the telephone or a Braille electronic unit. If equal opportunities for employment are not provided, this sector of the people, who form an integral part of our society, cannot possibly achieve progress. Any able-bodied person can be disabled after a car accident or an epidemic. Hence, everyone should understand and explore the capabilities of the disabled and encourage them in obtaining their place in the sun. Let us begin by providing these requirements through practical plans, for, as the proverb says, a journey of a thousand miles begins with a single step.
XIV. FROM OLD TO NEW TECHNOLOGIES: TECHNICAL AIDS
AND THE INTEGRATION OF DISABLED PERSONS

by

Luis M.F. Azevedo, M.Sc.
Biomedical Engineer

CAPS/COMPLEXO
Instituto Superior Tecnico
Av. Rovisco pais
1096 LISBOA Codex
PORTUGAL
INTRODUCTION

One of the major challenges of modern society is to improve the quality of life of disabled persons through the appropriate technology, enhancing the opportunities for education, training and employment, facilitating independent living and promoting greater social integration. Technical aids, when properly chosen and adequately used, can play an important role in that process.

There already exist a substantial number of technical aids, including simple adaptations to existing equipment, that could significantly enhance, in all major life activities, the independence of individuals of all ages with disabilities, enabling them to lead more independent lives and putting them into the economic mainstream, preventing isolation from the rest of the community.

In addition, the use of adequate technology by individuals with disabilities can reduce the costs of the disabilities to society, by diminishing expenditures associated with early intervention, education, rehabilitation, health care, transportation, and other services required by disabled persons.

2. "Low" versus "high" technology

2.1 Technical aids and the transfer of technology to developing countries

Many of the least developed countries in the world are involved in armed conflicts. This leads to a large number of disabled persons, particularly among the civil population, wherein children are usually one of the most affected groups. Unfortunately, where resources are scarce, support to handicapped people is usually not a priority.

The ISAAC (International Society on Alternative and Augmentative Communication) Seminar on Developing Countries, held in Cardiff, United Kingdom, June 1987, emphasized the problems these countries with scant resources have to face, concerning the transference and the use of technology, and how international co-operation could solve some of those problems.

Mr. Ken Richtie, Executive Director of AHRTAG (Appropriate Health Resources and Technologies Action Group), one of the experts attending the Seminar, expressed his opinion about this subject, declaring that:

"Underdeveloped countries face the dual difficulties of major disease problems and a scarcity of resources to tackle them, as illustrated by the following facts:

"Infant mortality rates
160 per 1,000 in the least-developed countries
19 per 1,000 in the industrialized countries"
Expenditure on health services p.a.

$US 1.70 per person in the least-developed countries
$US 244 per person in the industrialized countries.

"It is evident from these statistics that technologies promoted in underdeveloped countries must differ greatly from those promoted in industrialized countries."

These words should be remembered when thinking of transferring technology to developing countries. It is also essential to consider the language, the culture and the economic and social aspects of the society to which the technology is being introduced.

Another point to be considered is the possibility of adapting technical aids to local resources. This may be done by training local professionals and giving them appropriate and continuous technical support. Funds must be found not only to obtain the technical aids, but also to provide the education and support such training. At the same time, the level of awareness of the general population and of those involved with the handicapped must be raised in order that attitudes may be changed, especially in societies where people see a handicap as a stigma.

Finally, it is important to remember that local solutions to certain problems may already have been developed, and are sometimes much more appropriate to local needs than imported technologies.

2.2. The situation in industrialized countries

Industrialized countries face other types of problems concerning the use of technical aids to support disabled persons. In most of the European countries, Canada and the United States of America, large sums of money have been put into research and development of technical aids, as well as in practical schemes to make effective use of those aids by all groups of the disabled population.

Information technology (I.T.) provides many useful solutions to the problems of disabled persons, solving problems that some years ago were impossible. One of the fields of I.T. that provided many solutions to the serious problems faced by handicapped persons was the development of technical aids based on personal computers. The solutions found allowed severely disabled persons to gain access to areas of education and employment inaccessible to them in the recent past, contributing on a large scale to their full integration in society.

But "high" technological solutions are not always developed on a large scale, even in rich countries, mainly due to the fact that these solutions are usually directed to restricted groups of the disabled and consequently are for restricted markets. Historically, manufacturers have mostly treated disabled people as a separate market which results in an inadequate and unaffordable
product. Fortunately, this negative fact is changing rapidly. At the end of this presentation a programme of European co-operation is described, as an example of how these problems can be solved with success.

Technical solutions must be supplemented by appropriate legislation, making available to the target populations the potential benefits of those solutions. An example of this is a recent law approved by the United States Congress, the "Technology Related Assistance for Individuals With Disabilities Act of 1986". As a consequence of this Act "... substantial financial support will be provided to the States to develop and implement programs of technology assistance for individuals of all ages with disabilities".

As a consequence of section 508 of the Rehabilitation Amendments Act 1986 of the United States Congress, effective 1 October 1988, the biggest customer for electronic equipment in the world (the United States Government Agencies) are only allowed to purchase electronic equipment which is accessible to disabled people. From that date, manufacturers have to consider special needs at the drawing stage. If this approach is applied to other products and services, the benefits for handicapped persons will be enormous.

2.3 The transfer of technology for the disabled in Portugal

The possibility of profiting from the experience of more developed countries is, in our opinion, very important. Portugal has a "curious" situation within the European countries, especially if we consider the members of the European Economic Community (EEC). In fact, and in spite of being a member of the European Community since January 1986 and one of the 23 industrialized nations of the world, Portugal is probably the least developed country among the economically powerful group of countries that form the EEC. There are still large differences between our economy and the economies of more developed EEC countries like Denmark or the Federal Republic of Germany. These differences are obviously reflected also in the field of technical aids, where, until recently, the situation in Portugal could be compared to that of a developing country, rather than to an industrialized one.

The situation led to a need to transfer to Portugal technology in the fields of special education and rehabilitation. As a practical example of the problems that arose by an inappropriate transfer of technology, we could describe the situation created by the "offer" of some microcomputers from another European (but more developed) country, to help children in Portugal afflicted with cerebral palsy. This transfer failed for two main reasons:

(a) The transferred technology was not the appropriate one for our country. This was, for example, the case of microcomputers with word-processing programs, which were not prepared to generate some special Portuguese characters, like the vowels with acute, circumflex and grave accents (e.g. â, ô, à, á, é, ë). This situation created difficulties, for example, when these microcomputers were used as a technical aid for communication, to replace typewriters used by students with severe motor
disabilities. At that time, computers generating the mentioned special characters were already available in Portugal. However, as the equipment was offered, no search was made in the local market.

(b) People who were going to use the transferred technology were not given appropriate training to use the equipment in a learning situation. Furthermore, there was no regular technical support for that equipment, making it very difficult to have it properly repaired when "things went wrong".

The above-mentioned reasons created a situation whereby special educators and therapists developed a negative attitude towards technical aids.

Fortunately, there are also examples of transference of technology to our country, where aspects like training of users and helpers, and the technical support for equipment were not forgotten, and were considered a priority from the beginning of the co-operation. These transfers, contrary to the above-mentioned example, gave a positive contribution to a more specialized support to disabled people in Portugal.

3. Technical aids for alternative and augmentative communication

3.1. The importance of communication

"Man is distinguished from other life forms by his need to communicate and his sophisticated means of expression. It is therefore surprising to realize that this very fundamental need was, until recently, seldom considered when dealing with multiple disabled non-speakers. In our communicating world, people who cannot speak are isolated from the rest of society. However, various graphic communication systems (using pictures, symbols and words) have been developed in the past, so that non-speakers may also express their needs and ideas by pointing to the different components of a communication display."

These are the introductory words of an interesting book of a Canadian speech therapist, Mrs Christiane Charlebois-Marois. The book entitled "EVERYBODY'S TECHNOLOGY", contains a variety of practical ideas already being put to use in the field of technical aids for augmentative communication. There, one can find both "low" and "high" technology adapted to the needs of non-vocal communicating people.

3.2. Low and high tech communication aids

"Low tech" systems for communication include pictures and symbol charts for those who have difficulty in understanding or expressing themselves through the written word. Some use simple black and white line drawings, others use photographs or symbols from standardized AAC graphic systems. A number of alphabet cards and word charts with a pre-selected vocabulary are commercially available, but others are often tailored by the teacher or the therapist to include vocabulary applicable to the individual.
"High tech" communication aids usually consist of electronic equipment, mostly based on microcomputers, providing a range of different modes of communication enhancement or replacement. The range of electronic communication aids now available is very wide, in terms of both capability and price. They can perform sophisticated functions like speech recognition, gesture analysis and speech synthesis. Adequate training in the use of those aids and in their care and maintenance is essential for the user and assistants, and it is important that everyone concerned be aware of capabilities and limitations. The transfer of this type of technology must always take into account the economic and technical possibilities of the countries to which they are transferred, in order to avoid the occurrence of future problems like those cited in section 2.3 above.

4. The use of graphic systems for non-vocal communication in Portugal

In Portugal, the use of alternative and augmentative communication (AAC) systems is still relatively new. There are two of these systems currently being used in our country: the Bliss System and the PIC System.

4.1. The BLISS System

The Bliss system is a symbolic system developed by Charles Bliss between 1942 and 1965 as a graphic system to facilitate better communication between persons with different language backgrounds. The system was first applied as an augmentative aid to speech when it was introduced in 1971 for physically handicapped, non-speaking children at the Ontario Crippled Children's Centre in Canada.

Blissymbols is a semantically-based system. Most components relate directly or indirectly to meaning. Blissymbols contain pictographic, ideographic and/or arbitrary components, which are organized in different combinations (McNaughton, 1980). Blissymbols are constructed from a small number of basic geometric shapes, presented below:

```
□ □ △ △
○ ☺ □ □
\_ ) (  
```

For example the basic symbol for HEART is used as a component for all symbols concerned with feelings.
The system was introduced in Portugal during the 1980s, as a consequence of the exchange of special educators and therapists with the United Kingdom, where the use of the Bliss system was widespread.

A Bliss's Resource Centre was created at the Cerebral Palsy Centre of Lisbon, where a group of educators, therapists and linguists were responsible for the translation and adaptation to Portuguese of the Bliss symbols. Soon it was used as an alternative system of communication, and some technical aids for communication were developed to support this method (boards, electronic scanners, etc). The Portuguese version of the Bliss system was implemented in Apple II and BBC microcomputers. This system has been successfully used for the last few years with such computers.

As an example, two symbols of this system, for the Portuguese words "Feliz" (meaning "Happy") and "Triste" (meaning "Sad") are presented below:

```
<table>
<thead>
<tr>
<th>feliz</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎵</td>
</tr>
<tr>
<td>triste</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>🎵</td>
</tr>
</tbody>
</table>
```

4.2 The PIC system

The PIC (pictogram ideogram communication) system also has its origin in Canada, where it was developed by a speech therapist, Mr. Subbas Marajh.

Again it was via international co-operation that the PIC system was introduced in Portugal. In fact, Portugal and Sweden established in 1976 an agreement in the field of special education. It was then possible to have educators and technicians trained either in Sweden or in Portugal. It was during these exchanges of personnel that Portuguese special educators became aware of the PIC system used in Sweden. Contacts were also established with Canada and a Portuguese version of the system was developed from 1984 to 1986 at the Resource Centre for Special Education, a service under the Portuguese Ministry of Education responsible for pedagogical and technical materials for handicapped students integrated in regular schools or in special institutions.

The version was based on both the Canadian and Swedish versions, and adapted to the Portuguese cultural and socio-economic reality. The system is formed by 400 pictographic symbols. These iconic symbols are drawn white over a black background. The meaning of the symbol is written (as in the Bliss system) on the top edge of the symbol, to facilitate communication with persons who are not aware of the system.
Teachers of special education and therapists dealing with non-vocal children with various degrees of mental retardation use this system, which proved to be very effective to develop communication with those groups of individuals.

Like other AAC systems, the PIC System was first implemented in "low tech" aids, consisting mainly of boards of easily available materials, where symbols were fitted, and pointed at or "chosen" by non-vocal children using some type of pointing device. An example of two PIC symbols representing the words "Happy" and "Sad" is shown below.

![PIC symbols]

No computer-based technical aids have yet been developed in Portugal for the PIC system. In order to redress this situation and as an attempt to solve some of the questions concerning technical aids for non-vocal communication in Portugal, a project was established under the Centre for Analysis and Signal Processing (CAPS) of the Technical University of Lisbon.

5. The project of "non-vocal communication"

CAPS is a Research Centre of a Research Complex located in the campus of the Instituto Superior Tecnico (IST), the School of Engineering of the Technical University of Lisbon. One of the research units of CAPS, the Laboratory of Acoustics and Noise Control, includes a broad range of activities and research programmes in different fields of communication, like measurement and analysis of dolphin "vocal" sounds, "mother-infant communication" through vocalized sounds, and a "project for non-vocal communication", this last directed towards the research and development of alternative systems and technical aids for non-vocal communication.

The first phase of this research programme is the implementation of graphic symbols for non-vocal communication in microcomputers, it will be finished in six months' time. It focuses on the implications and advantages of implementing graphic systems for non-vocal communication in microcomputers. Systems using pictographic and ideographic symbols, like the Bliss and the PIC systems will be implemented in the Apple Macintosh Computer, using Hypercard and the Hypertalk programming language. The possibility and the benefits of associating digitized speech to the symbols are also being investigated.

A second phase will follow, and it will concern the development of other technical aids for augmentative and alternative communication, as well as the training of special educators and therapists in this field.
A "support group" called the "Committee for Non-vocal Communication" was established within the project. The main objective of this group, made up of special educators, speech and occupational therapists, psychologists, linguists and engineers, will be, besides a technical and pedagogical background support to the project, the dissemination of information and training of people involved in AAC in Portugal.

Special attention will be paid to the development of "man-machine" interfaces in order to establish a "correct connection" between the microcomputer and the disabled person. Whenever possible, commercially available devices will be used. Research on new techniques for man-machine interface will also be investigated in co-operation with other departments of CAPS, namely the Biomedical Engineering and the Robotics Research Groups.

6. European co-operation in rehabilitation technology

I will finish my presentation giving an example of what I hope will become, in the very near future, a good example of the transfer of technology between the 12 countries of the European Community, the TIDE Programme.

The TIDE - Technology for the integration of disabled people in Europe - Programme is a proposal for a European Community research and development programme on the application of information and telecommunications technologies for disabled people. The programme will seek to identify, establish and implement a new strategy for the socio-economic integration of disabled people in society through technological intervention.

6.1. The basic concept

According to this proposal, "the basic concept is integration, i.e. the full participation of and equal rights for disabled persons in society".

The integration will be obtained through the use of advanced technology. With the intervention of advanced technology it is possible to do the following:

- Provide a methodology which will permit the development of general purpose technological devices, which are also capable of meeting the individual needs of a person with special needs;

- Provide specially adapted interfaces on existing general purpose technological tools;

- Provide customized devices.

6.2 The European market for technical aids

A European dimension is required to avoid duplication of efforts and to obtain a minimum market potential for products addressing minority groups.
Persons with some sort of disability represent a sizeable proportion of the total population in Europe. Depending on sources and methods of estimation, this figure ranges between 5 and 12 per cent and this implies that as many as 30 million Europeans have some sort of minor or serious handicap.

A Community dimension will make the disabled consumer group an interesting target for industry. Today, although the group of disabled persons is not negligible, it is probably too small, or it is considered to have too individualistic needs in order to be "interesting" as consumers in one single country. Also their capacity to buy equipment varies from country to country, because of differences in GNP, social welfare programmes and legislation. Thus there are good reasons to see Europe, in view of the completion of the internal market in 1992, as an open market for this type of equipment.

6.3 The industry

Industry response is expected to be positive because it is proposed that technical solutions for disabled persons should, as far as possible, be part of a general technical solution. One reason is that the border between disability and normal function is vague, and that what is beneficial to disabled persons is also beneficial to the general public. Another reason is that additional facilities tend to cost very little if they are included in the basic design criteria, and not added afterwards. Examples in the telecommunication fields are adjustable amplification in telephones which may be necessary for hearing impaired people, but which are also needed by normal people in a noisy environment.

Summing up the main reasons for such a programme:

Market:

"The national markets are too small and fragmented. A European dimension will provide the necessary market size. This is in line with the objective of the completion of the Internal Market in 1992."

Industrial:

"Industrial co-operation at a European level will provide industry, especially small industry, with new strategic industrial and service capabilities. This will strengthen international competitiveness in the field."

Standardization and regulation:

"This is related to the two previous reasons. A European dimension will avoid the emergence of different and incompatible solutions to the same problem, widely diverse regulatory policies, etc."
Social:

"It will enhance the quality of life for the disabled citizens of Europe. This is in line with the Community objective of strengthening the social cohesion of Europe."

The above-mentioned European Programme illustrates clearly that, in spite of cultural and socio-economical differences, international co-operation based on the knowledge and the acceptance of those differences is still the most adequate way of transferring technology among countries.

REFERENCES


XV. COMPUTER-BASED ASSISTANT-SYSTEMS FOR THE HANDICAPPED

by

M. A. Hashish and O. S. Eman
IBM Cairo Scientific Center
56 Gameaat al Dowal Al Arabeya
Mohandessen, Giza, Egypt
Introduction

Over the past two decades, computer technology has expanded very rapidly. For handicapped individuals, a major contribution of computer technology is the potential for compensation for the disability, thus reducing the degree of handicap associated with that disability. Many computer-based systems, available today, were designed to help individuals with disabilities to achieve greater personal and professional independence through technology.

Blindness and deafness represent the majority of handicapping conditions in Egypt. Therefore, a rehabilitation engineering programme was started at the International Business Machines Cairo Scientific Center (IBM-CSC) to help Arabic-speaking blind and deaf people by applying modern computer techniques. The main objective is to assist them to live as full a life as possible through providing ways of communication and educational services.

To that end, three computer-based systems have been introduced. The first is designed to produce reading material for visually handicapped people. For deaf adults, another system has been developed to generate left-hand finger-spelling. A speech-training system for deaf children has also been developed.

1. Aids for visually impaired persons

Visually handicapped people need broader access to society's growing flow of written information and educational books. However, the number of textbooks, magazines, periodicals, and other printed material transcribed for students or employed visually handicapped persons is kept to a minimum. This low level of information makes the visually handicapped person unacceptably dependent on sighted people to read for him or for her. Therefore, a reliable system for producing reading material is needed for visually handicapped people to offer them equal opportunities for education and employment.

In this work, two operative Braille production systems: semi-automated and automated, have been developed to produce reading material for visually handicapped people.

Semi-automated Braille production

This system translates the text, written either in Arabic or English, into Braille, but depends on manual entry of the text into the computer. The translation could be done using one-to-one character-pattern mapping (full spelling) or many-to-one mapping (alphabet abbreviations). Table 1 shows Arabic characters and their corresponding Braille code.

In addition, short vowels in Arabic may be indicated by diacritics above or below the letters (in practice they are usually dispensed with). These also have Braille equivalents, which may be used when vocalization is necessary (for instance for the Koran). They are written either above or following the letters they affect.
Automated Braille production

Another form of data entry, which is capable of efficiently and reliably solving the problem of input of the huge backlog of data already in existence, is through machine interfacing of written data (1). The Braille production process can be fully automated using an Optical Arabic Reading Machine (OARM) with high recognition rate for different fonts used in the production of printed material.

At IBM-CSC, the current status of the Arabic Text Recognition Project is that an Arabic Reading Machine has been developed with a recognition rate which reaches to 99 per cent on the character level. The font used is the IBM Quietwriter Arabic font (Yasmina). The approach used can be applied to other fonts.

Spell-checking and assistance software, developed also at IBM-CSC, can be used to enhance the recognition rate before transcribing the recognized Arabic words to Braille code.

The automated Braille production system is the same as the semi-automated Braille production system mentioned above but uses the Arabic Reading Machine for data entry.

2. Aids for hearing-impaired persons

Experience in the field of rehabilitation has shown that it is necessary to distinguish between a rehabilitation programme for profoundly hearing-impaired adults and a rehabilitation programme for children. In the present work, two different systems have been developed: one for deaf adults and the other for deaf children.

Deaf adults

A profoundly deaf person (0.05 per cent of the population) is greatly handicapped by his inability to communicate with the hearing world. Adult hearing-impaired persons who have not been trained to speak fail to communicate with hearing people. It is not therefore surprising that they could not be offered the same opportunities for education and employment. They need another entry to the spoken language.

A system for generating left-hand special signs that represent each Arabic character (i.e., finger-spelling) has been developed at IBM-CSC. This system can be used as a means of communication between deaf and hearing persons. Moreover, this system can be used in early education stages to teach Arabic characters and words spelling.

Deaf children

The ability to speak and utilize language is closely associated with hearing. If a person loses his/her hearing after learning to speak, speech is
Table 1. Arabic Braille code

<table>
<thead>
<tr>
<th>العربية</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ق</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ر</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ل</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ش</td>
<td></td>
<td></td>
</tr>
<tr>
<td>م</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ن</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ت</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ج</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ه</td>
<td></td>
<td></td>
</tr>
<tr>
<td>و</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ى</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
usually retained, but it is often subject to a noticeable reduction in quality. In contrast, the deaf-born child cannot learn to speak and requires special training.

Deaf children differ from adults in that they have a residual hearing and therefore can be trained to pronounce different sounds. In helping deaf children to speak, it is necessary to provide the child with some information he cannot perceive through hearing, through an unimpaired sense such as vision or touch.

For some aspects of speech touch is useful, but for pattern recognition vision is far superior. Moreover, a visual display representation of speech can be observed by both child and teacher, and frozen to facilitate comparison and explanations.

A prototype speech-training system which provides real-time visual feedback of some speech parameters has been developed at the IBM Paris Scientific Center (2). This system was extended and adapted to the Arabic language at IBM-CSC.

On 1 November 1989, IBM in the United States introduced the Speech-Viewer, to aid the speech and hearing impaired. SpeechViewer exists to allow 'Hearing with eyes'. It is tool for speech pathologists and professionals who treat speech disorders or hearing disabilities that affect speech. By translating sound into images, it allows deaf children to "watch" the sounds they produce, and to compare them with those of the therapist.

The Arabic version of the SpeechViewer is ready and being tested at IBM-CSC and will be demonstrated at the exhibition.

3. Conclusions

The above-mentioned Braille production systems have been developed for totally blind people. However, partially-sighted persons with their residual vision can be provided with other assisting tools to enable them to use computers.

A magnification software package could be developed to allow the user to select one of many different font sizes. This should be done in such a way that can be used with other computer applications and existing software.

It is important to point out that there are still a lot of rehabilitation areas where modern computer technology can be applied. For instance, mental impairment is one of the most important subjects that needs more attention for research and development.

Co-operation between different organizations is needed to achieve a better life for Arabic-speaking handicapped persons.
References


XVI. SOCIAL ASPECTS OF THE DISABLED IN THE WESTERN ASIA REGION
AND THE IMPORTANCE OF THEIR MODIFICATION

by

Amani Qandil
## CONTENTS

Summary.................................................................................................................. 207

Chapter

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION: ON THE SOCIAL CONTEXT AND ITS ASSOCIATIONS...</td>
<td>209</td>
</tr>
<tr>
<td>II. WORK OPPORTUNITIES FOR THE DISABLED AND THE TECHNOLOGIES</td>
<td>211</td>
</tr>
<tr>
<td>EMPLOYED: THE SITUATION AND THE POTENTIAL.................................</td>
<td></td>
</tr>
<tr>
<td>III. SOCIAL INTEGRATION OF THE DISABLED: THE FAMILY AND THE</td>
<td>222</td>
</tr>
<tr>
<td>COMMUNITY......................................................................................</td>
<td></td>
</tr>
<tr>
<td>A. The disabled person and his family.........................................</td>
<td>222</td>
</tr>
<tr>
<td>B. The disabled person and the community.....................................</td>
<td>226</td>
</tr>
<tr>
<td>IV. CONCLUSION: SUGGESTED POLICIES...............................................</td>
<td>230</td>
</tr>
</tbody>
</table>
Summary

The paper is intended to focus on two basic points: firstly, work opportunities for the disabled and the technologies employed and, secondly, the social integration of disabled persons with respect both to the family and to society. The introduction is concerned with defining the social context and its associations, through an examination of the relationship between the disabled and society as a subject for analysis. The disabled person is a live social entity, lives in society, is affected by it and in turn affects it. Society is a cultural, social, economic and political structure which establishes values and lays down rules of behaviour. An objective treatment of the subject must therefore be based on a recognition of the interaction between the disabled person and the society in which he lives. In other words, the success or failure of any effort in connection with the disabled will be determined by the relationship between the disabled person and society.

If we accept this introduction, there are certain important conclusions, foremost among which is the fact that disability relates to all of society, affects its productive and social forces and is affected by its policies, attitudes and values. It also becomes clear that there is a need to understand the extent to which the social and cultural environment is responsible for creating disability: the response therefore depends on the ability of society to change some of its values, attitudes and practices. Following this introduction, which establishes the thrust of the investigation, the study moves on to discuss the question of work opportunities for the disabled. Here we note the link between work opportunities and the technologies employed, because the enormous technical development registered in recent years has affected the possibilities offered by prosthetic appliances and aids for the disabled. These technologies make it easier to put the remaining abilities of a disabled person to good use and increase his chances of obtaining employment. International and regional papers on the disabled have for this reason focused on work opportunities and the development of appropriate technology for the disabled. The discussion refers to Arab legislation and the extent to which work for the disabled is guaranteed. It is noted that, in most bodies of legislation, such provisions are dispersed among the laws relating to labour, young people, social welfare and insurance whilst some Arab countries (such as Iraq and Egypt) have striven to combine the separate elements of these laws into an integrated piece of legislation designed to protect the disabled. While some laws prescribe that a certain quota of disabled persons must be employed, other Arab bodies of legislation (that of Jordan, for example) do not oblige employers to hire the disabled.

While recognizing the importance of Arab legislation in establishing the disabled person's right to work, it is also important to follow up the real opportunities for such work. Here the discussion moves on to focus on the practical aspects of employment for the disabled, and three questions are raised in this connection. The first is how to ensure that the disabled are rehabilitated for the labour market, i.e. the institutional contexts for such rehabilitation. The second seeks to identify those work opportunities which
have been provided to them, and the principal problems and obstacles, while the third endeavours to assess the specific technology made available to the disabled. On the basis of examples from Arab countries, the discussion concludes that there is a need for both quantitative and qualitative improvement in rehabilitation centres in order to meet the actual requirements of current markets. It also mentions a number of problems faced by the disabled in their work, particularly in view of the figures which suggest a relatively low employment rate. The most important problems include work which is inappropriate for the circumstances of the disabled person, a lack of response on the part of employers and difficulties relating to access and mobility. The discussion finally addresses the ineffectiveness and poor performance of prosthetic appliances and the failure to develop appropriate technology at a reasonable price for the disabled.

The second area of concern in the discussion - social integration of the disabled - is addressed through an analysis of the disabled person and his family, on the one hand, and of the disabled person and the community, on the other. Modern thinking on rehabilitation has it that the family must bear the major burden in processes of rehabilitation, meaning that the disabled person's family must be educated and trained in order to be successful in integrating him and in responding to his needs and problems. The family also bears the primary responsibility for meeting the basic requirements of its disabled members and has the major task of ensuring early detection and limitation of the disability. Here it is noted that institutions caring for the disabled have a responsibility to maintain regular contact with their families, and mention is made of the possibilities made available through preventive medicine and centres for the welfare of mothers, children and families. Reference is made, lastly, to the responsibility of the media in addressing both the Arab family and the disabled individual.

With regard to the relationship between the disabled person and the community as a whole, his integration into the community can be ensured only if he is accepted and perceived as an active and productive member of that society. Efforts to change society's attitudes to the disabled are of fundamental importance for the success of social rehabilitation in the broad sense, and for the disabled person's participation in the life of the community. The educational system ranks as a major instrument in such endeavours, and sports and cultural activities also constitute means whereby the disabled person may be enabled to participate in the community. Finally, the media and non-governmental organizations have significant roles to play in facilitating the process of social integration. In addressing these points, the study cites positive examples from certain Arab countries, which must be promoted and given attention in order to broaden their effect.

The conclusion is that the proposed policies for integration of the disabled into society should not be confined only to legislative policy, but should extend to policies relating to education, information, science and technology. The institutions of civilian society should also be mobilized to deal with the issue.
I. INTRODUCTION: ON THE SOCIAL CONTEXT AND ITS ASSOCIATIONS

This study presents an analysis of the principal relationship determining both the present and the future of the disabled in Arab society, i.e. the relationship between the disabled person and society. A disabled person, like any human being, lives within society, which affects him and which is affected by him. Society is a cultural, social, economic and political structure which establishes values, forms attitudes and lays down rules of behaviour. By means of public policies, it specifies objectives and programmes and allocates resources. Thus, objective treatment of the subject of the disabled must be based on a recognition of the interaction between the disabled person and the society in which he lives and to which he belongs. We can therefore say that the success or failure of any effort in connection with the disabled is determined and governed by this interaction between the two.

Some important primary conclusions may be drawn from this introduction:

1. Interaction with the disabled must not be determined on a partial basis but fully and completely. Fragmentation of the issues and their separation from the overall issues of society would result in preservation of the status quo. Disability relates to all of society, affects its productive and social forces and is affected by its policies, attitudes and values.

2. The extent to which the social and cultural environment is responsible for creating disability must be recognized. It is also no coincidence that disability tends to be more prevalent in rural than in urban areas. Research and studies have shown the links between disability, the type of upbringing and certain cultural and social practices, particularly the practice known as "closed marriage".

3. While some of the reasons for disability lie in the nature of the social and cultural environment, the extent to which this phenomenon is addressed depends on society's ability to change some of its values, attitudes and social and cultural practices. This represents a major challenge, which must be taken up from the outset.

4. Acceptance of the relationship between the disabled person and society in the course of our discussion of the social context of the disabled in Arab society obliges us to change our emotional approach to the subject. This means that we must, in our interaction with the disabled, go beyond the realm of charity, compassion and humanitarian feelings and embrace a logic which emphasizes justice, equality and equalization of opportunities. We must therefore treat the problem as a social issue which concerns all of society, affects society and is affected by it, and is thus one of the responsibilities of a modern State.

These four conclusions, which arise from the nature of the interaction between the disabled person and society, both determine and explain the features of the social context of the disabled in Arab society. They also highlight the lines of thinking adopted in this research paper.
In the pages which follow, this paper analyses the social context of the disabled in Arab society by concentrating on two principal areas of concern:

1. Work opportunities for the disabled and the technologies employed: the situation and the potential.

2. Social integration of the disabled: the family and society.

Before addressing these two areas in detail, some fundamental observations should be made:

1. The first observation relates to the concept of disability and the extent to which it is homogeneous. Although the phenomenon is referred to by one word, the concept of a "disabled person" or "disability" embraces disparate categories and groups. There is mental impairment, sensory impairment and physical impairment, and there are also degrees in the level of disability before it becomes total. The definition adopted by the United Nations in the World Programme of Action concerning Disabled Persons, 1/ refers to handicap as "a disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the fulfilment of a role that is normal, depending on age, sex, social and cultural factors, for that individual".

2. The second observation relates to the practical and scientific difficulties involved in defining the concept of disability in the Arab region. Among the principal difficulties is the absence of precise statistical surveys in many Arab countries. In some of these countries, indeed, the problem is ignored, whether unintentionally or deliberately. The striking thing is that no comprehensive field research has been carried out to identify categories of disability, and census questionnaires have not in the past included an objective endeavour 2/ to obtain detailed data on the subject. They concentrate for the most part on a single variety of disability, namely mental disability, while the subject of physical disability is marked by considerable confusion. 3/ The situation is further complicated by the

---


2/ Data of this sort, if included in a census questionnaire, are based on the responses of the family itself. The result therefore depends on the extent to which such families perceive and appreciate the disability. Evidently, some tend to ignore the existence of the disability or have a sense of shame or disgrace with respect to it, etc. This affects the credibility of the data.

3/ For further details, see Uthman Faraj, "Factors causing disability and programmes of prevention in the Gulf region", Seminar on the welfare of the disabled in the Arab Gulf States (November 1981), p. 29.
fact that Arab countries differ as to how they determine the nature of disability and define partial or total disability. Finally, official data concerning the number of disabled persons in certain Arab countries is based on records of those in contact with the State, i.e. those at welfare institutions and rehabilitation centres, and it is very difficult to list those disabled persons who are not registered, although they are proportionately very numerous. Taken together, all these difficulties make it necessary to exercise a degree of restraint and caution in accepting some of the declared official assessments. Although the Arab Declaration on Work with the Disabled suggested that the overall number of disabled in Arab States be assessed at 15 million, the real total may well be much higher. We should not ignore the past and continuing effect of wars in the region, which provide basic fodder for disability figures in the Arab States in general, and particularly in the ESCWA region.

3. The third and final observation relates to the interaction between the study's two principal areas of concern: work opportunities, on the one hand, and social integration, on the other. Modern thinking on social rehabilitation of the disabled tends to address the two areas in a single context. Rehabilitation is a co-ordinated and integrated process, making use of medical, social, educational and rehabilitative measures in conjunction, to help a disabled person to attain the maximum possible level of effectiveness and integration into society. This means that the thinking on work is part of a more comprehensive line of thinking, designed to integrate the disabled person into society and to increase his level of participation. This is something which does not come about automatically but as a result of educating society and making it aware of the need to work with the disabled. If this is not done, legislation affirming the right of disabled persons to work is meaningless and devoid of sense.

II. WORK OPPORTUNITIES AND THE TECHNOLOGIES EMPLOYED: THE SITUATION AND THE POTENTIAL

The issue of work opportunities for the disabled is linked to that of the technologies employed. The explanation for this lies in the enormous technical development registered in recent years, as reflected in the possibilities

---

1/ Arab Declaration on Work with the Disabled, Kuwait Regional Conference on the Disabled (Kuwait April 1981), p. 4.

2/ Among the principal regional and civil wars to which the region has been and continues to be subjected are the Arab-Israeli war, the struggle of the Palestinian people for its legitimate rights, the Iraq-Iran war and the civil war in Lebanon.

offered by prosthetic appliances and aids for the disabled. In this connection, the technologies employed make it easier to put the remaining abilities of a disabled person to good use and increase his chances of obtaining employment.

Most international and regional papers on the subject of the disabled have focused on work opportunities. The reference to equality and the equalization of opportunities in the World Programme of Action means that education and employment opportunities must be made available to the disabled. It also means that they should be provided with the social and health-related services which allow them to participate in the building of society because "what is required is to focus on the ability, not on the disability of disabled persons."1/ The Arab Declaration on Work with the Disabled also stresses the principle of equal rights and the equalization of opportunities. Among the basic ideas expressed in that document is the recognition of all disabled persons' right to welfare, education and work, without discrimination on the basis of sex, origin, social status or political affiliation.2/ Work, then, in relation to education and training, is a fundamental criterion by which to determine the effectiveness of the principle of equalization of opportunities, as it is actually applied. In the context of attention to the work of disabled persons and opportunities for their employment, a United Nations paper has highlighted another aspect - the employment of disabled women. Although opportunities for women in third world societies are generally limited, with respect to both education and work, the work opportunities of disabled Arab women are expected to diminish. This aspect must be addressed and publicized, to the extent that data is available. Employment legislation and the extent to which statistical data is available on employment of the disabled occupy an important position among indicators of the status of the disabled in different States. The study will endeavour to highlight this in order to provide an objective assessment of real work opportunities for the disabled.

Concern over work for the disabled is not based simply on notions of equality and the equalization of opportunities but, basically, on economic and productive considerations. Transformation of the disabled person into a productive member of the work-force means a gain in terms of production and a reduction in the burden of care that has to be assumed by his family and the State. The State's expenditure on centres for the education and training of the disabled thus produces an economic return. In some communities, moreover, disability constitutes a source of tensions and social problems. In Egypt,


2/ Arab Declaration on Work with the Disabled, Kuwait Regional Conference on the Disabled (Kuwait, April 1981), p. 6.
for example, research indicates that disabled persons have turned to begging and perversion and, since disability is linked to poverty, some members of the group have joined the ranks of the young homeless. 1/

Employment of the disabled is thus more a social and economic necessity than a psychological and humanitarian necessity. This is an idea which must be highlighted and emphasized, particularly as some voices are raised in demands that priority in employment should be accorded to the non-disabled. Reference is made in particular to Egyptian society, where there is a serious unemployment crisis and it is difficult to speak of giving work to the disabled while non-disabled individuals are unemployed. Here, the question arises: to which of the two should the State address itself? 2/ This is a very serious question, and the answer must be based not only on the logic of equality and the equalization of opportunities but on that of the economic and social returns and of the economic benefits. The starting-point for discussion of work opportunities for the disabled is Arab legislation and the extent to which it provides guarantees for the protection of the disabled. The resolutions and laws certainly constitute a minimum response to the issue and also refer to the responsibilities of Governments. The legislation extends to work, education, rehabilitation, training and services, etc. Although it is true that a gap exists between what is in place and what should be there, the legislative structure does, in the final analysis, constitute a legal basis for addressing the problem. It is also this structure which establishes what is meant by a disabled person, what his rights are, what rehabilitation programmes are designed for his benefit, the extent to which he is employed in offices and public institutions and other details which determine the features of his life and activity.

Arab legislation concerning the disabled is dispersed among various subjects. Thus, there are some clauses in labour law which provide for the employment of a certain quota of disabled persons and there are other provisions which relate to disabled juveniles, in addition to clauses contained in laws on social welfare, security and insurance. Exceptions to this general trend may be seen in certain Arab countries (such as Iraq and Egypt) which have endeavoured to combine the scattered elements of these laws into integrated legislation designed to protect the disabled. An example of the dispersal of such laws may be seen in the situation of disabled persons under Kuwaiti legislation, where there is no special law to cover them. However, the Kuwaiti legislator accords them special treatment in civil matters (Law No. 4 of 1974 concerning the administration of palace affairs and


2/ Seminar organized by the Arab Centre for Research on Development and the Future (Cairo, 18 November 1988), participants being Uthman Faraj, Qadri Hafni, Sayyid Yasin, Ali al-Din Hikal, Najwa Hafiz and Amani Qandil.
Law No. 5 of 1959 concerning the registration of immovable property) and in criminal matters (articles 22, 166, 178, 179 and 191). There are other legal clauses governing the provision of assistance and insurance. Reference is made in particular to Law No. 5 of 1968, as amended by Law No. 30 of 1971, concerning public assistance, which provides that "assistance shall continue to be provided until such time as the disabled person is rehabilitated or is trained to such a level that he is capable of providing for himself". 1/

Among the positive features of Arab countries' attitudes to the disabled is their endeavour to adopt integrated legislation in that connection. 2/ The proposed Kuwaiti draft law includes advances with respect to the machinery of protection, providing as it does for the imposition of penalties ranging from imprisonment for a period not exceeding six months to a fine of up to 200 Kuwaiti dinars, or one of the two, in cases where the employer or person responsible refuses to employ a disabled person, and for the imposition of criminal penalties in cases where the person responsible is neglectful of welfare in fulfilling his obligations to the disabled person. 3/

The same situation may be seen in the Sultanate of Oman, where there are no special legislative provisions or laws covering the disabled but clauses relating to them contained in the laws on social security, low-cost housing and labour. Omani law does, however, provide for the employment of disabled persons with certain abilities and obliges employers to give 2 per cent of jobs to disabled workers. 4/ Jordanian legislation contains no provisions obliging employers to give work to the disabled but there are legislative proposals to this effect which have not yet been put into practice. In Bahrain, 1976 saw the adoption of a law concerning the employment of rehabilitated disabled persons which obliged employers of 100 or more workers to ensure that 2 per cent of their workforces consisted of disabled persons. It also empowered the Minister of Labour and Social Affairs to decide in which Government posts and occupations priority should be accorded to the disabled. Under Iraqi law, the State and the public and mixed sectors are obliged to

1/ Manal Mansur Buhamid, The Disabled, Kuwait Foundation for the Advancement of Science (Kuwait, 1985), pp. 183-189.

2/ The Manila Conference of 1978 addressed important recommendations to countries of the world concerning rehabilitation of the disabled, the adoption of legislation for their protection and the guaranteeing of work opportunities for them.


employ disabled persons, and if the disabled person refuses to work he is deprived of his family welfare allowance until such time as he agrees to do so.1/

Egyptian law reflects an endeavour to organize the affairs of the disabled and to protect them by means of a single body of legislation which was previously dispersed among the laws on labour (Labour Law No. 92 of 1959), social security (Law No. 116 of 1950), rehabilitation (Law No. 14 of 1959), health, insurance, etc. Social Rehabilitation Law No. 39 was adopted in 1975, combining the scattered elements of its articles in a single law concerning the social rehabilitation of the disabled. This was followed by the adoption of a series of successive ministerial decisions designating posts in the Government and the public sector. The Egyptian law provides that every disabled person is entitled to rehabilitation (art. 3) and obliges employers with 50 or more workers to ensure that five per cent of their work-forces consists of disabled persons proposed, inter alia, by the Ministry of Manpower (art. 9). It also allocates to disabled persons who obtain rehabilitation certificates a quota of five per cent of all posts in the administrative apparatus of the State, public authorities, public institutions and economic units governed by them (art. 10), and prescribes that those who violate its provisions should be subject to fines or imprisonment (art. 16).2/

While the general trends in Arab legislation concerning the disabled, particularly with respect to the right to work, range from specific legal recognition, or the inclusion of general provisions concerning rehabilitation, to some cases of neglect of legal protection, the question is whether the legal position is reflected in terms of reality, i.e. whether legal recognition of the disabled person's right to work is reflected in the provision to him of real work opportunities.

A realistic investigation of work opportunities for disabled persons reveals that such opportunities are limited and subject to a number of constraints that must be addressed directly. In this respect, the law has not been able to protect the work opportunities of disabled persons, the situation in the final analysis being the same in most countries of the region, both in those where the law clearly guarantees the disabled person's right to work and in those which have no special law covering the disabled or where legislation concerning the disabled is dispersed.

In order to bring out the practical aspects of work opportunities for the disabled, we have to answer three questions:

---

1/ Ibid., p. 12.

2/ The fine is not exceed 30 Egyptian pounds and imprisonment is not to exceed one month. Previously, the law established a quota of 3 per cent of jobs for the disabled. See Law No. 39 of 1975 concerning rehabilitation of the disabled.
1. How can the disabled be rehabilitated for the labour market, and in what institutional contexts?

2. What are the work opportunities that have been established for them, and what are the most important problems and obstacles?

3. To what extent is specific technology available to the disabled, and how effective is it?

With respect to rehabilitation of the disabled for the labour market, the general trend in the Arab countries reveals two approaches, the first through general and higher education and the second through centres for the rehabilitation of the disabled or special training schools governed by the ministry responsible for education. Because of the differences in sources of rehabilitation, education and training, the institutional framework governing the provision of work opportunities to the disabled is concentrated within the ministry responsible for social affairs and labour. In most of the Gulf States, the two are combined within a single ministry, which presides over rehabilitation in the broad sense and over the provision of work opportunities.\(^1\) While we have another example in the case of Egypt, where social affairs are handled by one ministry and labour or manpower by another. This means that responsibility for rehabilitation and labour is fragmented and divided among a number of institutions. Some experts and officials\(^2\) consider this institutional separation - between the authority which presides over rehabilitation and that which presides over employment - to be "the greatest mistake, doing harm to the disabled and negatively affecting their work opportunities".

Although we have no precise information as to the percentage of disabled persons who have benefited from rehabilitation services and actually worked, certain indicators do confirm the limited scope of rehabilitation centres and offices in Arab countries, and thus the limited number of beneficiaries. Meanwhile, rehabilitation for the purposes of work has for many years been carried out in a traditional manner, without being adapted to the circumstances and requirements of either the disabled person or the market. What is striking is that the idea of creating work opportunities for the disabled person in the context of society as a whole is either non-existent or limited. Often work for the disabled is restricted to what he does in the rehabilitation centre itself, without his being integrated - in terms of production and society - into a broader framework; and some of the negative features of work in such centres should be highlighted.

\(^1\) This is the case in, for example, Kuwait, Saudi Arabia and Bahrain.

\(^2\) Abd al-Salam al-Banna, Under-Secretary for Rehabilitation at the Ministry of Social Affairs, in an interview with the author (Cairo, 28 November 1988).
In most Arab countries there is a severe shortage of trained personnel capable of training the disabled and of working with them. Sometimes nationals of the country decline to work in such a field, and Asian and Arab migrant workers become primarily responsible for such tasks. ¹/ In other cases shortages of funds constitute a major constraint on the level and extent of services.²/

Some information concerning employment of the disabled in Egypt indicates that work opportunities are provided through the Ministry of Manpower to an average of 1,500 disabled persons each year,³/ which is a low figure by comparison with the total number of disabled individuals with university degrees, intermediate diplomas or rehabilitation certificates. Certificates were obtained from rehabilitation centres and offices by 5,873 disabled persons in 1986.⁴/ It is clear, if we compare this number with the number of disabled persons who obtained posts in the work-force in 1986 (1,553),⁵/ that the rate of employment is extremely low.⁶/

Given the absence of comprehensive detailed information on the disabled and their social, educational and economic position, as well as the variable of sex (male/female), it is difficult to draw any general conclusions concerning trends in their employment and the work opportunities which are offered to them. However, it can be stated that the number of those actually employed is low in relation to the total number of disabled persons registered

¹/ This situation is particularly prevalent in Kuwait, where rehabilitation centres and institutions for the care of the disabled rely on migrant labour either because of a shortage of specialized national staff or because nationals decline to work in this field, or for both these reasons.

²/ The effect of funding shortages on institutions working with the disabled is particularly evident in Egypt.

³/ Abd al-Salam Banna, interview with the author.


⁵/ Ibid., table, p. 204.

⁶/ Manpower offices employed 3 per cent of the disabled persons registered with them between 1973 and 1979, for a total of 19,007. The highest rate of employment was among production workers (66 per cent), followed by clerical (20 per cent), services (5 per cent) and technical and practical vocations (2 per cent). Unpublished report on the situation of special categories, Comprehensive Social Survey, National Centre for Social and Criminological Research (Cairo, 1989), p. 530.
with the Ministry of Manpower. Furthermore, the years following the war of October 1973 saw an increase in the rate at which disabled persons were employed, as a result of war-related operations in both the State apparatus and the private sector. Thus, the employment situation varied in accordance with changing circumstances.

While we have in the preceding passage given a general indication of the employment situation for the disabled, showing that there are difficulties and problems with regard to the employment of individuals in this category, it is important to identify the nature of these difficulties. In addressing the factors which restrict the employment of the disabled, we shall rely on the results of a major field study carried out recently in Egypt on a sample of 525 disabled persons, all of whom had recently undergone rehabilitation. Some had obtained university degrees or intermediate diplomas, while others had been awarded training completion certificates by rehabilitation offices. ¹/ The results, particularly those based on in-depth interviews, showed a lack of follow-up by experts in the rehabilitation of the disabled, despite the disabled person's need for such follow-up for the purposes of attaining psychological and social conformity and sustaining his work. Half of those surveyed in the sample suffered from instability in their work, for various reasons: some because of a deterioration in their health, others because of low wages, while yet others mentioned mobility problems and difficulties in travelling from home to their place of work. ²/ 20.7 per cent of the sample stated that the tools and equipment which they used were not suitable for them, while half of those surveyed said that the training they had received was appropriate for work with such tools and equipment. ³/

The results of the study also indicated that irregularity in the work of some of those surveyed was due to the absence of any work that was appropriate to the training they had received. This confirms the need to develop the training of disabled persons and to prepare them to respond to the labour market in a modern and economical manner: this can be done by studying the market, its supply and demand trends and those professions which are in demand. ⁴/


²/ Ibid., p. 11.

³/ Ibid., p. 34.

⁴/ Seminar organized by the Arab Centre for Research on Development and the Future.
The proportion of disabled persons among those surveyed who were working in professions for which they were not prepared amounted to some 18 per cent, while 36.1 per cent said that the period of their training had been insufficient and that they required further training.\textsuperscript{1}\

In the course of an attempt to research and identify the reasons for the low rate in the rate of employment of the disabled, it became clear that some employment sectors did not comply with the requirement to employ such individuals. In many cases, the private sector refrained from providing employment opportunities to disabled persons and treated the employment quota as a hindrance.\textsuperscript{2} Thus - as noted by one of the expert officials - it is easy to dodge the quota established by law (5 per cent) for employment of the disabled. This highlights "the need to rehabilitate society as a whole towards work with the disabled, and the need to establish contact with employment organizations and employers".\textsuperscript{3}\

It is clear that there are many different factors which limit the employment of disabled persons, including the distance travelled to work, mobility problems, low wages, the refusal of society and the employment sectors to comply with the law concerning employment of the disabled, a lack of follow-up by the labour office and rehabilitation experts, differences in levels and types of rehabilitation for work and a shortage of employment opportunities in the market. All these factors confirm the importance, on the one hand, of field research and the variables and conditions which such research reveals and, on the other, of a comprehensive response based on integrated social policies.

Last but not least, we should note the importance of the role played by technology in providing prosthetic appliances and aids for the disabled. Just as this field draws on expertise in the social sciences for work with the disabled and their preparation for a role in society, the world has also seen much use made of technological developments on behalf of the disabled. While science and technology have achieved outstanding results in the treatment and rehabilitation of disabled persons and in the development of aids which promote their integration and participation in society, the situation indicates that little use is made by disabled persons in the Arab world of such technology. The principal reason is that "Arab countries rely on their own individual efforts to import some of these technologies; obviously, they


\textsuperscript{2} Ibid., p. 40.

\textsuperscript{3} Abd al-Salam Banna, Under-Secretary for Rehabilitation at the Ministry of Social Affairs, an interview with the author.
are expensive and their production locally requires support from the Arab market if they are to be provided at reasonable prices within the means of the disabled.\footnote{Abd al-Salam Banna, in an interview concerning technological developments in the world of the disabled. A modern artificial hand, for example, could cost more than 10,000 Egyptian pounds, and an artificial knee about 18,000 Egyptian pounds.} It should be noted that there is a newly-established Egyptian national association, known as the "Egyptian Association for Artificial Limbs and Prosthetic Appliances", which includes among its objectives an increase in the production of aids and prosthetic appliances for the disabled. This represents a positive trend in national efforts.\footnote{The Association, most of whose members are specialist physicians, was founded in 1980 and is chaired by Dr. Abd al-Salam Banna.}

There are factories which make artificial limbs in some Arab countries, some of which employ disabled persons, but their production may not meet the needs of the local market and may require modernization and updating if they are to conform to world developments. The Armed Forces Rehabilitation Centre at Cairo, one of the oldest rehabilitation centres in the Arab region, contains a factory which makes artificial limbs and prosthetic appliances and is used both by the military and by civilians. However, it has not been updated and renovated over the past 35 years in a manner consistent with its functions. As a result, a decision was recently taken by the Egyptian Minister of Defence to allocate $3 million for the construction of a new centre.\footnote{Brigadier Ahmad Nabil Mas'ud, Director of the Association of Veterans and War Victims, interview with the author (Cairo, 12 November 1988).}

The other important point in connection with the uses of technology relates to the applications of computers in facilitating the daily living conditions of the disabled, and their extension to the fields of education, training and employment. This is a sphere which has not up to now been explored by the Arab countries. Apart from the seminar organized by ESCWA - in conjunction with the Iraqi Centre for Electronic Research and Computers, the Iraqi Centre for the Welfare of those Disabled Veterans and the UNESCO Regional Office, Arab experts and specialized public opinion have not yet taken note of computer applications for the benefit of the disabled.\footnote{The seminar, which was attended by 150 Arab and international experts, was held at Baghdad from 4 to 6 May 1987.} Despite the keenness of education colleges in most Arab countries to make use of computers for educational purposes, they have not, for the most part, shown any inclination to use them on behalf of the disabled.
In Egypt, for example, where there are more than 11 training colleges, there is no specialized programme for the education of the disabled or for the training of teachers and supervisors in welfare and vocational rehabilitation institutions.\footnote{Seminar organized by the Arab Centre for Research on Development and the Future.} Universities with an interest in rehabilitation engineering also show only limited initiatives in developing prosthetic appliances for the disabled. Among positive initiatives are the efforts undertaken by the College of Engineering at the University of Zagazig.\footnote{Al-Ahram (Cairo, 6 May 1986).} However, it is in the end a matter of individual initiatives, which require planning, organization and support from social policies. Thus we are bound in the final analysis to affirm the link between the issue of the disabled and other issues relating to society, as well as the link between success in confronting the issue and the ability and awareness of society and its institutions taken together.
III. SOCIAL INTEGRATION OF THE DISABLED:
THE FAMILY AND THE COMMUNITY

The concept of social integration of the disabled is based on the concepts of participation, equality and the equalization of opportunities, and full participation in the basic units of society - the family, social groups and the local community - is the essence of human experience. The right to equality of opportunity for such participation is set forth in the Universal Declaration of Human Rights "... but disabled persons are often denied the opportunities of full participation in the activities of the socio-cultural system of which they are a part. This deprivation comes about through physical and social barriers that have evolved from ignorance, indifference and fear." It is thus that the World Programme of Action concerning Disabled Persons describes the difficulties of integrating the disabled into the community, evoking the responsibility of society as a whole, and its social policies, to accept the disabled as basic partners in all aspects of the life of the community, as well as the future of the relationship between society and the disabled.1/

We may discuss the concept of social integration on two levels. The first, which is narrow, concerns the nature of the relationship between the disabled person and his family, while the second, which is broad, concerns the nature of the relationship between him and the community as a whole and the extent to which the community accepts the disabled person's participation with respect to production, society, culture and sport.

A. The disabled person and his family

Before discussing the preparation of the disabled person's family for interaction with him, it is important to note that this step should be preceded by another fundamental step, that of preparing the disabled person psychologically and socially for adaptation to his family, in accordance with the physical and mental constraints to which he is subject. Many studies have highlighted the psychological condition of the disabled person, concentrating for the most part on his lack of self-confidence, and the resulting conflicts in his attempts to assert himself. One of the major points revealed by these studies is that the presence or absence of an inferiority complex in the disabled person depends basically on the way in which he is treated by his family, particularly in his early years.2/ The attitude of the family to its disabled child supports the trend in modern thinking on rehabilitation which asserts that the disabled should not be isolated from their families and that the family should bear a greater share of the burden of the rehabilitation process. Since not all families share the same level of culture and awareness

1/ World Programme of Action concerning Disabled Persons, p. 19.

of methods of education and upbringing, particularly with respect to their
disabled children, it is necessary to educate them and to prepare them
psychologically to work with their children. We may distinguish the following
tendencies in interaction between families and their disabled children:1/

1. A tendency to reject, caused by the family's feeling of guilt,
   anxiety or inability to play the role expected of it for one reason or
   another. The role of specialists or institutions for the welfare of the
disabled is therefore of importance: they have to reduce the burden on such
parents, offer them opportunities to rid themselves of guilt feelings and
encourage them to share responsibility for channelling the remaining abilities
of the disabled person.

2. A damaging tendency to pamper to excess, which implants in the
disabled child a feeling of deficiency and the hopelessness of acquiring
expertise. Here also an important role can be played by psychological and
social specialists with respect to organization of the relationship between
the disabled person and his parents.

3. A tendency to deny, even to the extent of denying the existence of
   the disability and attempting to treat the condition as if it were natural.
   This does further damage to the position of the disabled person and requires
   intervention on the part of specialists.

4. A pessimistic tendency, in which the family loses hope of an
   improvement in the condition of the disabled person and so becomes subject to
   increased psychological pressure. Here the family requires outside
   intervention on the part of a specialist, who can make it aware of the true
   situation and the possibilities for developing the disabled person's abilities.

5. A tendency to withdraw, whereby families refrain from speaking of
   their disabled members, never referring to them for reasons of shame and
   embarrassment. This tendency affects the growth of their disabled children
   and also requires treatment on a self-help basis.

These diverse types of families, given the differences in their
educational, social and economic levels, adopt various attitudes towards their
disabled children. This variety highlights the need of such families for
scientific information on their children's condition and development, as well
as the need for them to be aware of the valuable role which they can play in
relation to their children, by interacting with the situation without
embarrassment or shame. In addition, it is the family which bears the primary
responsibility for meeting the basic requirements of its disabled members.
This role depends on both the condition of the disabled person, and the social

1/ Jamil Tawfiq, "Categories of disabled persons, their psychological
and physical characteristics and the role of the disabled in society", Seminar
on the welfare of the disabled in the Arab Gulf States, pp. 52-55.
and economic position of his family. This is another factor which confirms the importance of increasing the family's awareness and of providing it with information. How well or badly the family plays its role has a direct effect on the situation of the disabled person and the possibilities for his participation in the life of the community. The third important point which draws attention to the role of the family is the nature of its relationship to the school. It is by means of this relationship that certain cases of disability (slowness to learn, deafness, speaking disabilities, impaired vision, etc.) may be detected at an early stage. The absence of such a relationship and a family's unawareness of its importance tends to exacerbate the disability. The fourth and final point which makes it particularly important to deal with the family is the role of the family in limiting disability. It is important to detect the disability at an early stage or to limit it, by beginning prevention before treatment. If we briefly review the reasons for disability in the Arab countries, we find that the social and cultural factors include some which are directly linked to the role of the family, such as the way in which the family brings up its children. Excessive pampering and the leaving of children in the care of foreign nursemaids, particularly in the Gulf region, have produced negative results with respect to the child's psychological and social growth. The country study on the United Arab Emirates revealed that the psychological and linguistic development of such children had been impaired, so buttressing one of the social mainstays of disability. One must also consider the effect on a disabled person of being deprived of love and care. At Kuwait's Institution for the Care of the Disabled, which in 1985 had 218 inmates, 41 proved to be subject to difficult social conditions (no family, or the separation of father from mother). It also turned out that 71 of the inmates had four or more older siblings; this indicates that they were relatively deprived of care and attention and also confirms the importance of the family's role in limiting disability. Reference was also made to the high rate of disability caused by household accidents occurring in the family context.

1/ Samirah Abu Zayd, Proposed programme for the upbringing of disabled children such as to limit disability, research paper submitted to the Conference on the Limitation of Disability, Association of Institutions for the Care of Special Categories and the Disabled, Arab Republic of Egypt (6-8 December 1988), pp. 4-5.


If the above factors, taken together, demonstrate the importance of the family's role in integrating the disabled person, either by limiting the disability or through interaction with the reality of such disability, the major question is how to deal with the family and to support its role in the social integration of the disabled person.

There are a number of means and instruments available to us, the basic objective of which is to provide information to the family and thus to ensure a greater degree of awareness in interaction with disability. Among the most important of these means is the role which may be played by institutions for the care of the disabled through contacts with their families. Despite the logic and the simplicity of this role, most such institutions do not maintain a continuous relationship with families of the disabled. There are many reasons, including a lack of awareness on the part of the disabled person's family and its unwillingness to maintain such contact, a lack of understanding on the part of those running the institution of the importance of contacts with the families of disabled persons or a high proportion of inmates in relation to the responsible technical staff. 1/ Among the positive steps being taken by the Association for the Disabled in Kuwait are the organization of meetings with the families of the disabled and its moves to encourage regular visits by child inmates to their families. It also supervises the preparation of meetings between doctors and specialists, on the one hand, and the family, on the other, at one of its clubs (the Kuwait Club for the Disabled). 2/

Another important means is to make use of the possibilities offered by preventive medicine, either through a general physician or through mother-, child- and family-care centres. These centres must be used to concentrate on the preventive aspect of disability, with a view to reducing such disability. This field continues to enjoy only limited recognition, despite the positive possibilities which it offers. Some pioneer experiments are being carried out in Oman and Saudi Arabia. In Oman, a programme has been arranged for the development of rural society, with care of the disabled included among its objectives. A young man and a young woman enjoying the trust of each village were selected to take part in a six-month training programme covering aspects of health, nutrition, prevention and education. These young people have indeed played a useful role in attending to programmes for the reduction of disability. In Saudi Arabia, the University of Abha designated some of its students to follow up the cases of resident families, with a view to the early detection of cases of disability. There are thus experiments here and there,

1/ This became clear in the course of an interview conducted by the author with some supervisors and officials of the special schools for intellectual development (which provide teaching to mentally retarded children), Ministry of Education, Egypt (15 November 1988).

2/ Kuwait Society for the Care of the Disabled, The Disabled, Kuwait Foundation for the Advancement of Science (Kuwait, 1985), p. 15.
but they need to become more common and to be directed towards a specific objective. Use may also be made of the media and publishing. Among positive initiatives in this area we may cite the organization by Egyptian television of a special programme for the families of disabled persons, to help them both to understand the condition and to meet the disabled person's requirements. The programme provides advice and guidelines designed to facilitate the family's interaction with its disabled children. A booklet was also printed in Egypt some years ago, under the title "Dialogue with a mother", in an attempt to make mothers aware of disability cases and how to detect and treat them: it deals specifically with mental disability. The production of more such informative booklets and their wider distribution would undoubtedly help to make the phenomenon rarer. However, it should be noted that daily newspapers and magazines pay scant attention to this important topic. In a review by this researcher of the material contained in one Egyptian daily paper (Al-Ahram) over the past nine years, it was observed that the provision of information to the family, and the heightening of society's awareness of disability, had been neglected. Most of the material related to the opening of institutions, the adoption of decisions or the formation of committees, etc., which are, basically, of concern to those who formulate decisions and social policies.

B. The disabled person and the community

The disabled person cannot be integrated into the community unless that community accepts him and considers him to be an active and productive member thereof. It is interesting to note society's attitudes towards the disabled, particularly in some rural communities of the Arab world. Some invent vague and fanciful explanations which endow the disabled person with a form of social status, designed to conceal his disability and treat it as a sort of hidden power. The real reason for such an attitude is their feeling of embarrassment and shame with respect to the disability and their desire to invest the disabled person with a more exalted extra sense in order to draw a veil over his real deficiency. While this is a negative attitude, it is better than other attitudes which neglect or deny any form of care to the disabled person, or than those which pity him or treat him as an incomplete person. Natural acceptance of disability can be achieved only through a

1/ Seminar organized by the Arab Centre for Research on Development and the Future.

2/ Including ways of making it easier for a blind person to move about the house, the arrangement of furniture in such a way as to facilitate his mobility, etc. The programme is broadcast on Channel Three.

3/ Uthman Faraj, "Dialogue with a mother".

4/ The review covered the file concerning the disabled in the archives of Al-Ahram (Cairo), from 1974 to 1988.
positive attitude on the part of society, meaning acceptance of the disabled individual as a person with abilities, feelings, desires, characteristics and potential like any other member of society, whom we can expect to perform in conformity with his experience and abilities and who must be helped to overcome his various impairments and shortcomings.

The endeavour to change community attitudes towards the disabled is of fundamental importance if social rehabilitation in the broad sense is to be successful and if the disabled person is to participate in the life of the community. Approaches to the community must therefore fulfil two objectives:

1. They must provide a measure of information concerning disability, the reasons for it and interaction with it, in a manner which enables the community to increase its awareness of the condition.

2. In conjunction with the first objective and, to some extent, as a result of it, they must cultivate positive value- and behaviour-related attitudes towards the disabled by preparing the community for interaction with the disabled before it opens its doors to them.

Before discussing the means and instruments to be used for the social integration of the disabled, it should be noted that certain initial requirements must be met. Foremost among these are welfare services in the areas of health, rehabilitation and education, as well as the facilitation of opportunities for access and mobility. With respect to the facilitation of access, it is important that modern buildings and homes - in particular - should conform to certain construction specifications which facilitate the mobility and access of disabled persons. This is an area which can subsequently be given more attention if approaches to the community are enhanced by fresh ideas designed to ensure the disabled person's integration and participation in society.

The education system ranks as one of the instruments which may enable the disabled person to be accepted in the community. An attitude which permits the disabled to participate with the non-disabled in education and training helps the disabled to adapt and encourages them to develop their abilities; the success of this approach has been proved by certain research projects.

Our encouragement of this attitude must, however, remain within the limits of

---


2/ Samirah Abu Zayd, Proposed programme for the upbringing of disabled children such as to limit disability, research paper submitted to the Conference on the Limitation of Disability, Association of Institutions for the Care of Special Categories and the Disabled, Arab Republic of Egypt (6-8 December 1988), p. 5.
the disabled person's condition and his ability to keep up with his peers; otherwise, its positive features will have the opposite of the intended effect. The education system is not simply an instrument which enables the disabled to be integrated into society but a means of correcting the values, attitudes and behaviour of the non-disabled towards the disabled. Some researchers\(^1\) refer to the need for a revision of books and study curricula, in order to rid them of some of the misrepresentation which reinforce negative attitudes towards the disabled. The education system is thus a means of adapting the disabled to society, of heightening awareness and of changing attitudes.

Sports and cultural activities are also means whereby the disabled person may be enabled to participate in the community. In recent years sports teams and associations for the disabled have been set up in many Arab countries. A special Arab sports meeting has also been arranged for them. If opportunities are to be offered to the disabled through public or private clubs,\(^2\) encouragement and support is required from the State, together with the provision of sufficient facilities\(^3\) for the practice of sports and the proper arrangement of activities. In the context of sports and recreational activities, we may mention the project adopted by some countries (Spain, for example) to encourage social integration of the disabled by including them, along with their friends, families and peers, in the organization of annual activities open to all.\(^4\) Such activities are not restricted to the practice of sports but extend to reading, debates, entertainment, study, etc. The essence of the idea is to involve all - disabled and non-disabled alike - in organizing such activities; and the idea could easily be applied in Arab countries.

The third important instrument for the achievement of social integration and acceptance of the disabled by the community is the media. The media can address the community as a whole and establish an awareness of disability and the disabled while at the same time directing special programmes towards the disabled. In most Arab countries, the media appear to deal with the second

---

1/ Seminar organized by the Arab Centre for Research on Development and the Future.

2/ Such as the Kuwait Club for the Disabled and the Alexandria Club for the Disabled.

3/ Reference is made to the activities of the Sports Association for the Disabled in Egypt. Instead of the State encouraging and patronizing the Association, there has been conflict for years between ministerial bodies (Social Affairs and the Supreme Sports Council) over the Association's affiliation.

4/ The Disabled, Kuwait Foundation for the Advancement of Science (Kuwait, 1985), p. 36.
task at the expense of the first, to the extent that they - especially since the commemoration of the International Year of Disabled Persons - mostly present special programmes for the disabled, without paying much attention to the planning of a considered information campaign to change the attitudes of public opinion as a whole towards the disabled.

A role may also be played by local institutions and local government authorities. If disability is more widespread in rural areas than in the cities,¹/ this implies a special responsibility for the various local authorities. Each authority can make its own effort both to establish programmes for the reduction of disability and to provide all possible means - through education, information and sports and cultural activities - to ensure the integration of the disabled into the life of the community.

Means of achieving the social integration of the disabled also include the role of representative organizations, which can ensure their greater participation in the process of formulating the social policies by which they are affected. In the contemporary world, these organizations reflect the wish of the disabled to attain a higher level of participation by giving expression to their views and problems and discussing their needs.

We also emphasize the role that can be played by non-governmental organizations - which reflect an effort by the people - to heighten awareness and provide information on the subject under discussion. I refer, for example, to the commendable effort of the "Arab Family in Sharjah" organization, which, through the endeavours of its members, strives to ensure that public opinion is supportive of and sympathetic with the cause.

These are then, inter alia, some of the major means which may enable some integration of the disabled into the life of the community and may help to establish a positive view of the disabled person as a productive partner. It is hoped that the preceding discussion of the relationship between the disabled person and society will have reflected the interdependence of different aspects of the issue and the number of social, cultural and economic variables involved, as well as the nature of the response, which must also be social, cultural and economic and must be directed at both the disabled person and society.

¹/ United Nations estimates indicates that 80 per cent of disabled persons live in scattered rural areas of developing countries. For example, a study conducted in Syria in 1975 reveals that cases of natural disability are more prevalent in rural than in urban areas, with 64 per cent occurring there, as opposed to only 34 per cent in the towns. For further details, see Seminar on the Social and Vocational Integration of the Disabled, League of Arab States (Tunis, 1980), p. 8.
IV. CONCLUSION: SUGGESTED POLICIES

The policies suggested for the integration of the disabled into society and the provision of added work opportunities for them depend on a combination of both governmental and non-governmental efforts. They also depend on co-ordinated and comprehensive policies, since increased effectiveness and enhanced performance rest on such co-ordination. We emphasize the importance of attracting political attention to this vital topic in order that it may be accorded priority on the agendas of decision-makers. The establishment of a supreme council comprising politicians capable of providing support to the cause and specialized experts will therefore ensure effectiveness in our Arab communities. Legislative means also occupy an important position, although they are not always borne out by reality. Such means are important: they indicate how far the cause of the disabled has developed in society and pave the way for the acceptance of change.

Among policies whose value may be affirmed are the following:

1. Education policy: By virtue of being directed towards the whole of society, this policy may bring about the desired awareness in society of disability issues. It can play its part in changing society's attitudes to the disabled and define who is disabled, what his problems are and how one may properly interact with him. Education policy also increases integration of the disabled into society, particularly when the nature of the disability permits. The need, then, is to remove from our curricula and courses of study any misrepresentations which obstruct integration of the disabled into our social, economic and cultural life, meaning a deeper and more scientific approach in education policy's response to disability issues.

2. Information policy: Policy in this area has a major responsibility for correcting society's perception of and attitudes to the disabled and for providing special services to them. To perform the first task, information policy has to be aware of and to draw attention to the scale of the problem, its dimensions and negative effects on the dynamics of society. In doing so, it must not rely on arousing feelings of compassion or pity but on demonstrating the remaining creative abilities of the disabled person and the ways in which we may give him scope to apply them. With respect to the second task, information policy must give expression to the disabled's right to information; here, there are pioneer experiments in the industrialized States which should be taken into account. In cases of sensory disability (deafness and dumbness), some news bulletins are designed to cope with this group: often a portion of the television screen is used to address the deaf and dumb at the same time that a bulletin is broadcast to the general public. The most important concept demonstrated here is that all citizens have an equal right to information and that there is no difference between the non-disabled and the disabled, providing continuous confirmation of this axiomatic principle.

3. Scientific policy and technology: Any attempt to change and enhance the position of the disabled must adopt a basically scientific approach. The simplest way to start would be to compile comprehensive statistics and
scientific data on the disabled in Arab society, denoting categories and levels (partial or total) of disability, their distribution (urban/rural areas; male/female) and other details which may be of use in policy-making. It is also important, in the context of such scientific policy, to ensure that field research is conducted for the purpose of following up disability cases, the extent to which they are integrated into society, the work opportunities made available to them and the problems by which they are confronted. Scientific policy is linked to technological policy, with the aim of developing special technology for the disabled and encouraging its national and popular dimensions through national research centres, which can make innovations in the production of appropriate low-cost technology. We emphasize the national dimension of such technological policy not simply in terms of national efforts but in terms of the establishment of agreed national criteria and standards, the fulfilment of requirements (maintenance and spare parts), the familiarization of disabled persons with such appliances and instruction in their use.

4. Mobilization of civilian institutions: Trade unions, associations and federations should be prompted to address the problem and to participate in its solution, not only through the provision of funds but also by means of raising awareness and making efforts to integrate the disabled into work and into the life of the community. Approaches to employers and trade unions will undoubtedly contribute to progress in this direction.

In conclusion, the effectiveness of the suggested policies depends on the extent to which they are coordinated and comprehensive: these two criteria can determine whether the response to disability issues is a success or a failure.
XVII. ACCESS FOR THE DISABLED IN THE URBAN ENVIRONMENT

by

Riadh R. Tappuni
CONTENTS

SUMMARY ................................................................. 235

INTRODUCTION ......................................................... 236

A NOTE ON DISABILITY .................................................. 236

MAJOR SPECIAL ACCESS GROUPS ..................................... 237

1. Wheelchair users ............................................... 237
2. Visually impaired persons ....................................... 238
3. Hearing impairments ............................................. 239
4. The mentally retarded ........................................... 239

TRANSPORTATION AND MOVEMENT IN THE URBAN ENVIRONMENT ............................................. 239

BUILDING REGULATIONS FOR ACCESSIBILITY .................................................. 242

REMEDIES FOR EXISTING BUILDINGS ........................................... 245

CONFLICTING DESIGN SOLUTIONS .......................................... 245

DEMONSTRATION PROJECTS ON AN URBAN SCALE ........................................... 245

- The Netherlands, the city of Gouda ...................................... 245
- Denmark, the city of Fredericia ...................................... 247
- Iraq, a national strategy ............................................ 249

RECOMMENDATIONS ..................................................... 250

Annex. A listing of general planning and design requirements for accessibility in the urban environment ........................................... 251

LIST OF TABLES

1. Suggested solutions to obstacles faced by the disabled in the urban environment ........................................... 241

2. Provisions implemented in Gouda for the different target groups ........................................... 246
<table>
<thead>
<tr>
<th>LIST OF FIGURES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The three spheres of a person's life</td>
<td>236</td>
</tr>
<tr>
<td>2. The three areas of concern of access in the urban</td>
<td>237</td>
</tr>
<tr>
<td>environment</td>
<td></td>
</tr>
<tr>
<td>3. Low deck public bus</td>
<td>243</td>
</tr>
<tr>
<td>4. Pavement raised at bus stop to level with deck of</td>
<td>243</td>
</tr>
<tr>
<td>bus</td>
<td></td>
</tr>
<tr>
<td>5. Wheelchair lift from ground to airplane level</td>
<td>244</td>
</tr>
<tr>
<td>6. Plan of the city of Fredericia showing the special</td>
<td>248</td>
</tr>
<tr>
<td>service bus route of the obstacle-free pedestrian</td>
<td></td>
</tr>
<tr>
<td>route</td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>253</td>
</tr>
</tbody>
</table>
Summary


A mental, social or physical disability in a person can have an effect on his or her entire life and can affect the attitude of the community towards the person. Access for the disabled to the urban environment can be divided into three areas of concern relating to the environment outside the building, building entry, and inside the building. Major disability groups have differing access requirements. Wheelchair users require even pavements, level entry to transport, ample circulation space, and positioning of equipment, and switches and knobs within their hand reach. Visually impaired persons need unobstructed pedestrian routes, clear, well-placed signs, acoustic information to support visually displayed information, and even surfaces with tactile direction-signs. When persons with hearing impairments are involved, the need arises for pedestrian/vehicular segregation of traffic, use of visible signs, telesymbol amplifier systems in gathering places, and appropriate lighting. For the mentally retarded, pavements should be evenly laid and guiding instructions should be easily perceptible. In order to facilitate easy public movement for the disabled, there should be provision of transportation aids, especially detailed urban elements like kerbs and pedestrian crossings, and special training and instruction for both the disabled and community on the needs of the disabled.

The application of accessibility standards should be guaranteed through building regulations. A good example of this has been the co-ordinated effort of the Nordic countries. A special effort should be made to remedy existing buildings that do not provide access for the disabled. The United Nations effort concerning its buildings, documents and information sets a good example in this respect. Individual countries have carried out independent efforts in this field. The city of Gouda in the Netherlands and the city of Fredericia in Denmark have served as demonstration projects on an urban scale. Iraq has adopted a national strategy in providing appropriate housing for the disabled, through policies that are socially acceptable. The paper ends with a number of recommendations for further effort in the field of accessibility for the disabled in the urban environment.
INTRODUCTION

The Declaration on the Rights of Disabled Persons was adopted by the United Nations General Assembly in its resolution 3447 (XXX) of 9 December 1975. The Declaration contained 13 national/international guidelines for further action on the rights of disabled persons. A "disabled person" is defined as any person unable to ensure by himself or herself, wholly or partly, the necessities of a normal individual and/or social life, as a result of a deficiency, either congenital or not, in his or her mental capacities.


![Diagram: Three overlapping circles labeled Mental, Social, and Physical.]

Figure 1. The three spheres of a person's life

A NOTE ON DISABILITY

A person's life is defined by three overlapping spheres: mental, physical and social. A handicap in any of these spheres will have negative consequences for the others. This fact is clearly evident when an initially able-bodied person becomes physically impaired. His or her impairment(s) may lead to disabilities in dealing with the urban environment. Moreover, it is likely that the community will experience a change of attitude towards the person. Such changes are likely to lead to other, non-physical handicaps (e.g. social handicaps). It is when an environment demands a performance capacity which some people lack that a handicap is created. A handicapped person is one who has difficulty in relating positively to his or her environment. The impairment can be congenital or caused by illness or injury. It may restrict the physical, mental or social capacity for managing routines of one's daily life.
A planner or architect performs his function by designing an environment to meet the needs and requirements of a group of individuals. The norms and standards that are usually followed by the architect are those of able-bodied persons. Such norms automatically limit access to the environment by many categories of people. It is often the deficiencies in the environment which create the special needs, and not the characteristics pertaining to this group of individuals.

Every individual can be considered as functionally disabled at sometime in his or her life. Some individuals are functionally disabled throughout their whole lives. An approach that presents a basic solution to the problem would be to adopt planning and design norms and standards that accommodate all individuals, including the disabled. Needs of the disabled should therefore form part of the needs of the whole community. In order to formulate a clearer picture, access in the urban environment can be divided into three areas of concern, expressing the various stages of the problem (1) (figure 2), and disability groups can be defined in relation to their access needs (2).

![Diagram](image)

Figure 2. The three areas of concern of access in the urban environment

**MAJOR SPECIAL ACCESS GROUPS**

1. **Wheelchair users**

   It is possible to describe the situation of a physically disabled man in a wheelchair as follows:

   - First, it was his original impairment which forced him to use the wheelchair;

   - Secondly, the fact that he must operate at a (physically) lower level than normal (standing) people is both a physical and psychological constraint;

   - Thirdly, because a wheelchair does not permit economy of movement, its owner needs a great deal more space than an ambulant person.
In search of a better understanding of this problem, let us try to imagine for the sake of this study how would our lives be if we were all wheelchair users. Since the main obstacles to a wheelchair user are changes of level, and a wheelchair user can manage a maximum step of 30 mm on his own, and since pavements and surfaces that are uneven would be difficult to manage, all our floors would be on one level, free of steps. Ceilings need not be as high as we normally make them, but may be half the usual height. Doors would be wider. Kitchens and bathroom equipment would have different designs and dimensions. Short distances are preferred since the use of the manual self-drive of wheelchairs can be tiring to the hands. Transport vehicles have to allow for easy access and use by wheelchair users. A wheelchair user can reach from 0.4 to 1.2 m above floor level and 0.4 m from corners; thus all shelves, switches, etc. have to be within this range.

In conclusion, one can state that the following are the most important points to be considered in the urban environment:

(a) Even roads and surfaces with no change of level;
(b) Entrance to means of transport with no steps;
(c) The provision of sufficient space in circulation areas;
(d) The positioning of equipment, switches, knobs, etc. within hand reach of a wheelchair user.

2. Visually impaired persons

Visual impairments can be of various degrees, and failing sight is common among older people. Blind people usually overcome their loss by the use of other senses. In the street they find orientation through listening to various noises. They feel changes of pavement surfaces with their feet, they feel texture and read signs the text of which can be felt with their hands. They use a cane to make sure that their path is clear and identify materials by tapping them with a cane. They use their sense of smell to identify plants or shops and places. Visually impaired persons use sticks, guide dogs or electronic aids (such as signal lamps and signs sending out acoustic information).

Persons with partially impaired vision often need plenty of light. The use of contrasts should be used in identifying things which they need to find. Marking and identification of glass entrance doors are important. Similarly edges of steps should be well marked. In conclusion, the following can be considered the most important points for consideration in design of the urban environment:

(a) Pedestrian areas should be clear with no unexpected obstructions;
(b) Signs should be clearly displayed with sufficient lighting and at an appropriate height;
(c) Visual information like signs or texts should be supported by acoustic information;
(d) Surfaces should be even with tactile direction-signs.
3. Hearing impairments

In comparison with the blind, people with hearing impairments can be considered underprivileged. This is due to the fact that the handicap is not visible to other people and therefore can frequently be overlooked. Hard-of-hearing persons can use lip-reading to overcome some of the problem, provided the mouth of the opposite speaker is clearly visible and well lit.

In conclusion the following are the most important points that should be considered in design of the urban environment:

(a) Segregation of traffic (vehicular from pedestrian);
(b) Use of acoustic and visible signs;
(c) The installation of tele-loop amplifier systems in public gathering places;
(d) Use of appropriate lighting.

4. The mentally retarded

This group is difficult to define because it includes a varied number of subgroups according to the degree of mental retardation. However, the problems the mentally retarded encounter in their movement in the urban environment are mainly due to their limited cognitive abilities in comprehending or interpreting information. Uneven pavements can cause bad falls. Some of these people cannot distinguish colours. Since this group is of a widely varying nature, it is difficult to formulate recommendations that can benefit the whole group. Nevertheless, as a minimum, the following should be provided:

(a) Evenly laid pavements (roads, paths, etc);
(b) Guiding directional instructions that are easily perceptible with short texts, simple symbols, etc.

TRANSPORTATION AND MOVEMENT IN THE URBAN ENVIRONMENT

In order to achieve an active participation of the disabled in the daily life of the community, special attention has to be given to the following points:

1. Transportation alternatives and technical aids that fulfil the needs of the disabled have to be provided. These could come in some form of motorized transport, or as aids such as wheelchairs, tricycles, or even prostheses or simple canes.

2. Maximum safety and convenience for the disabled must be sought, taking into account the design and planning guidelines within the following elements of the physical environment:
- Pavements
- Kerbs
- Pedestrian crossings
- Traffic signals
- Paths
- Pedestrian streets

3. Training and instruction would enable and encourage the disabled to use the transportation facilities provided for them. Community information at schools and through the media on the special needs of the disabled is also important.

Table 1 below gives a more detailed view of the obstacles that could be faced by a disabled person in the urban environment, with suggested solutions:
<table>
<thead>
<tr>
<th>Problem area</th>
<th>Examples of solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossing a street with heavy traffic.</td>
<td>Pedestrian crossings with light and sound signals.</td>
</tr>
<tr>
<td>Difficulties for the visually impaired in orienting themselves at pedestrian crossings.</td>
<td>Establishment of direction signs, installation of light and sound signals.</td>
</tr>
<tr>
<td>High kerbs is a problem for wheelchair users.</td>
<td>A lower kerb height at the natural crossings and a levelling of 0 of kerbs at pedestrian crossings.</td>
</tr>
<tr>
<td>Missing kerbs is a problem for the visually impaired.</td>
<td>Low kerbs (3 cm) will facilitate orientation.</td>
</tr>
<tr>
<td>Overhanging shrubbery that hampers a clear view and protrudes over the pavement.</td>
<td>Directives for cutting (pruning). Protruding branches should be at least 2.50 m above ground level.</td>
</tr>
<tr>
<td>Inconsistent location of signs, letter boxes, posts, and advertisement display pillars.</td>
<td>Examination of already existing signs, etc. and a consistent location away from walking areas.</td>
</tr>
<tr>
<td>Problems of mounting buses and trains.</td>
<td>Stops and terminals should be designed out of consideration for handicapped people with low mounting height and installation of handrails.</td>
</tr>
<tr>
<td>Difficulties for the visually impaired to know which bus is coming.</td>
<td>Number and destination should be indicated with typography of optimal readability and with an optimal lighting. Amplifiers should be placed on the outside of the vehicle to announce the bus in question. The bus should stop with its entrance step exactly opposite the bus stop.</td>
</tr>
<tr>
<td>Difficulties for the visually impaired to know when they arrive at the right stop.</td>
<td>Announcement of the next stop should take place inside the bus.</td>
</tr>
<tr>
<td>Difficulties for the mobility impaired to mount the bus and get seated before the bus starts.</td>
<td>The timetable of the bus should be sufficiently elastic to allow the driver to make a proper stop and to start only when everybody is seated.</td>
</tr>
<tr>
<td>Reserved parking spaces are often occupied by the non-handicapped.</td>
<td>Improved information for drivers, and a consistent practice of imposing fines in the case of negligence: no parking without the special sign affixed to the windshield.</td>
</tr>
</tbody>
</table>
A fresh look at public transportation is needed if it is to be made equally available for everybody, including the disabled. The following are notes on some recent developments in this respect with regard to the various forms of public transport:

- A new form of public bus is being developed in Denmark. It is designed with the concept of amassing the machinery in a rear compartment of the bus, thus making it possible for the bus floor to become low enough to level with the side kerb, making it possible to eliminate steps (see figure 3). Another advanced concept is the "kneeling" bus. This design allows for the rear end of the bus to drop close to the pavement when the bus stops. Other kinds of busses have been equipped with lifts for wheelchairs. Some planning details can be used for overcoming problems of transfers between platform and vehicle (3) (figure 4).

- In addition to reserving spaces for the disabled on trains, a practice which is generally followed in the industrialized countries, Denmark has constructed trains with a middle compartment that is easily accessible to the disabled.

- A recently developed lift transports persons in wheelchairs from a level 15 cm above ground to airplane level (4) (figure 5). A specially designed transit in-flight wheelchair that can be used along the cabin aisle is now provided by some airlines. This makes it possible for a wheelchair user to use the cabin lavatory which, owing to the compact design of the lavatory, may require help from a companion (5).

**BUILDING REGULATIONS FOR ACCESSIBILITY**

General planning and design requirements for accessibility of the handicapped have been listed in the annex to this study. In order to ensure the application of accessibility standards, they should be enforced through regulations. Since access of the disabled to the urban environment is best handled as part of the total planning and building design process, standards thereon should be integrated into the building regulations. Working towards this end, and providing a good example of the international effort in this field, the Nordic countries set up a committee that devised guidelines for Nordic building regulations. The committee's report, "Accessibility of buildings to handicapped persons", was issued in 1974. Individual Nordic countries agreed in principle to include the guidelines in future modifications of their building regulations.
Figure 3. Low deck public bus

Figure 4. Pavement raised at bus stop to level with deck of bus
Figure 5. Wheelchair lift from ground to airplane level
REMEDIES FOR EXISTING BUILDINGS

In response to the proclamation of the International Year of Disabled Persons in 1981, the United Nations Centre for Social Development and Humanitarian Affairs in Vienna produced a three-part report on access to United Nations buildings, documents and information for disabled persons (6, 7, 8). The first part dealt with mobility-impaired persons, the second with persons with visual impairments, and the third with persons with hearing impairments. These reports are a good example of how to ensure that disabled persons can use existing buildings originally designed for the non-disabled. Considering that the great majority of the existing urban fabric was constructed with little or no consideration for the disabled, such an approach is of particular importance in planning new developments.

CONFLICTING DESIGN SOLUTIONS

Owing to the fact that the term "disabled" can be applied to individuals with a wide range of handicaps, planning and design solutions may conflict. For example, the wheelchair users' need for pavements without kerbstones conflicts with the need of the blind person using a cane for a well-defined pavement. Such problems have to be recognized and identified through the design process in order to avoid or eliminate them.

DEMONSTRATION PROJECTS ON AN URBAN SCALE

The issue of access for the disabled can be effectively handled at the national level. However, a good solution to the issue is a universal solution, i.e. one that tackles the many aspects of disabled persons' lives. Realizing this, some countries have resorted to the idea of creating a model urban environment by modifying an existing settlement or planning and constructing a new one. The following are examples of this approach:

The Netherlands

The city of Gouda (9): With the intention of demonstrating to local councils in the Netherlands methods of limiting the obstacles in the streets and increasing safe mobility, the city of Gouda produced a report in 1982 entitled "Route Plan for People with a Handicap". The plan was supported by the Department of Transport and Public Works, and implementation was phased out to three stages ranging between a closely meshed network in the inner city and a less comprehensive one outside the city centre. A number of experimental provisions were also to be tested by this project (see table 2).
<table>
<thead>
<tr>
<th>Provision</th>
<th>The Blind</th>
<th>The Partially Sighted</th>
<th>Wheelchair Users</th>
<th>People with Limited Walking Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of obstacle free route</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of resting places</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of guiding lines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marking obstacles and crossing points</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of adapted parking places</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of dropped kerbs and adapted footways at crossing points</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of dropped kerbs on both footways at traffic islands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shortening the length of crossing points on roadways</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of easier access to push-button units of traffic lights</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of sound signal (bleeper) to indicate red/green at traffic lights</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension of green phase at traffic lights</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaption of ramps (shallower gradient)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaption of shape of handrails on bridges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
By a systematic information plan, the inhabitants of Gouda were informed of the proposal and asked to participate by making suggestions. To this end, the local media were utilized and public gatherings were held. To start with, the most frequently used routes in the city were screened and adapted to meet the immediate needs of handicapped people, with the possibility of extending the facilities to complete accessibility for all handicaps. The usefulness of the provisions was evaluated and a study was made of the pattern of movement of the target groups and of the reactions of the general public in the city. After setting up the route plan, the authorities of the city extended an open invitation for people to see how a road network could be provided that is "user-friendly" for all, including those with a mobility handicap.

**Denmark**

The city of Fredericia (10): As a result of a national competition, Fredericia (population 46,000) was chosen out of 16 cities for a demonstration project. A steering committee was set up to co-ordinate the work of five main groups, each including a representative of the target group.

```
Steering Committee

| Private and public services | Obstacle-free pedestrian routes | Bus services | Railway stations | Information and training |
```

The project included two major features, an obstacle-free pedestrian route and a special service bus route suitable for use by all categories of people, e.g. the handicapped, the elderly, children and mothers with prams (figure 6). The project is due for completion in 1991 and an evaluation process carried out by disabled persons will follow.
Figure 6. Plan of the city of Fredericia showing the special service bus route of the obstacle-free pedestrian route
Iraq

A national strategy: In recent years Iraq has given particular attention to the problems faced by the disabled, whether in rehabilitation or housing. In this respect, the following three major policies are being adopted (11):

1. The construction of housing complexes that are especially suited for the disabled. Two such schemes have been implemented, each with a total of 100 one-storey houses. Of these houses, 80 were designed for wheelchair users and 20 for severely handicapped persons who depend heavily on help from cohabiting relatives. Houses in the latter category have been equipped with a remote control system. The houses are of three sizes with one, two or three bedrooms. All the severely handicapped were allocated two- or three-bedroom houses in order to encourage a larger number of their families to live with them. An additional 50 ordinary houses were allocated for paid volunteers who provide additional help for the disabled. Special consideration has been given to the urban design of the complex. Communal facilities such as a health centre, cafeteria and social club have also been provided. Special buses provide public transport. These complexes have not been used yet, and post-occupancy evaluation involving the disabled themselves would be extremely useful.

2. The second policy covers the adaptation of the existing housing stock. The Commission for the Disabled, in collaboration with the Ministry of Local Government and Amanat Baghdad (Mayors of Baghdad), is carrying out a scheme by which a sum of approximately 3,000 Iraqi Dinars is allocated to each case. Upon the request of a disabled person, a committee of specialists visits his or her house, provides technical advice and estimates the cost of the needed alterations. These usually involve modifying entrances, bathrooms and doors. The estimated sum is granted to the disabled person. With the help of his or her family and with technical advice from the committee, adaptation of the house is carried out.

3. A third policy is being carried out by an Inter-Ministerial committee. It involves the allocation of a plot of land and the provision of construction costs to the disabled. Government agencies provide the necessary materials and equipment. The disabled person, with the help of his or her family and relatives, is expected to have the house constructed to meet the design requirements. The costs are provided by the State.
RECOMMENDATIONS

1. Strategies should be devised to educate the public on the rights and needs and methods of providing help to the disabled.

2. Research should be encouraged to define design and planning requirements that would provide access for everybody, including the disabled.

3. Further research is needed to develop new methods of transport that cater for everybody, including the disabled.

4. Designers should pay special attention to the detailed design of routes providing safety and convenience for the disabled.

5. Planning and building regulations should be formulated to ensure accessibility and safety for the disabled along with the rest of the community.

6. Intergovernmental co-operation should be encouraged in devising standards and developing regulations concerning provisions for the disabled in the urban environment.

7. Special attention should be given to remedies for existing buildings that have originally been designed according to non-disabled standards, making them usable by the disabled.

8. International co-operation in the field of the disabled should be encouraged, and exchange of information should be sought to benefit from experience.
Annex

A LISTING OF GENERAL PLANNING AND DESIGN REQUIREMENTS FOR ACCESSIBILITY IN THE URBAN ENVIRONMENT

1. Parking and Vehicular Approach

   (a) Reserved disabled parking spaces
       - Close to main entrance
       - Level approach
       - Adequate size
       - Preferably covered and well lit

   (b) Temporary parking space at building entrance for vehicles with disabled passengers.

   (c) Management measures to ensure availability of above-mentioned provisions and prevention of their use by the non-disabled.

2. Pedestrian paths

   (a) Width governed by wheelchair standards
   (b) Kerbs with ramps ≤ 1:10
   (c) Ramps are preferably textured
   (d) Location of street furniture to avoid obstructing path of disabled
   (e) Minimal variations in level
   (f) Identification of level variation by
       - Lighting
       - Colour contrast
       - Textures contrast

3. Approach to entrance

   (a) Level approach recommended
   (b) Ramps ≤ 1:12 with top and bottom landings
   (c) Level landings at 10 m intervals for long ramps
   (d) Handrail for ramps ≥ 1:15
   (e) Additional stepped approach should adhere to the following:
       - Maximum rise between landings 1.2 m
       - Height of riser ≤ 150 mm
       - Depth of tread ≥ 280 mm
       - Height of handrail = 850 mm

4. Entrance to buildings

   (a) Easily distinguishable
   (b) Preferably sheltered from sun or rain
   (c) Width of door ≥ 1 m
   (d) Threshold ≤ 25 mm
5. Circulation in buildings
   (a) Width ≥ 1.2 m
   (b) Good lighting
   (c) Slip-resistant surface
   (d) Colour contrast for steps edges
   (e) Floor cover variations to indicate directional changes.

6. Internal doors
   (a) Clear width ≥ 900 mm

7. Signs
   (a) Large contrasting characters
   (b) Good lighting
   (c) Use of internationally recognized symbols
   (d) Place in key locations
   (e) Use of simple text
   (f) Signs particularly meant for the disabled should be identified by the generally accepted access symbol.

8. Toilets
   (a) Internal dimensions ≥ 2x1.5 m
   (b) W.C. height = 450 mm
   (c) Vanity mirror height from floor = 900 mm
   (d) Provision of hinged support rails and vertical grab rails

9. Lifts
   (a) Front landing depth ≥ 1.5 m
   (b) Opening width of door ≥ 0.8 m
   (c) Internal measurements ≥ 1.4x1.1 m width
   (d) Acoustic signals recommended
   (e) Embossed digits recommended
   (f) Height of lift controls between 1.0 and 1.4 m from floor

10. Internal staircases
    (a) Maximum rise between landings = 1.8 m
    (b) Step rise ≤ 170 mm
    (c) Handrails should extend by 300 mm beyond last step

11. Auditoriums
    (a) Provision of wheelchair user spaces ≥ 1/100 of public seats and not less than 6
    (b) Each space ≥ 1.4x0.9 m
    (c) Spaces are preferably dispersed to allow wheelchair users to be close to their companions

12. Short-term alternative remedies for existing buildings
    (a) Short rise lift or portable ramp at entrance
    (b) Stair lift
    (c) A well-suited bell to call for assistance
    (d) Training for staff in assistance methods for the disabled
References


4. EKKO AERO Ground Support Equipment, the EKKO AERO Self-propelled Cabin Lift Camel, DK7182 Bredsten.


7. Ibid., Documents and Information for Persons with Sensorial Disabilities (Hearing-Impaired Persons), Vienna, 1996.

8. Ibid., Documents and Information for Persons with Sensorial Disabilities (Persons with Impaired Vision), Vienna, 1986.


XVIII. WOMEN AND DISABILITY IN THE ESCWA REGION

by

Nazek Nosseir
The American University in Cairo
Egypt
CONTENTS

Introduction ............................................................................................................. 256

Chapter

I. CAUSES OF DISABILITY .................................................................................. 257
   A. Causes related to hereditary factors ............................................................. 257
   B. Causes related to environmental factors ...................................................... 258

II. SOCIETY AND DISABLED WOMEN .............................................................. 261

III. ROLE OF WOMEN ...................................................................................... 262

IV. POLICY EXPERIENCES .................................................................................. 264
   A. Bahrain ......................................................................................................... 264
   B. Egypt ............................................................................................................ 268

V. CONCLUSION AND RECOMMENDATIONS ............................................... 272

Annex. List of resource people ........................................................................... 275

LIST OF TABLES

1. Percentage distribution of the blind according to the Egyptian census, 1976 .................................................... 269

2. Institutions and centres serving the disabled, by type of disability, 1987 .......................................................... 272

References ........................................................................................................... 276
It may, or may not, be coincidental that the United Nations Decade for Women (1976-1985) overlaps, at least partly, with the United Nations Decade of Disabled persons (1983-1992). One thing that may link these two subgroups - women and disabled persons - and one that distinguishes them from the rest of the population, is that they deserve special attention from both national and international bodies. This is clearly indicated in the slogans adopted by both decades - "Equality, development and peace" for the former and "Full participation and equality" for the latter. Hence, "equality" seems to be one of the objectives targeted by both decades: equality between women and men, and equality between disabled and able persons. It may not be quite analogous that men are the able persons and women, the disabled; however, in many respects, it is metaphorical.

Accurate information about the number of disabled persons in the world today is definitely lacking. However, there seems to be consensus in the literature about disability that 10 persons out of every 100 are disabled by sensory, physical or mental impairment. Also, there seems to be consensus that in developing countries, eight of those 10 disabled persons live in rural or isolated areas where services are scarce or totally lacking.

To apply these conservative estimates to countries in the ESCWA region, where the total population has been estimated to exceed 118 million in 1989, the number of the disabled therefore, would amount close to 12 million persons. Assuming a sex ratio of unity, there would be about 6 million disabled females in the region. To continue with this conservative demographic analysis, it would be expected that of these 6 million about 4.8 million disabled females live in isolated, rural and impoverished areas, a situation which would deny them assistance, support and service. This situation is likely to render those females partially, if not totally, handicapped.

In many third world countries, including countries in this region, females suffer discrimination in various spheres of life: education, employment, nutrition and entertainment. In these same countries, disabled persons suffer discrimination, too. They are a source of shame for their families so they are kept where they cannot be seen. Hence, it follows that disabled females suffer dual discrimination: because of their gender and because of their impairment.

The objectives of this paper are: to point out the main causes of disability, particularly those affecting females; to highlight some of the social problems facing disabled women; and to discuss the role of women in the prevention, early detection, treatment and rehabilitation of disability. Finally, some policy experience from selected countries in the region will be presented and a number of recommendations will be made.
I. CAUSES OF DISABILITY

After estimating the expected magnitude of disabled females in the ESCWA region, this section will deal with the major causes that contribute to the occurrence of impairments which generate disabilities. In this discussion, the following definitions proposed by the World Health Organization have been adopted (13):

Impairment: any loss or abnormality of psychological, physiological, or anatomical structure or function.

Disability: any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

Handicap: a disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the fulfilment of a role that is normal, depending on age, sex, social and cultural factors, for that individual.

It becomes evident that the range of disabilities is varied and that the causes are quite diversified. Theoretically speaking, no one is immune from becoming disabled. Impairments could occur before birth, affecting the unborn child, during birth, or any time after birth. However, it has been observed that certain categories of people are more exposed to the risk of disability than others. The risk is highest among females born or living in poor families.

In this section, the causes of disability are categorized in two groups:

A. Causes related to hereditary factors

The most common cause of disability that is pointed out in countries in the region is owing to the prevalence of endogamous marriage. Cousin marriage is quite prevalent and also most preferred. A variety of cultural and social factors contribute to the widespread incidence of this marriage arrangement. It occurs in all Arab countries and among all social classes.

In a personal communication, a specialist in human genetics indicated that a large number of impairments that could result in all types of disabilities - sensory, physical and mental - do have genetic causes. Individuals may look perfectly normal, but could be carriers of certain genetic disorders.

When these individuals get married to relatives, particularly first cousins, these genetic disorders are most likely to impair some of their offspring.
In a study conducted by the National Research Centre in Egypt, 100 mentally retarded cases were examined clinically and genetically to indicate the causes of mental retardation. The findings showed genetic factors to be the cause of mental retardation in 90 per cent of the cases. In the majority of those cases, retardation was caused by metabolic disorders which resulted from intermarriage among relatives - 50 per cent of which were cousin marriages (8).

8. Causes related to environmental factors

The list of environmental or non-hereditary factors that may cause disability is too long to be covered in any one discussion. Therefore, only those factors that are prevalent in countries of the ESCWA region will be discussed. Some of these factors are interrelated, and some may even have a causal relationship with each other. However, all of them are potential causes of disability.

1. High illiteracy rates

Illiteracy has been found to be a handicap in many social situations. It is both one of the determinants and one of the consequences of underdevelopment. Studies have shown the positive relationship between women's illiteracy and infant and child morbidity and mortality. Also, women's education has been singled out as the variable with the highest predictive power over the level of fertility (a factor which will be discussed later).

Illiteracy rates are quite high in the ESCWA region, particularly among females. With the exception of Lebanon, where illiteracy rates are low, the rates in the other countries among national females 15 years and over range from a low of 40 per cent to 97 per cent (14). Clearly these illiteracy rates are even higher among disabled females. Illiteracy and disability have a reciprocal relationship in the sense that illiterate females are ignorant of the ways and means that help to improve their status economically, socially and psychologically - a situation which may lead to disability. In the meantime, disabled females quite often end up illiterate and are thus restricted in participating in rehabilitation and training programmes.

2. Poverty

Poverty is another factor which is manifested in different ways that are related to disability. It is a factor that affects the preponderance of disability and is intensified among the disabled.

1/ Professor Samia A. Temtamy, Head, Department of Human Genetics, National Research Centre, Cairo, Egypt.
Poverty is manifested in malnutrition — a situation which is more prevalent among females. Malnutrition is considered to be one of the main causes of disability. Experts anticipate that the nutrition status will deteriorate with the increase in population. In the world today, 100 million persons are disabled as a result of malnutrition. The majority of those are pregnant women and female children (15). Malnutrition among pregnant women affects the unborn child and may cause mental retardation.

In a personal communication, a nutrition specialist\(^1\) indicated that nutritional inadequacy among pregnant females quite often results in low-birth-weight children. Such children usually suffer from mental retardation, as well as physical growth retardation. Females among these children usually suffer the most and their physical retardation continues through adolescence and adulthood. If they become pregnant, the result would be low-birth-weight children, and the cycle continues.

The nutrition specialist also noted that females quite often suffer from iron deficiency, which results in anemia. This iron deficiency leaves the women lacking in vigor and vitality and also affects breast-feeding. In addition, this deficiency affects work performance, which includes the care of children. This would expose them to higher morbidity and to the higher risk of house accidents.

Another manifestation of malnutrition caused by poverty is vitamin A deficiency. It is estimated that each year 250,000 children lose their sight because of this nutritional deficiency (15).

Poverty is often associated with unsanitary living conditions, the unavailability of safe drinking water and lack of proper means of garbage disposal. All of these factors contribute to the widespread incidence of communicable diseases, which leads to poor health or impairment. At present, it is estimated that 56 million persons suffer from impairments that can be attributed to communicable diseases (15).

3. High fertility

This factor is quite often associated with early and late childbearing. It is already well established that children born to teen-age mothers, as well as those born to women in their late childbearing years, usually suffer from various impairments including low birth weight and mental and physical growth retardation. Short birth intervals are also associated with high fertility. This is likely to impair the health of both the mother and child. Successive pregnancies at short intervals are both a cause and consequence of the early termination of breast-feeding. Substituting breast-feeding with outside food

\(^1\) Wafaa Moussa, M.D., Ph. D., Head, Department of Field Studies and Research, Nutrition Institute, Cairo, Egypt.
could be hazardous to the child's health. Another concurrent element is the absence of adequate pre-natal, peri-natal and post-natal care. Such care is fundamental to the early detection of correctable disorders. It is also worth noting that high fertility wears away the mother's energy; this affects the care she gives to her children and makes them prone to accidents.

4. Accidents

A large number of disabilities result from accidents on the road, at work, and even in the house. It is estimated that 75 million persons have become disabled as a result of such accidents (15). The spread of technologies when unaccompanied by adequate preparation could result in serious accidents. In many developing countries, roads are not built to accommodate large numbers of vehicles. The increasing size of the population puts pressure on such vehicles, with no regard being paid to safety measures, thus leading to accidents. Work accidents are also increasing with the increase in the use of machinery. Inadequate training, along with illiteracy, poor health and over-exhaustion may lead to high accident rates. Certain industries such as carpet-making and textiles are more attractive to females. Such industries are also hazardous to the eyesight and may cause permanent impairments. Even at home, accidents are likely to occur to children when they are not closely observed. With more women going out to work and the unavailability of enough day-care centres for the young, they could be left unattended and thus exposed to house accidents. Such accidents also occur when the mother is at home but over-exhausted and depleted of energy.

5. Old age

The average life expectancy is increasing all over the world, including developing countries. The probability of disability increases with the increase in age. Since females are expected to live longer than males, they are more likely to become disabled because of old age. Care of the aged used to be the moral obligation of the family. With the increasing pressures of life and the disintegration of the extended family, this duty is no longer being met, and if met, it is done with reluctance. This change in the role of the family leaves the older people physically, socially and psychologically disabled.

6. Alcoholism, drug addiction and smoking

Although such habits used to be prevalent mainly among males, more and more females are acquiring them. Such habits are not only impairing the health of the women, but also that of their offspring.

7. Wars

Unfortunately, several countries in the region have suffered and are still suffering from wars. It is true that wars affect mainly males; however, modern warfare takes no regard of women and children. It renders them physically and psychologically disabled.
8. Attitudes toward the disabled

Attitudes towards the disabled can be more of a handicap than the impairment itself. Ignorance and negativism could contribute to the building of social and psychological barriers for the disabled that are much harder to break than physical barriers. In this sense such attitudes become a cause of disability.

II. SOCIETY AND DISABLED WOMEN

In the previous section, the most recurrent causes of disability in countries of the region have been presented. Many of these causes affect mainly females, or at least affect them to a large extent. In this section, some of the social problems that women with disabilities face in societies like those in which we live and in cultural settings like this, will be discussed.

As was mentioned earlier, disabled females suffer from double discrimination: for being a female and because of the impairment. In many societies, including those in the region, to be a female is quite often a disadvantage, and to be a disabled female is a handicap. Such societies are male-oriented and cater for the needs of the "able-bodied".

The impact of disability on females is aggravated not only by unequal opportunities, for they sometimes are denied basic human rights.

In Women and Disability (15) the following causes that characterize females with disability and which contribute to their inferior situation are given:

1. They are more likely to be poor and destitute;

2. They are more likely to receive less food;

3. They are more likely to be illiterate and/or without vocational training;

4. They are more likely to be unemployed;

5. The appropriate services available to them are much fewer, and their access to rehabilitation is reduced;

6. Their chances of setting up a family are poorer;

7. They are more likely to receive no support from the family or the local community (including physical, financial and emotional support);

8. The stigma of disability and myths and fears are more likely to increase their social isolation.
In the process of child-rearing, female children are led to believe that they come second to their male siblings, that females are subordinate to males and dependent on them. In time, this style of socialization turns into a self-fulfilling prophecy. Females grow up believing that they are inferior beings. Naturally, such an image is compounded by the presence of an impairment.

This self-image affects their educational attainment. A large percentage of females drop out of school, that is if they have the opportunity to go to school. Lack of formal education and training affects their employment opportunities. This situation reinforces their self-image. Thus, one of the main problems that faces females with disabilities is their unawareness of their potentialities and capabilities as a result of faulty child-rearing practices.

Another problem facing disabled females is the insensitivity of society to their needs. Females with any type of impairment - sensory, physical and mental - are essentially females with feelings and emotions. They have needs, desires, rights and obligations. Because of their impairment, they are quite often exempted from their obligations. However, in return, they are denied their rights. Their needs and desires are often overlooked.

In a personal interview, a young woman (26 year old) with cerebral palsy who has been in a wheelchair since the age of three was asked about the types of problems she faces as a young woman moving about in a wheelchair. Her spontaneous answer was: "You mean love... whether I have someone that I love and want to marry?" She added, "Yes there is this young man, and we love each other and plan to get married."

In general, disabled females find it difficult to get married, though mentally retarded have less difficulty; men may accept to marry a mentally retarded female, especially if she is pretty (15).

Another dimension to the problem that faces females with disability is the scarcity of rehabilitation and vocational training centres for females. Of the few that exist, they are usually found in cities and large metropolitan areas. Considering the disproportionate distribution of disabled persons in rural and remote areas, and also the over-protectiveness of parents of their female children, particularly if they have an impairment, it is unlikely that such children will be sent to such institutions. Inadequate training and rehabilitation minimizes their opportunities to "full participation and equality".

III. ROLE OF WOMEN

After surveying the main causes of disability and some of the social problems that confront females with disabilities, this section will focus on the role of women with regard to disability. Specifically, emphasis will be
placed on the role of women in the prevention of disability, the early
detection of impairment and the treatment of disability and rehabilitation
measures.

Clearly, women, single-handedly, cannot do a great deal in the field of
disability and in many other spheres of life. However, assuming the presence
of co-operation, collaboration and participation of all segments of society,
this section highlights the role of women in disability. This requires a full
awareness and understanding of the cost of disability. Disability inflicts a
cost not only upon the disabled individual, but also upon his family,
community, and the nation at large. It is estimated that in those populations
where 10 out of every 100 suffer from disability, at least 25 individuals out
of 100 are adversely affected by the presence of disability (13). Hence,
there is a psychological, social and economical cost.

With this realization, the prevention of disability becomes an essential
prerequisite for reducing the prevalence rate of disability and alleviating
the cost. How can women prevent disability?

One important measure could be accomplished through genetic counselling
before marriage. The prevalence of cousin marriage has contributed to the
higher incidence of various hereditary impairments. According to the genetic
specialist, about 5 per cent of these impairments could be prevented by simple
genetic counselling.

Pre-natal care of pregnant women is another measure that helps to prevent
impairments that can occur in both the mother and child.

Scientific research and technology has identified certain genetic
disorders that can develop into impairments, and which can be detected by
means of neo-natal screening. Putting the new-born child on a special diet
for a certain period would help to eliminate these disorders.

Women should refrain from getting pregnant at very young and at very old
ages in order to avoid possible impairments to them and their children.
Related to this point, adequate spacing between pregnancies should be
allowed. On the one hand, spacing allows the continuation of breast-feeding
for an extended period—a measure that should be encouraged. On the other,
it allows the woman to regain her strength for a subsequent pregnancy.

One last measure that could be easily observed by mothers and one that is
quite essential in preventing disabilities is immunization of her child
against various diseases.

Underlying all these measures is the basic appeal to raise the status of
women. A necessary component of this appeal is to wipe out illiteracy among
females, and to provide them with equal opportunities with respect to
education and employment.
With respect to the early detection of impairments, the role of mothers in detecting impairments in their children is particularly important. The findings of a study in a developing country in Africa have suggested that 14 per cent of all disability is sustained before the age of 5, and up to 53 per cent before the tenth year (9). During these early years of the child's life, the mother is usually closest to the child and is most familiar with any possible changes in his appearance or behaviour. Therefore, mothers should be made aware of various symptoms that could be indicative of potential disorders. The alerting of mothers could be incorporated into primary health care programmes (PHC), mother and child health programmes (MCH), and immunization programmes. When such symptoms appear, the mother should seek medical assistance. Many disorders could be treated in their early stages; if they are left unattended, however, they may result in permanent impairment.

With regard to treatment and rehabilitation measures, whether at home or in specialized centres and institutions, it is usually females who attend to the disabled. In homes with disabled individuals, it is usually the mother, sister or daughter who takes care of him/her. In centres and institutions for the disabled, most of the employees - nurses, teachers, therapists - are females. Being able to deal with and help the disabled requires special training. Females should be guided and encouraged to acquire this training.

In the event that the women become disabled, they should be motivated to seek treatment and to make use of available rehabilitation services. This, of course, requires that such services be offered locally and at a minimum cost, and that they be geared to the basic traditional roles of females in order to facilitate their integration in their families and local communities.

V. POLICY EXPERIENCES

After identifying the main causes of disability and some of the problems that face women with disabilities, and finally the role of women in relation to disability, this section will focus attention on the policy experiences of two countries in the region: Bahrain and Egypt.

Both countries have recognized the disabled as a category that requires special attention and services. Both countries have also distinguished the disabled as a special group about whom information is collected in their respective censuses.

A. Bahrain

According to the last census of 1981, the number of the disabled numbered 3,478, or just 1 per cent of the total population. Of these, there were 2,205 males (1.1 per cent) and 1,273 females (0.9 per cent). Clearly, the proportion of the disabled is drastically biased downward and even more so among the females (the sex ratio is 173.2 among the disabled and 140.3 for the whole population). The census distinguishes six categories of the disabled in addition to a category of "others". Sensory impairments are classified into
three types: blind, deaf and dumb. Physical impairments are classified into two: amputee, and paralysed. The sixth category is the mentally handicapped (2).

The census data are presented according to the cause of disability and sex. Four main causes are specified: birth trauma, injury or accident, disease or illness and congenital. Also included is the distribution of the disabled according to age groups, educational status and labour force participation. All of the above characteristics are cross-tabulated by sex, with nationals being distinguished from non-nationals. In addition, educational status and labour force participation are also classified by the type of disability.

According to these statistics, the blind are the largest group of all the disabled among both males and females (31.9 per cent and 38.3 per cent respectively). Among disabled males, the next two largest groups are the mentally handicapped (17.8 per cent) and the paralysed (14.8 per cent). This order is reversed among disabled females - the paralysed amount to 19.1 per cent and the mentally handicapped, 15.6 per cent. Disease or illness seems to be the main cause of these disabilities among both males and females, with the exception of mentally-handicapped males. Among this category, birth trauma has a higher frequency as a cause of disability. It is worth noting that the frequency of amputee males is more than three times that of amputee females. Such prevalence is likely to be attributed to accidents; however, the statistics show disease as the main cause in both sexes.

With regard to age distribution and type of disability, among blind males and females the number increases with the increase in age. With respect to the mentally handicapped, almost half of that group are between the ages of 10 and 24. This can be observed both among males and females. Among the paralysed in both sexes, about one out of every five is 70 years and over. Excluding this older group, a large proportion (37 per cent) of the paralysed fall between the ages of 5 and 19 years. With respect to paralysed females, one out of every four is 70 years and over. Excluding this age group, one out of every two paralysed females is between the ages of 5 and 24.

Illiteracy is high among the disabled aged 10 and over - 71.5 per cent among males and 85.9 per cent among females.

This situation is even more pronounced in labour force participation. The percentage of economically active males of all disabled males, 15 years and over, is 31.1 per cent. Of these, 84.5 per cent work. Among females, only 4.7 per cent are economically active and about one quarter (25.5 per cent) work.

Motivated by the United Nations Decade of Disabled persons, a National Committee for the Handicapped was set up in Bahrain by an order of H.E. the Minister of Labour and Social Affairs in May 1984. This committee is composed of representatives of the following ministries: Health, Labour and Social Affairs, Education, Interior, Information and Foreign Affairs, as well as
representatives of the General Organization for Youth and Sport, the Regional Bureau of the Middle East Committee for the Blind (Bahrain), the Child and Mother Welfare Society, the Bahrain Mobility International Centre, and the Friendship Society for the Blind. It is worth noting that five of its 11 members are females, and that one is a disabled female. The objectives of the Committee are to draw up the general policy for the rehabilitation of the disabled, to propose the introduction of legislation, prepare studies and implement preventive schemes according to the world wide programme of action for the disabled (10).

Prior to setting up this Committee, in 1970 the Ministry of Labour and Social Affairs in Bahrain established the Rehabilitation Home for Disabled Children. This institute provides services for children (up to the age of 12) who suffer from both mental and physical disabilities.

In 1988-1989 the Home provided permanent residential care for 22 females who suffered severe mental and physical disabilities, and whose families were unable or who refused to take care of them. It also offers temporary residential care for children who need such care when their families are either sick or travelling abroad. Otherwise, it functions as a day care centre. In 1988-1989 it provided services for 109 children (males and females). The services provided include medical and health examinations including the treatment of illness, psychological examinations, educational and rehabilitation services, physiotherapy and recreational activities. Because of the severe disability of the children, the home employs a large number of staff – a total of 56 females – including teachers, nurses, assistant nurses and social workers. All of the services are offered free of charge. However, upon reaching the age of 12, the child is dismissed. This creates a problem, unless the child is capable of joining special classes for "slow learners" in ordinary schools.

Another institute founded by the Ministry of Labour and Social Affairs is the Rehabilitation Centre in Isa Town. The Centre opened in 1980 to provide services to children and youths who suffer from mild mental retardation and physical impairments.

The Centre consists of the following three units:

1. Hearing Impairment Unit. This provides education for children between the ages of 3 and 14 with hearing impairments. In 1987 it served 64 children (33 males and 31 females).

2. Special Education Unit. This unit provides rehabilitation services for children of mild to moderate mental retardation in the 12-14 age range. The objective of this unit is to develop the behavioural habits and attitudes of those children to facilitate their integration into society. It is also seen as a transitional stage towards vocational rehabilitation (pre-vocation training). In 1987, it provided services for 41 children, of whom only 11 were females.
3. Vocational Rehabilitation Programmes Unit. The centre offers training in 10 different programmes, three of which are mainly for females: sewing and handicrafts, typing and printing services, beautician and hairdressing. Another of the unit's programmes - pottery - caters for males and females. In 1987, this unit provided training for 124 trainees, of which a third (42) were females (11).

In Bahrain, there are also a number of non-governmental institutes for the disabled. There is Al-Noor Institute for the Arabian Gulf for the Blind, which was established in 1974 by the Regional Bureau of the Middle East Committee for the Blind. The objectives of the Institute are to teach, guide and qualify the blind for work or further study. It has both academic and vocational sections. Its academic section is supervised by the Ministry of Education. In 1988/1989, the academic section, which has classes through the intermediate level, had 170 students of 13 nationalities. Of these, 120 were resident at the Institute. According to the manager of the Institute, 40 per cent of the students are males. Those students who want to continue beyond the intermediate level are encouraged to do so in regular secondary schools. The Institute, however, continues to offer services to those students such as translating books into Braille, providing special typewriters for the blind (Perkins), providing a recorder to record lessons, translating exams into Braille and the students' answers from Braille, and finally providing transportation to and from the school.

Another section of the Institute deals with vocational training. This section accepts blind males and females between the ages of 18 to 50 years for vocational training. This training can last up to five years in the "Brushes" and "Rattan" workshops, which are mainly attended by males. A comparable workshop for blind females trains them to operate knitting machines.

Those males and females who have completed at least intermediate education can join a training programme for nine months to become telephone operators.

All of the services of the Institute are offered free of charge and, in addition, monthly allowances are given to students in both the academic and vocational training section.

Another institute set up in 1977 in Bahrain is the Hope Institute for Disabled Children. This Institute was set up by the Children and Mothers Welfare Society (a voluntary association of Bahraini women). The Institute has an academic section which provides the special education curriculum that was developed in Jordan. This curriculum is offered to children between the ages of 6 and 12 who suffer from mild mental retardation. It is supervised by the Ministry of Education. Another section of the Institute which opened in 1987 provides vocational training for children between the ages of 12 and 15. In 1988 to 1989, the Institute had 120 students, of whom 53 per cent were females.
There is also the Bahrain Mobility International Centre which was founded in 1979 as a non-governmental centre with the following objectives:

(a) Integrating the disabled in society by bringing them together and providing them with opportunities to engage in cultural exchange locally, regionally and internationally;

(b) Developing international, cultural, and social relations between this Centre and similar centres and organizations that work in the field of disability;

(c) Providing the disabled with opportunities to participate in finding solutions to the various social problems that face the disabled and helping them to remove all psychological and social barriers;

(d) Facilitating the transportation and movement of the disabled and removing physical barriers.

The Centre currently has 120 members of both sexes between the ages of 8 and 35 years. Of these members, 70 per cent are disabled. It has an elected Board of Directors consisting of 10 disabled members and four volunteers. It is worth mentioning that the Chair of the Board is a disabled female.

In spite of the small population of Bahrain and the availability of various institutes to take care of the disabled, a number of Bahraini experts in this field believe that the demand for more institutes of this type is greater than the services actually provided. However, these institutes are costly to set up and require trained workers to staff them. None of the available institutes is exclusively for females, and all of them are situated in or just outside the capital city.

B. Egypt

According to the last published census of Egypt of 1976, the number of disabled persons totalled 111,324, or 0.3 per cent of the total population. Of these, 82,905 were disabled males (0.4 per cent) and 28,419 disabled females (0.2 per cent). The rural-urban distribution was consistent at 0.3 per cent in each region. The disabled male-female proportional distribution in both rural and urban areas showed a preponderance of males. Clearly, these statistics are the result of an obvious under-enumeration of the disabled, particularly among females.

The census distinguished five groups of sensory impairments: blind, loss of one eye, deaf, dumb and deaf and dumb. It distinguished two groups of physical impairments: loss of one or both arms, and loss of one or both legs. It included a group of mentally retarded, as well as a group classified as "other impairments" (4).
The census presented its data on the disabled in the various governorates of Egypt by type of disability and sex. Also included was the distribution of the disabled by type of disability and sex according to age, educational status, labour force participation and occupational status. This information was presented separately for nationals and non-nationals.

According to the census information, the blind constituted the largest group of all the disabled. This was true of both males and females, and in rural and urban areas. However, the difference in the proportion of males and females was quite significant as, 100, was the difference between and within rural and urban areas (see table 1).

Table 1. Percentage distribution of the blind according to the Egyptian census, 1976

<table>
<thead>
<tr>
<th>Sex</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29.2</td>
<td>17.8</td>
<td>23.9</td>
</tr>
<tr>
<td>Female</td>
<td>53.7</td>
<td>32.4</td>
<td>44.1</td>
</tr>
<tr>
<td>Total</td>
<td>35.7</td>
<td>21.4</td>
<td>29.1</td>
</tr>
</tbody>
</table>

It is clear that blindness is a major cause of disability among females in Egypt: in rural areas, more than one in every two disabled females is blind, while in urban areas the number is about one in every three.

It is worth noting that among disabled males in Egypt, the second largest group is categorized under "other disabilities" (19.9 per cent), followed by "loss of one eye" (17.5 per cent). These two categories of disability are maintained among rural males, though the order is reversed. Interestingly, among urban males, "other disabilities" rank first (22.2 per cent), followed by the blind, then the "loss of one eye" group.

Ranking the disabilities among females in Egypt, the second largest group is "loss of one eye", followed by the deaf and dumb. These two categories maintain their position in a reversed order among urban females. Among rural females, "loss of one eye" ranks second, followed by "other disabilities".

The age distribution of blind males and females in Egypt indicates that there is a high incidence of blindness between the ages of 5 and 19 followed by a decline in incidence to the age of 29; it then increases with the increase in age.
The illiteracy rate is high among disabled Egyptian males 10 years and over (51.9 per cent), and is even higher among disabled Egyptian females 10 years and over (72.0 per cent).

With respect to labour force participation, the percentage of economically-active Egyptian disabled males six years and over amounts to 59.1 per cent. Of these, 95.5 per cent work. The percentage of economically-active females is much lower (11.4 per cent), of whom 88 per cent work.

The occupational status distribution of Egyptian disabled males 15 years and over show that 65.9 per cent have occupations. Of these, more than one third work in agricultural and related activities (33.9 per cent), while over one fifth work as skilled and semi-skilled labourers (22.5 per cent). With respect to females, only 13.0 per cent have occupations. Of those more than one fifth are professionals and semi-professionals (22.3 per cent), and an almost equal proportion do clerical and secretarial work (22.0 per cent).

It is worth noting that the tradition of counting the disabled in Egyptian censuses goes back to the census of 1907.

According to the mandate by which the Ministry of Social Affairs (MOSA) was founded in 1939, caring for those "with impairments" was one of its responsibilities. The Ministry's first experience with the rehabilitation of the disabled was in 1952 when it set up the first office for the training and instruction of the disabled. This pilot project was followed by the establishment of several rehabilitation centres all over the country (7).

Currently, MOSA offers its services through a variety of outlets:

1. Rehabilitation offices. There are 64 offices all over the country which can offer rehabilitation services to 15,000 disabled persons annually. For training, these offices use their own workshops, or they make arrangements with workshops in the public and private sectors. These offices also offer mobility aids, appliances as well as financial aid.

2. Rehabilitation centres. These centres offer integrated services to the severely disabled, as well as boarding facilities for those who are unable to move easily. There are 17 such centres in the various governorates which can offer services to 10,000 cases annually.

3. Sheltered workshops. There are five such workshops which cater for 215 cases. They offer rehabilitation for the severely disabled who would not be employed elsewhere.

4. Intellectual development institutes. These institutes offer training to those suffering from mild to moderate mental retardation. There are 13 such institutes which can serve 1,000 cases annually.

The Ministry of Social Affairs distinguishes eight groups of disabled people, as follows:
(a) Blind;
(b) Mentally retarded;
(c) Deaf and dumb;
(d) Cancer patients;
(e) Rheumatic heart patients;
(f) Tuberculosis (TB) convalescents;
(g) Leprosy convalescents;
(h) Physically disabled.

There are 149 non-governmental institutions and centres which offer services to the disabled. Some of these institutions are specialized in a particular type of disability, while others deal with multiple disabilities (see table 2).

The services offered by these institutions vary, but they include rehabilitation, training, education and instruction. They also provide financial and other material aid, as well as treatment.

It should be noted that some of these institutions date back to the 1930s and 1940s. For example, the General Association for the Control of Tuberculosis was founded in 1936 in Cairo to rehabilitate tuberculosis convalescents and also to care for their families. Currently, the association has 13 branches in the different governorates. Another example is the Egyptian Association for the Care and Rehabilitation of the Deaf, which was founded in Cairo in 1948. Care for the blind also started in the 1950s. In 1953 the Model Centre for the Care of Blind Males was founded in Cairo, and in 1954 the Light and Hope Society for the Care of Blind Females was founded (7). This latter Society now has three branches in three governorates. In the last few years, this Society was able to form and train a Chamber Music Orchestra consisting of 36 blind females. They have twice been invited to play in Austria in the past two years.

In Egypt, the Ministry of Education (MOE) also shares in the care of disabled children. It provides educational services through a special education programme in special schools for children with the following categories of impairment:

(a) For the blind, there are the Light Schools which accept children between the ages of 6 and 8 who may then continue their education through to university. There are 26 such schools, primarily in the main cities;

(b) For the deaf, there are the Hope Schools which accept children between the ages of 5 and 7. There are 55 such schools;

(c) For the mentally retarded, there are the Intellectual Development Schools which accept children between the ages of 6 and 12 who suffer from mild mental retardation. Schooling lasts for seven years, which is then followed by vocational training (6).
Table 2. Institutions and centres serving the disabled, by type of disability, 1987

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Total number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blind</td>
<td>21</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>7</td>
</tr>
<tr>
<td>Deaf and dumb</td>
<td>6</td>
</tr>
<tr>
<td>Cancer patients</td>
<td>4</td>
</tr>
<tr>
<td>Rheumatic heart patients</td>
<td>5</td>
</tr>
<tr>
<td>TB convalescents</td>
<td>47</td>
</tr>
<tr>
<td>Leprosy convalescents</td>
<td>9</td>
</tr>
<tr>
<td>Physically disabled</td>
<td>17</td>
</tr>
<tr>
<td>Multiple disabilities</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>149</strong></td>
</tr>
</tbody>
</table>

Source: Egyptian Federation for the Handicapped Welfare Agencies, Directory of Agencies for the Care and Rehabilitation of the Handicapped in the Arab Republic of Egypt (Cairo, 1982) (Arabic only).

The Ministry of Health (MOH), in addition to offering services which include public health and preventive care in 1976 established the Poliomyelitis Institute to treat poliomyelitis patients.

The varied services and activities for the disabled which are provided by governmental as well as non-governmental institutions call for some form of co-ordination and collaboration. In its efforts to co-ordinate such activities, in 1975 the Ministry of Social Affairs (MOSA) issued a law that stipulates among other things the formation of a Higher Council for Rehabilitation. This Council was formed and operated for a short while. MOSA is currently in the process of reactivating it.

In 1969, the Egyptian Federation for Handicapped Welfare Agencies was established. One of its objectives is to co-ordinate and establish links between institutions that work in the same field of disability. The Federation also organizes local and regional conferences and conducts studies and research.

Experts believe that the existing institutions and centres for the disabled do not meet the existing demand for such services. Active co-ordination is also essential to improve performance.

V. CONCLUSION AND RECOMMENDATIONS

In this study, it becomes clear that a conservative estimate of the number of disabled females in countries of the ESCWA region is equal to the total populations of the United Arab Emirates, Kuwait, Oman, Bahrain and Qatar.
all together. It is recognized that women in most third world countries, including the countries of this region, do not share the scarce resources and opportunities that men in such countries may enjoy. It is also recognized that people with clear and apparent impairments, whether sensory, physical or mental, are often discounted when the planning of these scarce resources and opportunities takes place. They are discounted by their own families, by local communities and therefore by the nation at large. Even when discounting those with impairments, females are often discounted more than males. In a society where men have more and better opportunities than women, and where the "able-bodied" have more and better opportunities than the disabled, it is obvious that disabled females are in the worst position of all.

Several experts believe that the United Nations Decade for Women did not accomplish as much as it should have. It is to be hoped that the United Nations Decade of Disabled Persons will accomplish what it set out to, particularly with respect to this forlorn segment of the population - disabled women.

In this regard, a number of recommendations are proposed in the hope that the Economic and Social Commission for Western Asia will aid the countries of the region to implement them.

1. For each country, a committee for the disabled, consisting of experts in government as well as non-governmental organizations (particularly those dealing with women's activities) should be set up. It is imperative that these committees include among its members at least one who is disabled, and preferably a disabled female. In those countries which already have such a committee, this committee should be activated. The first task of this committee would be to identify the needs of the disabled and the gaps in existing services and programmes, and to make an assessment of resources available to fill these gaps. It would be of use if the work of this committee was endorsed by high officials and policy makers. Upon receipt of the Maurice Bate Award in the sum of 25,000 dollars, H.E. Mrs. Mubarak, wife of the Egyptian President, donated this money to the renovation of a school for the deaf and dumb in Egypt. Following the publication of this news item in the Egyptian press, there has been a significant increase in the number of statements made by different officials in various parts of the country regarding the opening of new schools for the disabled or adding new classes to already existing schools.

2. At the regional level, a co-ordinating committee for the disabled should be established to link with the national committees. The presence of female members, and particularly disabled females, would be an asset to this body. Like other specialized pan-organizations, the task of this committee would be to receive and dispense funding over and above what individual countries are able to do with their own local resources. Another task of this committee would be to organize regional programmes and projects such as the setting up of a regional centre for the training of the trainers of the disabled. This committee could arrange for the exchange of expertise and experience among the countries of the region, as well as with countries outside the region.
3. The definition of disability and the various types of disability should be standardized among the various countries. From the census data of the two countries that were used as examples above, it is clear that each country classifies disabilities differently. Far worse, in the case of Egypt, the category of "other disabilities" accounted for the second largest category of the disabled. This failure to identify disability does not help planners. Standardization allows for better understanding as well as comparison both vertically and horizontally.

4. It is clear from the census data that this group of the population is under-enumerated. It is also clear from the available literature on the subject that there is a dearth of relevant material. It will be necessary, therefore, to set up a research project to help to clear the mist regarding this group of people with respect to their numbers, needs and capabilities. Such information is vital for the planning and implementation of sound programmes.

5. Calling attention to the talented work and accomplishments of the disabled would be a useful way of breaking down the social and psychological barriers to disability. It is no longer sufficient to identify a day or a week in the year "for the disabled". The mass media could be used to propagate these accomplishments. When Egyptian television presented a programme about the tour of the Light and Hope Chamber Music Orchestra to Austria, and declared that this orchestra consisted of 36 blind Egyptian females between the ages of 13 and 30 years - the one and only uniquely "blind orchestra" - as a consequence more people inquired about the services of the Light and Hope Institute and offered their assistance. Acknowledging such talents contributes not only to the individuals concerned, but also to the cause of disability.

The above recommendations are not exhaustive. Specific recommendations could always be developed when a sound base of information and statistics has been provided and when enough concern has been demonstrated by the respective countries.
Annex

LIST OF RESOURCE PEOPLE

Mounira Ben Hindi. Social Worker, Social Rehabilitation Section, Ministry of Labour and Social Affairs, Bahrain, and President of the Mobility International Centre, Bahrain.

M. A. A. S. el-Banna. Counselor of Rehabilitation and International Activities, Ministry of Social Affairs, Egypt, and Deputy Vice-President of Rehabilitation International for the Arab Region.

Osman Farrag. Professor of Psychological Health, American University in Cairo, Egypt.

Hanan Kamal. Head, Social Rehabilitation Section, Ministry of Labour and Social Affairs, Bahrain.

Waffa A. Mousa. Head, Department of Field Studies and Research, Nutrition Institute, Cairo, Egypt.

Samia A. Temtamy. Head, Department of Human Genetics, National Research Centre, Cairo, Egypt.
References


8. Human Genetics (Cairo), No. 42, September 1987, Bulletin of the National Research Centre (in Arabic).


10. Bahrain, National Committee for Disabled Persons (no date).


IXX. QUEEN ALIA FUND FOR VOLUNTARY SOCIAL WORK IN JORDAN AND ITS ACTIVITIES IN THE FIELD OF SPECIAL EDUCATION

by

Queen Alia Fund for Voluntary Social Work in Jordan
## CONTENTS

<table>
<thead>
<tr>
<th>I. PRELIMINARY FACTS ABOUT THE FUND</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Founding</td>
<td>280</td>
</tr>
<tr>
<td>B. Aims and objectives</td>
<td>280</td>
</tr>
<tr>
<td>C. The Fund's strategy of action</td>
<td>281</td>
</tr>
<tr>
<td>D. Policies and scope of work</td>
<td>282</td>
</tr>
<tr>
<td>E. Ways, means and tools</td>
<td>285</td>
</tr>
<tr>
<td>F. Organizational structure</td>
<td>287</td>
</tr>
<tr>
<td>G. The most notable achievements of the Fund</td>
<td>288</td>
</tr>
</tbody>
</table>

| II. ACTIVITIES OF THE FUND IN THE FIELD OF SPECIAL EDUCATION | 288 |
I. PRELIMINARY FACTS ABOUT THE FUND

A. Founding

The Queen Alia Fund for Social and Voluntary work in Jordan was started in mid-1977 by a Supreme Royal Decree, with His Majesty King Hussein as honorary president.

The Fund is a national non-governmental institution whose aim is to support and develop voluntary social work in Jordan in all social fields and with available means.

A provisional law for the Fund (Law No. 6 of 1979) was promulgated. It was ratified by the Houses of Deputies and Senators under a Royal Decree dated 17 July 1985 and was published in the Official Gazette No. 3336 of 17 August 1985 as Law No. 37 of 1985, Law of Queen Alia Fund for Social and Voluntary Work in Jordan.

The Fund is run by a Board of Trustees presided over by Her Royal Highness Princess Basma. Members of the Board are appointed for a renewable term of three years.

B. Aims and objectives

On the basis of its developmental message that aims at supporting and developing voluntary social work, the Fund seeks to achieve the following objectives:

1. Enhance and direct the efforts of voluntary and private bodies and institutions with a view to meeting the needs of the successive economic and social development plans and achieving development in all aspects of society;

2. Intensify in Jordanian society positive social values derived from the country's historical heritage;

3. Promote and organize community participation in social development efforts;

4. Improve the living standards of disadvantaged people either by training them in a new profession or by improving their performance in their own profession or skill;

5. Protect the solidity of the family as the basic unit, or nucleus, of society, through increasing the awareness of men, women and children of their roles in the family and society;

6. Improving child care and education through improving the role of parents, on the one hand and devoting attention to the child's health and upbringing, on the other;
7. Endeavour to compile demographic information, statistics and data relating to all aspects of social work and place them at the disposal of local, official and voluntary bodies and of Arab and international agencies, institutions and organizations;

8. Formulate a clear population policy that takes into consideration the present economic and social situation and future needs and aspirations.

C. The Fund's strategy of action

The strategy of action of the Queen Alia Fund emanates from the following facts and assumptions:

1. It regards the gains and fruits of development as the right of all citizens. Official and private voluntary efforts should distribute these gains to all citizens in such a way as to ensure social justice in every part of the country. This will intensify among citizens the sense of belonging to the homeland, of satisfaction in giving and taking and of equality in rights and duties.

2. Government alone cannot satisfy the needs of all categories of people and communities. Hence it is necessary to bring together private voluntary efforts, organize them and direct them to support government efforts to meet the requirements of the development plan generally and, in particular, the social sector plan which is designed to improve the national economic and social conditions of local communities and enable them to take active part in national progress.

3. The Fund looks upon development, including social development, as an integrated process composed of interactive elements. Therefore, it must be addressed within the framework of an overall programme, especially in the field of basic social services, such as educational, social, health and cultural services.

4. The aim of social work is to increase the individual's participation in the inputs of economic development. He should therefore be trained to participate in the economic sector and improve his living standard.

5. Preventive programmes and institutions have priority in social work.

6. The role of the family should be underlined as it is the cornerstone of a strong and united society.

7. Social work is specialized and requires adequate professional capacities. It also requires a flow of detailed and up-to-date social statistical data.

8. Programmes for the care and education of children should be given first priority since they concern the shaping of man, the raison d'être of development.
9. Women play an important and effective role in building the family and society. This role can be enhanced by developing their production capacities in various fields.

D. Policies and scope of work

In the light of the strategy, and the aims and objectives for which it was established, the Fund started its activities by conducting social studies and research to identify the basic requirements of the various aspects of local community development and the problems and difficulties facing it in order to draw up integrated and interrelated plans and programmes covering economic, social, health and cultural aspects.

Despite difficult conditions and limited resources and capacities, with 1,016 local communities in the country, the State has managed to provide a good standard, both in quantity and quality, of basic services for these communities. However, the first and foremost problem from which they continue to suffer is that projects for production and for the training and rehabilitation of women are very few.

The Fund therefore finds it its duty to take part in projects and programmes whose aim is to address and solve these issues in the following fields:

1. Co-ordination and co-operation

Co-ordination and co-operation should exist among local institutions and bodies and between them and Arab and international institutions engaged in social work in Jordan so that the role of these latter institutions may be made more effective and their technical and material capacities utilized in serving our official and private social institutions. It will also be possible in this manner to acquaint these institutions with the problems and needs of voluntary work and establish more extensive contacts with them.

2. Development of local communities

Jordan is composed of urban and rural areas. The rural population is approximately 35 per cent of the total population. Services are concentrated in cities. Many rural communities need to be redistributed. The Fund therefore devotes great attention to developing integrated social services in rural areas and deprived districts in cities and working out programmes and projects to meet the needs of these communities. It also gives considerable attention to setting up a network of social service centres, on an integrated services basis, to serve as social units where basic social services for various categories of people are pooled and dispensed to local communities, particularly in the fields of child care, mother care, care of the environment, activation and encouragement of individual efforts and the utilization of these efforts in productive activities to improve the economic and social conditions.
3. **Childhood and youth**

Jordanian society, as in other developing countries, is a young society where children under 15 years of age constitute over one half of the population. For this reason the Fund has given considerable attention to children and the young in its programmes.

Bringing up children in a proper way and meeting their basic needs in the spheres of education, culture, health and social care will contribute immensely to the building of a happy family and a virtuous society.

The Fund is therefore concentrating on this sector, particularly after it has been able to identify the requirements of children in Jordan on the basis of a field study on rural children it has conducted.

The Fund also supports youth and scout organizations with the necessary skills to infuse into the youth the spirit of citizenship and patriotism and respect for manual work. These ends can be achieved through organizing labour camps and setting up of voluntary projects where capabilities of the youth may be utilized for the benefit of their communities.

4. **The women's sector**

There is a category of services and activities which traditionally comes within the sphere of women's responsibility. The development process will continue to be limited in effect if women continue to perform these activities without knowledge and understanding. The Fund has given particular attention to this sector and is working to prepare woman to play her role as a mother and housewife and develop her capability through education, training and integration into the development process.

5. **Environment and community services**

The process of developing and improving the environment of the local community is important and necessary, because it reflects the extent to which the programmes and projects, which were designed to raise the living standard of the population itself, have affected the community members and prompted them to improve their environment is an expression of the change taking place in their lives. This requires co-operation between private efforts and official agencies concerned with the development of environment such as the Local Council, the Water Supply Board, the Electricity Company and other public service establishments.

If community members participate, through their voluntary and private institutions in demanding integrated basic services, they will be more careful to protect the improvements effected in their environment and more anxious to complete them through their individual efforts and local resources.
The Fund considers that serving the environment and the local community is a field of sustained work to narrow the gap between the less and more privileged communities and eventually to eliminate this gap.

6. Support for charitable societies

The Fund provides material and technical support to charitable societies, particularly those in rural areas, with a view to improving their performance and raising the standard of their services, programmes and activities, by utilizing model social service centres which the Fund establishes in towns and villages.

7. Special education

The activities of the Fund in this field will be reviewed later in this report.

8. National efforts in population issues

As a result of a growing interest in population issues in the country and the fact that the population factor is closely related to various development matters and in order to achieve greater co-ordination between official and private bodies in the field of population activities, the National Committee for Population, a committee set up under a Government decision, with headquarters with the Queen Alia Fund, is collecting data on population and studying their relationship to social and economic development elements. This will help to prepare alternative population patterns to be made available to decision makers to choose what is appropriate for overall and sectoral development processes.

9. Studies, research and information on children

In order to establish a data base and a body of studies and research on children the Fund, in co-operation with the Arab Council for Children and Development, undertook to set up a centre for this purpose. This centre, which has its headquarters on the Fund's premises, serves as an aid to the Arab Council for Children and Development in the field of studies and research on children in the Arab countries. Its relationship with the Jordanian Government is regulated by a special agreement signed between the Jordanian Government and the Council. The Centre has legal status and an independent budget allocated to it by the Arab Council for Children and Development.

The Centre aims at collecting information and conducting studies on Arab children in all fields independently or in collaboration with others, particularly Arab and international organizations concerned with children's issues.

Such information and studies will be used in determining the present and future needs of Arab children and in formulating and designing projects, programmes and activities for Arab children.
10. The Scientific Body for Arab Women

This is a private association whose members are a group of people concerned with the role of Arab women in overall development and whose objectives are developing women's capabilities and skills and enhancing their participation in activities for scientific, cultural, social and economic development of society. This body was established in response to the interest shown by Her Royal Highness Princess Basma and in accordance with the need for such an organization in the women's scientific sectors in the Arab countries to contribute to the introduction of new concepts compatible with the fundamental role of Arab women in development.

11. Improving social legislation

During the past three decades social work has been undergoing a process of development and updating owing to changes in concepts, expansion of voluntary institutions, both in quantity and quality, and emergence of new social institutions which contributed to these changes and developments. However, voluntary work in the social sector is suffering from outmoded regulations and legislation formulated to regulate the social sector while it was still in its early stages. The old legislation is incapable of meeting the new requirements of the social work institutions. Hence, the Fund has taken an interest in updating social legislation to suit social changes and address problems arising from imbalances in the social structure.

E. Ways, means and tools

1. Information media

The Fund uses the media as a channel to reach all sectors of society with guidance and orientation to establish positive values and concepts with regard to social work. It also enlightens citizens as to the areas and spheres of social work and ways to achieve population communication.

2. Financing

The Fund relies on grants and donations from individuals and institutions and on financial support provided by Jordanian and Arab institutions in addition to contributions by Arab States and donations from Arab individuals to finance specific projects.

International institutions that are directly or indirectly concerned with social work, such as the United Nations agencies, constitute a significant source of material and technical support for the Fund's plans and projects.

3. Management and operation

The Fund has a Board of Trustees presided over by Her Royal Highness Princess Basma. The Board draws up the Fund's policy and supervises its
operation. Programmes are executed by specialized staff who follow up the Fund's projects and activities and provide material and technical services to private voluntary social institutions.

The Fund pursues a clear policy with regard to the social centres which it undertakes to set up and that is to hand them over, wherever possible, to private bodies, whether local councils or charitable societies, to supervise and run them. However, the Fund continues to provide financial and technical support to these centres and supervises their work within its five year or annual plans.

4. Training and rehabilitation of human resources

To raise the standard of services provided by voluntary social institutions, the Fund focuses on developing the capacities of workers in these institutions by organizing training programmes concerning, inter alia, children, training for women, special education, local community leadership, traditional rural industries, and education in health, social and nutrition matters.

5. Studies, research, seminars and conferences

In order to keep in step with the changes taking place in all aspects of social life, the Fund will continue to carry out field research and appraisal studies on various social issues to investigate the causes and magnitude of these changes and develop remedies.

The Fund will also continue to organize seminars, conferences and symposia to discuss various topics of interest to researchers and planners and in order to improve and update performance in all aspects of the Fund's activities.
F. Organizational structure

QUEEN ALIA FUND FOR VOLUNTARY SOCIAL WORK

OFFICE OF THE PRINCESS

CHAIRWOMAN OF THE BOARD OF TRUSTEES

CO-ORDINATION AND FOLLOW UP UNIT

TECHNICAL ADVISER

STUDIES AND INFORMATION UNIT

DEPARTMENT OF SOCIAL AND RURAL DEVELOPMENT

DEPARTMENT OF PRODUCTION PROJECTS AND WOMEN'S PROGRAMMES

DEPARTMENT FOR CHILDREN

ADMINISTRATION AND FINANCE DEPARTMENT

DEPARTMENT OF ENGINEERING MAINTENANCE
G. The most notable achievements of the Fund

It is difficult in this paper to list all the achievements of the Fund since its establishment up to the present time. However, it may be worthwhile to indicate that the Fund has so far set up 21 social development centres distributed over various governorates in the country, especially rural and remote areas. This is in addition to 4 centres for persons with physical and auditory disabilities and mentally retarded persons. The Fund has also provided financial and technical support to several charitable societies and organized scores of training workshops for various categories of workers in the social sector and charitable societies. It also executed various programmes in the fields of health education, rural development, child care, training for women and special education.

In addition to the above, the Fund organized a number of seminars and its representatives participated in several conferences at home and abroad. It conducted several field studies and issued a number of publications and papers. It also awarded scholarships for studying abroad.

II. ACTIVITIES OF THE FUND IN THE FIELD OF SPECIAL EDUCATION

As indicated above, special education is one of the fields of activity of the Queen Alia Fund. Since its inception the Fund has given priority to work related to the disabled. This may be summarized as follows:

1. An overall survey of the disabled in Jordan was carried out in the spring of 1978 and the results were published in 1979. This was the first survey of its kind to be carried out at the country level.

The results of the survey revealed that there were 18,029 disabled persons with the types of disability specified in the survey (deaf and dumb, blind, paralysed, amputees, mentally retarded, psychologically disturbed) distributed over the country.

The survey also revealed that the highest proportion of disability was that of paralysis which constituted 30.5 per cent of the total number of disabled persons recorded, followed by the mentally retarded (25.9 per cent), the deaf and dumb (16.9 per cent), the blind (11.2 per cent), the deaf-dumb-blind (9.1 per cent), amputees (3.8 per cent), emotionally disturbed (2.4 per cent) and finally the deaf-blind (0.2 per cent).

Although many specialists feel that the figures recorded by this survey did not reflect the actual number of disabled persons, it nevertheless revealed clearly the magnitude of deficiency in the services provided to the disabled, which led the Fund and other bodies to give greater attention to the issue of disabled persons. This also explains the marked expansion which took place during the 1980s in the services provided to the disabled.

2. Attention was given to the preparation and training of workers in the field of the disabled through training courses, especially abroad, in view of
the fact that at that time there were few indigenous specialists in special education in Jordan.

3. Support was extended to the special education centres in existence at that time and financial aid was granted to them after consideration of their requirements.

4. The Fund established the following four centres for special education:

(a) **Amman Centre for Education and Rehabilitation of the Physically Disabled**

The building of the Centre, which occupies an area of 3,100 square (sq.) metres, cost JD 631,230. Its operational cost amounts to about JD 120,000 per annum. About 150 physically impaired persons benefit from this Centre and receive professional, educational and medical services. However, this Centre has been handed over to the Al-Hussein Society for the Care of the Paralysed to run and supervise it under an agreement with the Fund. It is worth mentioning that this Centre was established by a grant from the Sultanate of Oman.

(b) **Al Yarmuk Centre for the Education and Rehabilitation of Physically Impaired Persons/Idlib**

The building's area is 2,750 sq. metres. It has been handed over to the University of Science and Technology in Idlib to run and supervise under an agreement with the Fund. Building of an alternative centre at another area in Idlib is being contemplated.

(c) **Al-Raja' Centre for the Education and Rehabilitation of Persons with Auditory Disability/Yajouz**

The building of this Centre, which occupies an area of 1,700 square (sq.) metres, cost JD 213,540. Its operational costs amount to JD 36,000 per annum. It is used by 92 deaf boy and girl students who receive professional, educational and rehabilititional services. The Centre has been handed over to the Charity Society for the Care of the Deaf to run and supervise it under an agreement with the Fund. The building is a grant from the State of Qatar.

(d) **Mu'ta Centre for Special Education/Al-Karak**

The building of the Centre, which occupies an area of 700 sq. metres, cost JD 160,311. Its operational costs amount to about JD 23,000 per annum. The Centre is used at present by nearly 60 boy and girl students who are mentally retarded and suffer from an auditory disability. Here they receive professional, educational and rehabilitation services. The Centre has been handed over to the Society for the Care of the Disabled at Al-Karak to run and supervise under an agreement with the Fund. This Centre was built through a grant from the Republic of Iraq.

The Centre is being expanded by the addition of a section for vocational rehabilitation which comprises 4 main workshops, a multi-purpose hall, offices,
storerooms and other facilities. The additional buildings will occupy an area of 600 sq. metres and will cost up to JD 80,000 (buildings and equipment).

In the course of time the activities of the Fund in the field of special education expanded to cover the following:

Training programmes relating to special education have been expanded to cover five main categories:

(a) **Workers with the disabled**

Training courses for this category in Jordan and abroad were doubled in number to cover workers with various types of disabled persons in various areas. There were over 60 such courses from which over 1,000 persons benefited.

(b) **Mothers of the disabled**

Since 1985, 15 courses for mothers of the disabled were organized in various parts of the country. Over 1,000 mothers of disabled persons benefited from these courses. These were pilot courses organized on the initiative of the Fund.

(c) **Rural women leaders in the field of disabled persons**

This was started in 1987 also as a pilot idea by the Fund. Three training courses in this field were organized in Mafraq, Ma'an and Middle Valley respectively. The total number of participants was 133 women.

(d) **Lowest-stage primary school teachers of the Ministry of Culture and Education**

In 1987, also as a pilot idea, 12 training courses were organized for men and women teachers at the lowest primary school stage in Ma'an and Al-Tufaila governorates. The courses were attended by 307 men and women teachers of the first three primary school years in Ma'an and Tufaila governorates. This figure constitutes 76 per cent of the total number of teachers in these governorates.

(e) **Educational supervisors working in the Ministry of Culture and Education**

One training course was organized for general supervisors in Karak Governorate. It was attended by 23 general inspectors, social specialists and schoolmasters in Karak Governorate in 1988.

The Fund is at the moment developing its plan of action related to training the mothers of disabled persons.

- In addition to this, the Fund, in collaboration with the Ministry of Culture and Education and the special education programme at the College of
Education in the Jordanian University, initiated a class for slow learners in public schools. This was in Karak Governorate, where the pupils commenced studies on 17 October 1987.

As this class proved to be a successful experiment, two more classes were opened, one at Faqeu' and the other at Husseiniyah, both in the Governorate of Karak. These two classes, which pupils started to attend on 4 February 1989, began in the form of classes for slow learners and are being modified to become what in common terminology is called a 'resource room'.

To complete the task, preparation of a handbook called "A Guide to Special Education" is under way. The Guide, which is designed for teachers, extension workers and educational supervisors in general schools, contains practical educational advice on how to detect and deal with cases of pupils needing special education who, in the Guidebook, are divided into eight categories. It is hoped that it will be ready for distribution to the participants in the Conference.

- Furthermore, the Fund organizes and attends several conferences, seminars and workshops on special education in Jordan and also participates in such activities abroad.

- The Fund carries out field studies on special education. An example is a study on workers in the field of special education which was published in 1984. Another study, completed in 1986, comprised a survey of 700 households in Tufaila Governorate to identify a number of social and health characteristics according to certain indicators in the study.

- The Fund issued a number of publications and pamphlets for orientation and information on special education and centres for the disabled. Furthermore the Fund provides facilities, information and expertise to researchers and individuals concerned with special education.

- The Fund assisted in finding suitable opportunities to integrate disabled persons in ordinary schools. It also assisted in the provision of guidance and advice to households in hundreds of cases which were brought to its attention over the past years.

- The Fund made material and technical contributions to several special education centres in rural and remote areas. In addition, the Fund helped certain voluntary societies to set up centres for special education and provided them with the necessary material and technical support to proceed in this respect.

- In conclusion, it should be stated that the Fund is always eager to co-ordinate work and co-operate with other institutions engaged in this type of activity.
Part Three

COUNTRY PAPERS
XX. THE SITUATION OF THE DISABLED: THEIR CAPACITIES AND NEEDS IN BAHRAIN

by

Hanan Kamal
Head, Social Rehabilitation Section
Social Affairs Department
Ministry of Labour and Social Affairs, Bahrain
I. BASIC FACTS ABOUT BAHRAIN

The State of Bahrain, which covers an area of 677.9 square kilometres, is an archipelago consisting of 33 islands. According to the latest census, conducted in 1981, the population is 350,798, of whom 238,420 are Bahrainis and 112,378 are of other nationalities. Bahrainis thus account for 69.97 per cent of the population.

Apart from a narrow strip of fertile land in the north, the island of Bahrain is mostly low-lying, rocky and bare, consisting of limestone rock, covered with varying depths of sand, which is too poor to support vegetation apart from a few tough desert plants.

With regard to climate, the period from December to March is the coolest. Temperatures rise sharply after the end of March and reach a peak in August, although a cool north wind sometimes brings relief in June. The remainder of the year is dominated by hot winds from the south. The weather begins to cool down quickly in early October.

II. NATURE AND EXTENT OF THE DISABILITY PROBLEM

Statistics and figures derived from the Bahrain Census of Population and Housing - 1981 indicate that there were 3,478 disabled persons in Bahrain, representing 1 per cent of the country's total population of 350,798. Of the total number of disabled persons, 2,205 were male and 1,273 female. They were also grouped according to social status, age group and educational level, etc., as shown in the tables which follow.

Of the figures, it may be said that the disability rate appears very low, particularly if one notes that disability rates in other countries are relatively high, ranging from 7 to 10 per cent. International statistics indicate that there is a continual increase in disability cases in the world, as confirmed by the World Health Organization and the Rehabilitation International organization.

Following an examination and close reading of the census statistics on disabled persons in Bahrain, we have formed the view that the figures are flawed, for the following reasons:

(a) Advice was not sought, when conducting the census and drawing up the general policy on disabled persons, from the authorities concerned with issues which should and could have been investigated. In particular, the Ministries have specialists who can make relevant additions to the census documents;

(b) The census officers were not versed in the subject of disability and so were unable to go into detail and ask further questions which would illustrate the various aspects of disability and related issues;
(c) Because so many different types of information and data were requested, no emphasis was given to general subjects, including disability. We therefore see that the figures are very crude and lack the necessary comprehensiveness.

(d) Bahraini families are not in a position to detect disabilities at an early stage, meaning that this important factor is ignored. In our opinion, this distorts the figure for disabled persons in the lowest age group (one to ten). Furthermore, families in Bahrain do not volunteer information about their disabled children because they are embarrassed to do so. We therefore have doubts about the census figures.

The census figures on disabled persons are as follows:

Table 1. Causes of disability in Bahrain (1981)

<table>
<thead>
<tr>
<th>Cause of disability</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>571</td>
<td>301</td>
<td>872</td>
</tr>
<tr>
<td>Accident</td>
<td>362</td>
<td>123</td>
<td>485</td>
</tr>
<tr>
<td>Illness</td>
<td>1,192</td>
<td>812</td>
<td>2,004</td>
</tr>
<tr>
<td>Hereditary factors</td>
<td>77</td>
<td>37</td>
<td>114</td>
</tr>
<tr>
<td>Not known</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,205</td>
<td>1,273</td>
<td>3,478</td>
</tr>
</tbody>
</table>

Table 2. Disabled persons by age group (1981)

<table>
<thead>
<tr>
<th>Age group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1</td>
<td>9</td>
</tr>
<tr>
<td>1-4</td>
<td>59</td>
</tr>
<tr>
<td>5-9</td>
<td>187</td>
</tr>
<tr>
<td>10-14</td>
<td>239</td>
</tr>
<tr>
<td>15-19</td>
<td>306</td>
</tr>
<tr>
<td>20-24</td>
<td>232</td>
</tr>
<tr>
<td>25-29</td>
<td>153</td>
</tr>
<tr>
<td>30-34</td>
<td>140</td>
</tr>
<tr>
<td>35-39</td>
<td>124</td>
</tr>
<tr>
<td>40-44</td>
<td>161</td>
</tr>
<tr>
<td>45-49</td>
<td>187</td>
</tr>
<tr>
<td>50-54</td>
<td>279</td>
</tr>
<tr>
<td>55-59</td>
<td>231</td>
</tr>
<tr>
<td>60-64</td>
<td>327</td>
</tr>
<tr>
<td>65-69</td>
<td>213</td>
</tr>
<tr>
<td>70 and over</td>
<td>631</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,478</td>
</tr>
</tbody>
</table>
### Table 3. Disabled persons (aged 10 and over) by sex and category of disability (1981)

<table>
<thead>
<tr>
<th>Category of disability</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blind</td>
<td>691</td>
<td>480</td>
<td>1171</td>
</tr>
<tr>
<td>Deaf</td>
<td>134</td>
<td>80</td>
<td>214</td>
</tr>
<tr>
<td>Deaf and dumb</td>
<td>116</td>
<td>64</td>
<td>180</td>
</tr>
<tr>
<td>Missing one limb</td>
<td>230</td>
<td>68</td>
<td>298</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>355</td>
<td>179</td>
<td>534</td>
</tr>
<tr>
<td>Paralysed</td>
<td>282</td>
<td>211</td>
<td>493</td>
</tr>
<tr>
<td>Other</td>
<td>236</td>
<td>97</td>
<td>333</td>
</tr>
<tr>
<td>Not known</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,044</strong></td>
<td><strong>1,179</strong></td>
<td><strong>3,223</strong></td>
</tr>
</tbody>
</table>

### Table 4. Disabled persons (aged 15 and over) by sex and category of disability (1981)

<table>
<thead>
<tr>
<th>Category of disability</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blind</td>
<td>678</td>
<td>472</td>
<td>1150</td>
</tr>
<tr>
<td>Deaf</td>
<td>129</td>
<td>78</td>
<td>207</td>
</tr>
<tr>
<td>Deaf and dumb</td>
<td>95</td>
<td>54</td>
<td>149</td>
</tr>
<tr>
<td>Missing one limb</td>
<td>228</td>
<td>65</td>
<td>293</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>304</td>
<td>138</td>
<td>442</td>
</tr>
<tr>
<td>Paralysed</td>
<td>252</td>
<td>191</td>
<td>443</td>
</tr>
<tr>
<td>Other</td>
<td>223</td>
<td>77</td>
<td>300</td>
</tr>
<tr>
<td>Not known</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,909</strong></td>
<td><strong>1,075</strong></td>
<td><strong>2,984</strong></td>
</tr>
</tbody>
</table>

### III. Situation of Disabled Persons and Services Available to Them

Bahrain's attitude of responsibility in looking after its "special category" citizens derives from its heritage, social traditions and family ties.
The State provides various services to disabled persons by identifying their disabilities and determining their needs. Despite the fact that it is a newcomer to the provision of rehabilitation services for disabled persons, the country has managed to draw up a clear policy for work with the disabled. This has helped it in the course of long-term planning of new services, drawing on the experience of others without falling prey to their mistakes. The policy has been built on basic principles which conform with those advocated by the United Nations, in that they are intended to ensure the full participation and equality of disabled persons, from the following points of view:

(a) **Democratic:** A disabled person should be able to exercise his rights and perform his duties in full like any other citizen;

(b) **Economic:** A disabled person is a productive human being who participates in building his country's economy;

(c) **Humanitarian:** In keeping with the country's heritage and Islamic religion, services and assistance are provided to those whose circumstances restrict their mobility.

Our view of disabled persons is thus based on the conviction that they are an inseparable part of the community, may be integrated at all levels and can take part in all the activities of its various sectors. We therefore reject all forms of isolation, because of our faith in the performance of the qualified disabled person and the importance of his role in reducing the need for expensive special facilities and preserving the natural relationship between himself, his family and his environment. We also focus on the role of the disabled in overcoming their problems and taking an active part in their solution, rather than simply waiting for help from others (this should be no surprise, as disabled persons are experts on themselves).

These principles are clearly demonstrated in the State's services and plans, as offered and implemented by the various Ministries and other agencies concerned, which we shall review in the course of this report.

A. **Educational services**

1. The Ministry of Education has established the Special Education Commission. Its members are education officials and its function is to identify solutions for disabled persons in schools.

2. The State has carried out a pilot project with respect to the integration of blind persons into the community by giving the blind the opportunity to be admitted to ordinary secondary schools. Those admitted have done better than their sighted peers, providing an incentive to conduct the experiment at other levels of education.
3. Physically disabled pupils are taught side by side with their non-disabled counterparts. They also take part in social, recreational and sports activities at the schools and are given the opportunity to participate in school art competitions.

4. The Ministry of Education organizes extra classes for slow learners, in preparation for their integration into technical education.

5. The Ministry organizes courses to train teachers, supervisors and school principals in the art of interaction with disabled persons in general, and with slow learners and the mentally retarded in particular.

6. The Ministry is endeavouring to expand its educational services and to back them up with specialists in psychological and social services for disabled persons, so that such services can be provided to disabled pupils at normal schools.

7. The Ministry provides non-governmental sector centres for disabled persons with teaching staff and study grants for special education.

8. Normal schools provide the necessary facilities to disabled persons.

B. Health services

1. In keeping with its desire to ensure health for all, the Ministry of Health has established health centres in all parts of the country. These centres make health services accessible to every member of the population, free of charge.

2. In an effort to ensure the prevention of disease, the Health Education Section conducts familiarization programmes at health centres, schools, factories, associations and clubs. Public health programmes on the television and radio also serve to teach the public how to prevent physical, psychological and mental disabilities.

3. Each health centre has an early detection unit which caters for pregnant mothers and infants. Innoculations are given to women who have recently given birth and are susceptible to German measles.

4. The Ministry of Health's plan provides for the inoculation of all girls against German measles at the age of twelve, amniocentesis of some pregnant women and pre-natal scans to check the condition of the foetus.

5. All children at day-care centres and primary schools undergo a regular complete physical, sensory, intellectual and mental examination, conducted by the school health service, once every three years, and immediate treatment is provided.
6. The Physiotherapy Section provides special services to disabled persons, and physiotherapy specialists offer services to the disabled at special institutions.

7. The Prosthetic Appliances Section at Al-Salmaniayah Hospital provides artificial limbs and mobility aids to those with motor disabilities.

8. The Hearing Test Unit examines all school pupils and provides services to those with hearing disabilities.

9. The Ministry of Health deals decisively with diseases which cause physical disabilities, with the result that infectious diseases, trachoma, infantile paralysis and contagious eye diseases rarely occur.

C. social services

One of the major concerns of the Ministry of Labour and Social Affairs is to offer care and rehabilitation to persons suffering from various mental and physical disabilities at different age levels. Care is provided in accordance with the results of an expert survey of cases and with the schedule drawn up by those responsible for the provision of such services, pursuant to the overall policy established by the state for the care of disabled persons. The services are provided by the Social Rehabilitation Section, which is responsible for drawing up plans and projects for the disabled and for suggesting ways of putting them into practice and offers rehabilitation, vocational, social and material services through its units and centres. The following is an enumeration of these services:

1. Mobile units scheme

Under this scheme, services are provided to disabled persons in their families. Their needs are met in the way of health, sustenance, psychological help, physiotherapy and rehabilitation, and they are then helped to secure employment, develop self-reliance, achieve social integration and overcome family isolation, with their progress being monitored on a regular and continuous basis. An operational team of specialists plays a major part in this connection, together with volunteers from the non-governmental sector.

2. Family counselling

As a demonstration of faith in the role played by the family in a disabled person’s life, parents are involved in programmes designed to help their children. They are given the opportunity to discuss their problems and are given various guidelines concerning interaction with their children.
3. Institutional care

The Ministry has set up rehabilitation centres to provide services to disabled persons who are in need of special care. Some centres provide care only during the day, in keeping with the principle whereby disabled persons should not be isolated from the family and the family's role with respect to the disabled person should be maintained. There are also internal institutions offering comprehensive care to the disabled, which make it the responsibility of families to remain permanently in contact with their disabled members. These centres are as follows:

(a) Children's Rehabilitation Home

The Home was founded in 1970 to supply comprehensive services to children suffering from severe mental retardation and cerebral palsy. It provides its inmates and out-patients with daytime, temporary and intermittent care, together with periodic family visits in accordance with the needs of each individual. The services provided included:

(i) Sustenance

Services include the provision of food, clothing and training in the basic behavioural principles of self-care.

(ii) Medical

Services include a full examination on admission, periodic examinations, immunization against diseases, treatment of those who are sick and psychological examination.

(iii) Psychological

Services include psychological examinations, general ability tests, the formulation of a development and rehabilitation programme for the harnessing of special abilities, guidance, counselling and the treatment of speech defects.

(iv) Physiotherapy

Services are designed to make muscles more supple and to restrict limb deformities through special exercises and the use of auxiliary equipment.

(v) Vocational

Services include training in the use of limited abilities, in keeping with the principle that work is a form of therapy.
(vi) **Recreational**

In accordance with the principle that disabled persons should not be isolated, the Home permits service volunteers to arrange recreational activities for the children on a regular basis, with the intention of giving disabled individuals a sense of affection, hope and contact.

(b) **Centre for Rehabilitation**

The Centre was founded in 1980 and provides care on a daytime basis.

(i) **Long-term objectives**

The Centres long-term objectives are as follows:

a. To provide the necessary educational, vocational, health-related and social services to disabled students under a national rehabilitation programme, with a view to integrating them into the country's social and economic institutions;

b. To encourage the families of students to contribute to the development and strengthening of rehabilitation services at the Centre;

c. To train the necessary specialized staff in all areas of special education and vocational training, by means of on-the-job training in Bahrain and the arrangement of courses for them abroad.

(ii) **Short-term objectives**

The Centres short-term objectives are:

a. To develop students' education and learning abilities;

b. To develop skills through exercises in various vocational tasks;

c. To help trainees obtain employment in accordance with their abilities.

(iii) **Categories**

The Centre caters for the following categories:

a. Mentally retarded cases between the ages of twelve and twenty whose degree of retardation is minor to medium;

b. Hearing disability cases (minor to medium) between the ages of two and seven.
(iv) Services

The Centre provides the following services:

a. Special and regular academic education for the mentally retarded and those with hearing disabilities;

b. Vocational training and pre-vocational training;

c. Various health-related and social services;

d. Endeavours to ensure the social and vocational integration of trainees.

D. Legislative services

Under Bahraini labour law, 2 per cent of the positions in major institutions are to be occupied by disabled persons, and those who obtain the vocational training certificate are exempted from physical fitness requirements. The law also makes the appointment of qualified disabled persons to vacant Government posts a priority. In addition, if a worker suffers an injury which gives rise to a disability but does not prevent him from doing a job other than his previous job, the employer is obliged to place him in the appropriate post, at the level of remuneration fixed for that post, provided that he performs at least 5 per cent of the tasks involved in the job, and the worker is entitled to receive disability benefits in accordance with the provisions of the labour and social security laws.

E. Assistance to disabled persons

The Ministries provide every facility to disabled persons, including the following:

1. Ministry of Commerce and Agriculture

   Customs duty exemption for equipment, devices and instruments used by disabled persons;

   Priority treatment for the granting of commercial registration permits to disabled persons;

2. Ministry of Housing

   Provision of housing services and construction loans to disabled persons;

   Exemption of disabled persons, for periods, from payment of housing services fees;
3. General Foundation for Youth and Sports

Provision of a specialist in sports for the disabled;

Installation of ramps at sports facilities;

Establishment of the Bahrain Committee for Disabled Persons' Sports;

Involvement of disabled persons in youth work camps;

Provision of opportunities to young disabled persons for participation in local, Gulf, Arab and international sports competitions and championships;

4. Ministry of Transport

Assignment of instructors to train disabled persons to drive by hand-operated or automatic controls, free of charge;

5. Ministry of Foreign Affairs

Provision of information concerning the rehabilitation of disabled persons and the periodic bulletins issued by United Nations agencies;

6. Ministry of the Interior

Facilitation of procedures to obtain driver training permits for disabled persons;

Consciousness-raising, through use of the media and publications, for the purpose of preventing traffic accidents;

Provision of parking areas for disabled persons in public places.

F. The role of non-governmental activity in services for the disabled

Non-governmental associations play a major role in the care and rehabilitation of disabled persons, through co-ordination between their services and those provided by the Ministry of Labour and Social Affairs. The following are among the most important non-governmental institutions:

1. Al-Amal School for Disabled Children

The Association for the Welfare of Children and Mothers established Al-Amal School for Disabled Children in 1977, with the following objectives:

- Development of the skills and behaviour patterns required by a disabled person in daily life;
- Provision of support and guidance to the family, to ensure that it accepts its disabled child and adapts to the resulting situation;

- Conduct of studies and research to improve the standard of services offered to disabled children.

Services provided by the School are as follows:

**Educational**: arranged on the basis of individual teaching plans;

**Counselling**: provided to families of disabled persons, in keeping with the principle that the family affects the growth and development of the child;

**Medical**: provided to children with mental disabilities in conjunction with the Ministry of Health;

**Recreational**: provided through the arrangement of programmes which are appropriate to their abilities, trips for specific purposes, participation in official events, etc.

**Financial assistance**: provided to disabled children from low-income families, in conjunction with the Ministry of Labour and Social Affairs.

2. Bahrain Centre for International Mobilization

The Bahrain Centre for International Mobilization was founded in 1979 on the basis of a belief that disabled persons are experts on themselves and that no one is better placed to understand their problems, and of the principle that the disabled should not be isolated in societies or clubs. Its membership includes disabled persons and their friends, and its objectives are as follows:

(a) To integrate disabled persons into human society through a strengthening of the bonds between them, by means of travel and cultural exchanges, at the local, regional and international levels;

(b) To develop friendly, cultural and social links between the Centre and similar centres operating in this field, as well as with institutions and organizations with a local, regional or international interest in the affairs of disabled persons;

(c) To provide disabled persons with the opportunity to fulfil their mission in life like other human beings, to take part in the identification of appropriate solutions to the problems of the community, to express their opinions on the programmes offered and to eliminate the social and psychological obstacles to their integration;

(d) To help facilitate the mobility of disabled persons and to remove all the barriers and obstacles, whether natural or otherwise, which reduce their mobility either inside or outside the country. Public opinion is
directed through use of all the media, preparation of and involvement in social, cultural and sports programmes, including parties, trips, seminars and lectures, the conduct of research and studies relating to the Centre's activities and the publication of periodic bulletins in this connection. The Centre has managed to highlight the positive aspects of the problem and is actively engaged in mobilizing public opinion and changing attitudes towards disabled persons, by the following means:

(i) The organization of educational seminars at schools, clubs and societies, at which the disabled persons themselves explain the role of the disabled in society and the role of society in relation to the disabled;

(ii) A change in family attitudes to the handicapped, achieved by means of visits to families on the part of qualified disabled persons;

(iii) Endeavours, in conjunction with their friends, to eliminate architectural barriers and ensure the installation of ramps;

(iv) The arrangement of sports activities at various facilities.

3. Al-Sadaqah Association for the Blind

Al-Sadaqah Association for the Blind was founded in 1981. It is a non-governmental association which concerns itself with the affairs of the blind and their rehabilitation, training in self-reliance, and emphasis of their role in the service of the community.

It is the aim of the Association to provide the blind with an opportunity to fulfil their mission in society and to instil in them a spirit of assurance and self-confidence. The Association strives to develop and strengthen the bonds of friendship between it and similar associations, as well as to conduct studies and research and to use translations of works relating to the blind.

The principal achievements of the Association have been as follows:

(a) To distribute financial aid to some families of blind persons;

(b) To arrange literacy training classes for blind adults;

(c) To establish and finance a number of snack bars in the country's towns and villages, with a view to creating employment opportunities for the blind;

(d) To participate in a number of local and international conferences and camps;

(e) To maintain constant participation in local and international organized events.
4. Volunteer activities

Non-governmental associations and members of clubs join in voluntary work with the disabled by organizing specific days on which they provide everyday internal care at the rehabilitation institutions. Exhibitions, competitions and tournaments are also organized, with the proceeds going to the disabled, and members of the associations also participate in all the programmes designed to extend services to the disabled within their families.

5. Fund for Disabled Persons

The Fund for Disabled Persons was set up to meet the requirements of disabled persons and their families in terms of the purchase of special equipment and accessories, foodstuffs, etc. It is funded by contributions and donations from the non-governmental sector in general.

The Fund has been of great service, within the limits of the money collected.

G. Regional activity on behalf of the blind

The regional office of the Middle East Commission for the Affairs of the Blind established Al-Nur Institute for the Arabian Gulf in February 1974, to provide services to blind nationals of Gulf countries. The Institute comprises two sections.

1. Academic section

This section includes the primary and intermediate levels. As an experiment, blind pupils have been integrated into ordinary secondary schools, where they have notably excelled.

2. Vocational section

Blind students are trained in bamboo-work, carpentry and the making of rugs and brooms, as well as typing and telephone switchboard operations.

H. Co-ordination of services for disabled persons

The National Commission for Disabled Persons was established by a decision of the Minister of Labour and Social Affairs, dated 19 May 1984.

The Commission is responsible for formulating policy on the rehabilitation of disabled persons, proposing legislation, conducting studies and implementing preventive projects in accordance with the World Programme of Action concerning Disabled Persons. Its membership includes representatives of the following agencies: the Ministry of Health; the Ministry of Labour and Social Affairs; the Ministry of Education; the Ministry of the Interior; the Ministry of Information; the Ministry of Foreign Affairs; the General Foundation for Youth and Sports; the Bahrain regional office of the Middle
East Commission for the Affairs of the Blind; the Association for the Welfare of Children and Mothers; the Bahrain Centre for International Mobilization; and Al-Sadaqah Association for the Blind.

The Commission has established a number of subsidiary committees, as follows:

1. **Committee to Study the Situation of Disabled Persons**

   The Committee studies the situation at centres for disabled persons in Bahrain and projects future requirements in the way of centres and rehabilitation services.

2. **Committee for the Co-ordination of Services**

   The Committee is responsible for the co-ordination between the services of government and non-government centres for disabled persons, with respect to the implementation of programmes and fulfilment of requirements in accordance with priorities.

3. **Information Committee**

   The Committee's role is to heighten awareness with regard to the prevention of disability, by organizing information programmes, compiling bulletins and booklets and highlighting the role of disabled persons and the activities of centres for the disabled.

4. **Financial Committee**

   The Committee is responsible for organizing the income and expenditure of the Commission and identifying sources for the funding of projects to rehabilitate disabled persons.

5. **Sports Committee**

   The Committee is responsible for organizing recreational and sports competitions at centres for the disabled.

1. **Arabian Gulf University**

   In view of the importance of training teaching staff for the rehabilitation of disabled persons, and of raising the competence of staff in this field, the Arabian Gulf University established the Special Education Section, which is responsible for training staff in methods of teaching the disabled and for drawing up the necessary programmes. The Section also arranges training courses for staff at the rehabilitation centres.
J. Technical co-operation with organizations of the United Nations system

Bahrain pursues active co-ordination with organizations of the United Nations system, for the purpose of promoting the rehabilitation of disabled persons and acquainting itself with the experience of others throughout the world. Co-ordination takes place with the World Health Organization (WHO), the International Labour Organisation (ILO), the United Nations Children's Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Economic and Social Commission for Western Asia (ESCWA), etc. The principal areas of co-ordination include:

(a) Technical consultancy for new programmes and projects to rehabilitate disabled persons;

(b) Evaluation of existing projects for the disabled and formulation of recommendations for their further development;

(c) Training of staff working with the disabled;

(d) Provision of equipment and appliances to rehabilitation centres;

(e) Dispatch of all information materials concerning rehabilitation and the prevention of disability;

(f) Arrangement of bilateral programmes and projects for the rehabilitation of disabled persons.


Bahrain was one of the countries which took part in United Nations meetings to mark the Decade of Disabled Persons 1983-1992. It endorsed the World Programme of Action concerning Disabled Persons and is endeavouring to implement the Programme by the following means:

(a) Planning, organization and funding of programmes and projects;

(b) Provision of participation opportunities to disabled persons;

(c) Provision of (social, medical, vocational and educational) rehabilitation services and prosthetic appliances;

(d) Establishment of co-ordinated programmes for the prevention of disability;

(e) Establishment of programmes for early detection and early intervention;
(f) Support of associations for disabled persons;

(g) Familiarization with the causes of disability and means of prevention.

IV. RECOMMENDATIONS FOR THE FURTHER DEVELOPMENT
OF REHABILITATION SERVICES FOR DISABLED PERSONS

1. A system for early detection and early intervention should be established, by forming a committee of doctors and specialists. The committee would be responsible for early detection and identification, formulation of the necessary programmes for early treatment and the counselling and guidance of families.

2. Co-ordinated programmes for the prevention of disability, such as systems of primary health care, health care for mothers and children and family planning, should continue to be established.

3. Safety systems and training programmes should be drawn up, for the prevention of accidents in the home, at work and on the road.

4. An endeavour should be made to incorporate rehabilitation into the programmes and curricula of social workers, teachers, doctors and anyone else involved in taking decisions which affect the social, educational and vocational integration of disabled persons.

5. Programmes should be established for the integration of disabled children at normal schools.

6. A specific system should be established for the placement of qualified disabled persons in jobs which are appropriate to their abilities and qualifications. There should also be follow-up of the placement and employment process.

7. National institutions and factories should be encouraged to adopt the system of sheltered workshops and thus to help provide appropriate employment for trainees.

8. Training of rehabilitation workers should continue to be provided through the holding of training courses and the arrangement of inspection visits.

9. An endeavour should be made to establish a system of material and moral incentives for rehabilitation workers.

10. Councils comprising the parents of disabled persons should be established, to join with institutions for the disabled in the planning of education and rehabilitation programmes for their children, the follow-up of programme implementation and the expression of views on such programmes.
11. Instructive programmes and media campaigns to familiarize the public with programmes for the prevention of disability should continue to be arranged.

12. Material and moral support should continue to be provided to associations for disabled persons, and services should continue to be co-ordinated.

13. An endeavour should be made to increase the number of rehabilitation centres.

14. Use should continue to be made of the expertise and facilities offered by local, regional and international organizations and agencies for the purposes of technical consultancy, etc.

References


3. Information bulletins concerning rehabilitation services in the government and non-government sectors.
XXI. STUDY OF THE DISABLED IN DEMOCRATIC YEMEN

by

Hussein Ahmed al-Husni
Faculty of Economics
University of Aden
CONTENTS

Summary................................................................................................................. 314
Introduction.............................................................................................................. 317

Chapter

I. GEOGRAPHICAL SITUATION AND POPULATION OF DEMOCRATIC YEMEN........ 318
   A. Geographical situation................................................................................. 318
   B. Population................................................................................................. 319

II. ECONOMIC AND SOCIAL DEVELOPMENT PLANS............................................. 320

III. GOVERNMENT POLICIES.................................................................................. 323
   A. Department of Occupational Health......................................................... 326
   B. Association for the Care of the Blind....................................................... 327

IV. INSTITUTES AND SERVICES............................................................................. 328
   A. Institute of Light for the Blind, Aden....................................................... 328
   B. Institute of Light for the Blind, Hadhramawt......................................... 330
   C. House of the Elderly and the Disabled, Aden........................................... 330

V. NUMBER OF DISABLED...................................................................................... 332

VI. CONCLUSION.................................................................................................... 336

LIST OF TABLES

1. Number of districts and centres in each governorate in 1989................. 318
2. Population by governorate in 1988........................................................... 319
3. Population according to type..................................................................... 319
4. Investments in the social services sector................................................... 320
5. Pupils in educational institutions for the disabled in Kuwait and the United Arab Emirates in 1986......................................................... 331
<table>
<thead>
<tr>
<th>CONTENTS (continued)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Children seeking grants for study abroad in 1986</td>
<td>331</td>
</tr>
<tr>
<td>7. Distribution of disabilities according to age and</td>
<td>333</td>
</tr>
<tr>
<td>type in Aden Governorate, 1980</td>
<td></td>
</tr>
<tr>
<td>8. Type of disability according to sex in Aden</td>
<td>334</td>
</tr>
<tr>
<td>Governorate, 1980</td>
<td></td>
</tr>
<tr>
<td>9. Estimated number of disabled according to</td>
<td>334</td>
</tr>
<tr>
<td>governorate in 1981</td>
<td></td>
</tr>
<tr>
<td>10. Estimated population according to age group, sex</td>
<td>335</td>
</tr>
<tr>
<td>and governorate, 1988</td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>337</td>
</tr>
</tbody>
</table>
Summary

According to the preliminary results of the Second General Census of Population, Housing and Installations, which was carried out in March 1988, the population was 2,345,266, giving a population density of 6.9 persons per km².

1. Number of disabled

There are no statistics available in Democratic Yemen which indicate the extent of the problem or the various types of disability. No questions on disability were included in the General Census of Population and Housing of 1973, however these questions were taken into consideration in drawing up the return forms for the Second General Census of Population, Housing and Installations of 1988, which included a questionnaire for disabled persons to ascertain the origin (congenital, acquired) and type of their disability. The first and second phases of the Economic and Social Survey carried out in certain regions of the country in 1974-1975 included some questions on the disabled. The survey took in Abyan and Hadhramawt Governorates and showed that acquired disabilities were more common than congenital disabilities, comprising 78 per cent in the regions of Al-Mukalla and Ash-Shihr in Hadhramawt Governorate, 74 per cent in Saywun District, Hadhramawt Governorate and 77 per cent in Abyan Governorate.

A study of disabled persons in Aden Governorate was undertaken by the Department of Local Government in 1980 on a sample of 2,821 persons. Of that figure, 24 per cent of males and 21.8 per cent of females were in the youngest, 0-14 age group; 55.3 per cent of males and 53.6 per cent of females were in the 15-59 age group; and 20.5 per cent of males and 24.5 per cent of females were in the 60 and over age group.

The economic and social study carried out in Aden Governorate in 1980 showed a rise in the proportion of males and females with partial paralysis, 21 per cent; mental weakness, 20.4 per cent; and blindness, 11.5 per cent.

2. Government policies

The State is concerned with the disabled as a social category which is in dire need of social welfare and the provision of services. However, such welfare should not be understood as simply charitable or merciful financial assistance to alleviate their suffering. The State's concern induces it to strive in a number of ways to integrate the disabled in the community and to study the fields in which training can be given to the disabled in order to enable them to take up work and to provide them with work opportunities.

A project document was drawn up, a programme of vocational rehabilitation for persons with motor disabilities, in co-operation with the executing agency of the project, the International Labour Organisation (ILO). The Government
authority supervising the project is the Department of Local Government. The project will run for two years and is expected to begin in September 1989. The contribution of the United Nations Development Programme (UNDP) is $US 300,000, and the contribution of the Government is 142,975 Democratic Yemen dinars (= $US 414,628).

In addition to these contributions to the project, there have been discussions between numerous international organizations to co-ordinate efforts in order to avoid duplication in the provision of services. Among those organizations were the United Nations Children Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), the Population Programme, the Red Crescent and Rädda Barnen (the Swedish Save the Children Federation). The project is aimed at helping to implement the Government's policy of economic and social integration of the disabled by providing effective vocational rehabilitation services and creating job opportunities. The objective of the project is to develop vocational rehabilitation services for men and women with motor disabilities. The study on which the project document was based showed that estimations of 1988 statistics gave between 100,000 and 200,000 disabled persons of both sexes. These estimations were based on a proportion of between 5 per cent and 10 per cent of the total population of 2.5 million. The project document estimated that there were in the various governorates 18,000 persons with motor disabilities of different origins. They had difficulties in procuring artificial limbs and had to wait sometimes up to two or three years. If these could be provided locally this would enable these disabled persons to get training at the Vocational Rehabilitation Centre for Persons with Motor Disabilities, which would help them to become productive instead of being dependent on social welfare. The Centre would then concentrate on developing various appropriate posts for the rehabilitation of disabled persons.

The latest estimations of Rädda Barnen, which visited the country in mid-March 1989, put the number of the disabled at 175,000, using disability rates for developing countries established by WHO. Children make up half this figure, persons in need of vocational rehabilitation account for 40,000 and children needing schools for the disabled come to 15,000. Rädda Barnen has plans to assist Democratic Yemen by setting up a workshop in Aden for basic community rehabilitation, which will provide training to 50-60 persons working to implement the programme.

3. Institutes and services

There are Institutes for the Care of the Blind in Aden and Al-Mukalla in Hadhramawt Governorate, founded in 1951 and 1972 respectively. There is also a House of the Elderly and the Disabled founded at Shaikh Uthman, in Aden. It provides care to elderly and disabled men and women. The Institutes for the Care of the Blind are aimed at providing care and rehabilitation to the blind and to train them in certain skills and trades which match their physical abilities to enable them to earn a living by themselves and to serve the community.
The Institutes have study departments in which studies are completed up to the eighth grade, following which pupils are transferred to secondary schools for the sighted. While at the Institute, they follow the Ministry of Education curriculum with teaching materials printed in Braille. The Institutes also have vocational departments in which trainees engage in basket weaving and palm-leaf plaiting.

In addition to providing the disabled with opportunities for in-house study, certain categories of the disabled, such as the deaf and dumb, the mentally retarded and paralytics are sent abroad to study in Kuwait and the United Arab Emirates. A total of 42 students were sent abroad in 1986. Other groups also need to be sent abroad for study. The number of persons seeking grants for such study is 90.
INTRODUCTION

The State is concerned with the disabled and has undertaken economic and social surveys in 1974, 1975 and 1980. The Second General Census of Population, Housing and Installations of 1988 included questions on the origins of disabilities. Beyond these studies, there is a need to create a statistical system to record and classify cases of disability.

The State has also enacted legislation to guarantee the rights of the disabled and to afford them work opportunities and integration in the community. Such legislation was Basic Labour Law 14 (1987) and Worker\'s Social Security Law 1 (1980) for the protection of workers from industrial accidents and the curtailment of disability.

The State is concerned with the disabled as a social category which is in dire need of social welfare and the provision of services. However, this welfare should not be understood as simply charitable or merciful financial assistance to alleviate their suffering. The State\'s concern induces it to strive in a number of ways to integrate the disabled in the community and to study the fields in which training can be given to the disabled in order to enable them to take up work and to provide them with work opportunities.

In view of the scarcity of the potential and resources of the State and the lack of expertise in care for the disabled on the part of existing institutions and their staff, the State endeavours to involve the community in providing social care to the disabled. A programme will be set up to help the community provide care to the disabled.
I. GEOGRAPHICAL SITUATION AND POPULATION OF DEMOCRATIC YEMEN

A. Geographical situation

Democratic Yemen is situated in the south-west part of the Arabian peninsula, bordered on the north by the Yemen Arab Republic and the Empty Quarter, on the south by the Arabian Sea, on the east by Oman and on the west by the Red Sea. Its area is 336,869 km², of which 60 per cent is made up of mountains and desert.

1. Natural regions

The territory is divided into five natural regions:

1. The coastal plain extends from the Bab al-Mandab, in the south-west of the country, to the eastern border with Oman. The coastal strip is 1,200 km in length, varying in width between 12 and 25 km before the central uplands.

2. The central uplands extend from the western end of the country, including Lahej and Abyan Governorates, to the eastern regions, at altitudes between 610 and 1,524 m above sea-level.

3. The central mountains reach altitudes between 1,524 and 2,438 m above sea-level.

4. The desert areas include the north-eastern region of the country, which forms part of the Empty Quarter Desert.

5. Islands include Socotra and Perim. Socotra has an area of 3,650 km².

2. Administrative divisions

The country is divided into six governorates, which are subdivided into 30 districts, which are further subdivided into 95 centres, as shown in table 1, below.

Table 1. Number of districts and centres in each governorate in 1989

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Area (km²)</th>
<th>Districts</th>
<th>Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aden</td>
<td>6,980</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Lahej</td>
<td>12,766</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Abyan</td>
<td>21,489</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Shabwah</td>
<td>73,908</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Hadhramawt</td>
<td>155,376</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>Al-Mahrah</td>
<td>66,350</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>336,869</strong></td>
<td><strong>30</strong></td>
<td><strong>95</strong></td>
</tr>
</tbody>
</table>
B. Population

According to the preliminary results of the Second General Census of Population, Housing and Installations, carried out in March 1988, the population was 2,345,266, of whom 2,107,166 were in the country on the eve of the census, and the rest, estimated at 238,100, were abroad.

Population density in 1988 was 619 persons per km².

Table 2. Population by governorate in 1988

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Population</th>
<th>Percentage of total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aden</td>
<td>418,755</td>
<td>17.8</td>
</tr>
<tr>
<td>Lahej</td>
<td>533,984</td>
<td>22.8</td>
</tr>
<tr>
<td>Abyan</td>
<td>337,706</td>
<td>14.4</td>
</tr>
<tr>
<td>Shabwah</td>
<td>253,836</td>
<td>10.8</td>
</tr>
<tr>
<td>Hadhramawt</td>
<td>703,151</td>
<td>30.0</td>
</tr>
<tr>
<td>Al-Mahrah</td>
<td>97,834</td>
<td>4.2</td>
</tr>
<tr>
<td>Country total</td>
<td>2,345,266</td>
<td>100</td>
</tr>
</tbody>
</table>


The preliminary results of the Second General Census of Population, Housing and Installations, 1988 gave the population according to age group, showing 46.1 per cent for 0–14, 46.1 per cent for 15–59 (the population of working age) and 7.8 per cent for the over 60s.

Estimations in 1987 for the urban, rural, bedouin and nomadic populations were as follows:

Table 3. Population according to type

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Bedouin and nomads</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>757,827</td>
<td>1,295,905</td>
<td>224,174</td>
<td>2,277,906</td>
</tr>
<tr>
<td>Percentage</td>
<td>33.2</td>
<td>57</td>
<td>9.8</td>
<td>100</td>
</tr>
</tbody>
</table>

II. ECONOMIC AND SOCIAL DEVELOPMENT PLANS

The first experiment in economic and social planning in Democratic Yemen was the Three-Year Development Plan (1971/72-1973/74), which was followed by the First Five-Year Plan (1974-1978) and the Second Five-Year Plan (1981-1985). The Third Five-Year Plan (1986-1990) is currently being implemented.

Investments for the Third Five-Year Plan (1986-1990) amount to approximately $682.9 million Democratic Yemen dinars (YD), of which YD 212.4 million or 36.4 per cent of total investments is from local sources (Government, bank loans, private funds) and YD 370.4 million or 63.6 per cent is from foreign sources. The Plan concerns both the productive and non-productive sectors. YD 348.1 million or 59.7 per cent of total investments is devoted to the productive sectors. Investments in productive service sectors amounted to YD 136.7 million or 23.0 per cent, whereas investments in the social services sector totalled YD 98.1 million or 16.8 per cent. Investments in the social services sector during the Third Five-Year Plan (1986-1990) are distributed as follows:

Table 4. Investments in the social services sector

<table>
<thead>
<tr>
<th>Social services sector</th>
<th>Million YD 98.1</th>
<th>Percentage 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social services</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Housing</td>
<td>32.5</td>
<td>33.1</td>
</tr>
<tr>
<td>Health</td>
<td>19.0</td>
<td>19.4</td>
</tr>
<tr>
<td>Education</td>
<td>24.8</td>
<td>25.3</td>
</tr>
<tr>
<td>Culture, information and tourism</td>
<td>4.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Other services</td>
<td>13.9</td>
<td>14.0</td>
</tr>
</tbody>
</table>


The Three-Year Development Plan (1971/72-1973/74), the First Five-Year Plan (1974-1978), the Second Five-Year Plan (1981-1985) and the Third Five-Year Plan (1986-1990) had the following objectives:

(a) To transform the national economy from a service economy to a productive economy;
(b) To improve the standard of living and the cultural level and to increase real individual income;
(c) To diversify production;
(d) To put an end to unemployment and to ensure an increasing number of job opportunities;
(e) To achieve a balanced distribution of productive forces;
(f) To establish infrastructures gradually in the various governorates;
(g) To support public and co-operative ownership and to encourage national capital;
(h) To expand and develop education, health, cultural and social services;
(i) To achieve an equilibrium in the balance of payments;
(j) To achieve economic integration between the two Yemens.

In the economic and social development plans, the Government is concerned with the disabled. When the Second Five-Year Plan (1981-1985) was being drawn up, the Department of Local Government put forward an idea to include the project of an institution for the disabled. However, the scarcity of investments was such that it was not possible to include the project in the Plan.

A project document was drawn up entitled a "Programme of vocational rehabilitation for the disabled", in co-operation with the executing agency of the project, the International Labour Organisation (ILO). The Government authority supervising the project is the Department of Local Government. The project will run for two years and is expected to begin in September 1989.

The contribution of the United Nations Development Programme (UNDP) is $US 300,000, the contribution of the Government YD 142,975 (= $US 414,628) and voluntary contributions amount to $US 435,226.

In addition to these contributions to the project, there have been discussions between numerous international organizations to co-ordinate efforts in order to avoid duplication in the provision of services. Among those organizations were the United Nations Children Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), the Population Programme, the Red Crescent and Rädda Barnen (the Swedish Save the Children Federation). The project is aimed at helping to implement the Government's policy of economic and social integration of the disabled by providing effective vocational rehabilitation services and creating job opportunities. The objective of the project is to
develop vocational rehabilitation services for men and women with motor disabilities. The study on which the project document was based showed that estimations of 1988 statistics gave between 100,000 and 200,000 disabled persons of both sexes. These estimations were based on a proportion of between 5 per cent and 10 per cent of the total population of 2.5 million. The project document estimated that there were in the various governorates 18,000 persons with motor disabilities of different origins. They had difficulties in procuring artificial limbs and had to wait sometimes up to two or three years. If these could be provided locally this would enable these disabled persons to get training at the Vocational Rehabilitation Centre for Persons with Motor Disabilities, which would help them to become productive instead of being dependent on social welfare. The Centre would then concentrate on developing various appropriate posts for the rehabilitation of disabled persons.

The latest estimations of Rädda Barnen, which visited the country in mid-March 1989, put the number of the disabled at 175,000, using disability rates for developing countries established by WHO. Children make up half this figure, persons in need of vocational rehabilitation account for 40,000 and children needing schools for the disabled come to 15,000. Rädda Barnen has plans to assist Democratic Yemen by setting up a workshop in Aden for basic community rehabilitation, which will provide training to 50-60 persons working to implement the programme. Foreign experts will set up and supervise the workshop, which will be the cornerstone of the Basic Community Rehabilitation Programme in Democratic Yemen.

Rädda Barnen has plans to run a 20- to 30-day training course for 25 local workers in the Community Rehabilitation Programme with the aim of providing the workshop with follow-up on the Basic Community Rehabilitation Programme. Foreign experts will participate in this training course.

Rädda Barnen plans to start a pilot project in Tuban District, Lahej Governorate, which will continue for two years, after which it will be evaluated and another area will be selected for the Community Rehabilitation Programme.

Steps will be taken to establish a Vocational Rehabilitation Centre with offices and rehabilitation training rooms, which could be in the Institution for Vocational Training, at present situated in Al-Mansura quarter in Aden, in the Centre for the Blind in Al-Ma'alla quarter in Aden or in one of the hospitals of the Ministry of Health.

Programme objectives are as follows:

(a) To develop basic principles and to publish booklets promoting vocational rehabilitation services for persons with motor disabilities;

(b) To train at least 30 local government employees to provide basic services to this category of disabled persons;
(c) To train an expert supervisor for the project to be head of the rehabilitation programme services;

(d) To develop a rehabilitation unit in the Department of Local Government in order to provide effective and capable rehabilitation services in the centre;

(e) To train vocational rehabilitation planning and training personnel at local, regional and international levels and to organize fact-finding trips to familiarize them with services provided to the disabled;

(f) To train 120 persons with motor disabilities in the Vocational Rehabilitation Centre;

(g) To employ 30 of the above in income-generating jobs;

(h) To equip the Centre with the necessary machines and equipment for vocational work;

(i) After the successful completion of the Vocational Rehabilitation Centre experiment, to extend the experiment to other governorates.

III. GOVERNMENT POLICIES

The State is concerned with the disabled as a social category that is in dire need of social welfare and the provision of services. However, such welfare should not be understood as simply charitable or merciful financial assistance to alleviate their suffering. Rather, the social welfare and the assistance should enable them to be self-reliant and to become integrated in society and economic activity. The State emphasizes the need for consultations with disabled persons and associations for the defence of their rights in order to enact legislation guaranteeing their rights and interests, since these parties are those that best understand their problems and are working to solve them.

The State participated in the activities of the International Year of the Disabled, 1981. By resolution 36 of the Council of Ministers in 1980 the National Committee for the International Year of the Disabled was established, with the following tasks:

(a) To make the necessary and appropriate suggestions for the care of the disabled;

(b) To provide social welfare for the disabled, benefiting from aid provided by international and regional organizations in this field;

(c) To devote more attention to existing institutions for the blind;
(d) To investigate the possibility of establishing new institutions for other categories of the disabled;

(e) To alert public opinion to the problem of the disabled;

(f) To establish sub-committees at the governorate level, chaired by the chiefs of the executive bureaux and the Governors;

(g) To co-ordinate with the sub-committees at the governorate level to undertake various activities.

The Committee undertook the study of the areas of and opportunities for training which could be provided to the disabled to enable them to join the work-force.

By resolution 135 of the Council of Ministers in 1986 the National Commission for the Welfare of the Disabled was established, headed by the Vice-Minister of Health. The secretariat was entrusted to the Department of Local Government and membership was granted to numerous ministries responsible for social services, as well as certain mass organizations. The tasks of this Commission were defined as follows:

(a) To assist the disabled to adjust psychologically and occupationally to the community and to support national and international efforts to aid the disabled, train them, care for them, rehabilitate them and endeavour to integrate them in the community;

(b) To encourage specialized research and studies aimed at helping the disabled to participate in the activities of everyday life;

(c) To seek to adopt effective measures to hinder the occurrence of disabilities and to endeavour to rehabilitate the disabled in order for them to recover their capacity for production;

(d) To raise people's awareness of the rights and duties of the disabled concerning their participation in economic, social and political life and the contribution of their efforts to building the community;

(e) To plan care programmes for the disabled;

(f) To contact regional and international organizations on matters of assistance to the disabled and to exchange experience in this field.

In the Constitution adopted in 1978, the State guaranteed the rights of the disabled and the provision of care to them. Article 39 of the Constitution stipulated the following: "workers have a right to social security, health and occupational safety. The State guarantees full care for the disabled or the elderly."
The State has also guaranteed, in various pieces of legislation, care and services to the disabled. Basic Labour Law 14 (1978), article 5a, stipulates the following: "Work is a natural right of all citizens and a duty for all those capable of working, with the corresponding conditions, opportunities, guarantees and rights, without discrimination on the grounds of age, race, colour, beliefs or language. The State guarantees the right to work through increasing and progressive planning to develop the national economy in all domains."

The State also strives to provide security and occupational safety. It checks that the work place or building is safe and has sufficient space for workers to move in, which is conducive to health and occupational safety. Basic Labour Law 14 (1978), article 77, stipulates the following:

"(a) All enterprises shall introduce modern means of production to ensure health and occupational safety for employees;

(b) All enterprises shall provide a proper health environment to employees, including equipment, appliances, protective clothing to protect workers from industrial accidents and occupational diseases within the enterprise."

The State has forced employers to take appropriate measures to protect workers from industrial accidents.

Basic Labour Law 14 (1978), article 78 a, stipulates the following: "the enterprise management shall provide guidance and bring to the attention of the worker before he is engaged the occupational hazards and the protection procedures he should observe during work."

The State endeavours to curtail a growth in the number of disabled persons and is taking the appropriate steps to increase the provision of health, prevention and care services to all rural areas.

Priority is given to the Primary Health Care Programme. The number of primary health care units rose to 353 in 1987.1/ There is also a hospital for psychological and nervous illnesses in Aden Governorate with a capacity of 470 beds. There is a maternity and children's hospital in Aden Governorate with a capacity of 300 beds. The Programme includes the following main elements:

(a) Education concerning prevalent health problems and means of prevention and control;

---

(b) Improved provision of food and health nutrition;

(c) Sufficient provision of safe water and basic sanitation;

(d) Health care for mothers and children, including family planning;

(e) Immunization against the main infectious diseases;

(f) Protection against and combating local endemic diseases;

(g) Treatment of common diseases and accidents;

(h) Provision of basic drugs.

Health services also include:

(a) A campaign against malaria;

(b) A campaign against tuberculosis, malaria and bilharzia;

(c) A campaign against infectious eye diseases.

Infectious eye diseases such as trachoma are prevalent in Democratic Yemen. These diseases are now treated in hospitals and clinics. In 1987 there were recorded 153 cases of leprosy, 26 cases of infantile paralysis, 48,266 cases of malaria and 3,436 cases of pulmonary tuberculosis.1/ The following health measures are being taken to combat these diseases:

(a) Treatment of children in nursery schools and schools;

(b) Treatment of patients in remote villages and cities by mobile medical teams;

(c) Continued treatment in clinics, hospitals, health centres and units, mother and child care centres and other health institutions.

A. Department of Occupational Health

The Department of Occupational Health was established within the Ministry of Health in 1975 in order to study working conditions in industrial and other production enterprises and to ascertain existing working conditions, the number of workers in each enterprise and the type of prevention measures adopted. An effective mechanism was established to inform the Department of Occupational Health of industrial accidents and other health problems.

B. Association for the Care of the Blind

The Association for the Care of the Blind was established in February 1962 and registered with the Ministry of Labour and Social Affairs; its headquarters was in the Institute of Hope for the Blind in Al-Ma’alla, Aden Governorate. In the early 1980s an idea was put forward to establish a federation for the care of the blind in place of the Association, and statutes for the federation were drawn up. The Ministry of Justice and Awqaf (Religious Endowments) is agreed in principle, but it has been felt preferable to delay its establishment and to continue care for the blind within the framework of the Association. In order to provide a link between blind people and to expand the work of the Association to include care for all blind people in the country, a branch of the Association was established in Hadhramawt in 1979. The Association has the following objectives:

(a) To improve the conditions of the blind, in co-operation with government social service institutions;

(b) To establish a library for the blind with scientific, cultural and artistic books in Braille;

(c) To eradicate illiteracy among the blind;

(d) To raise cultural and political consciousness among the blind;

(e) To have contacts with federations, associations and other relevant bodies abroad in order to exchange information on improving the cultural and social level of the blind;

(f) To provide musical and recreational instruments and to start an orchestra with the aim of developing the artistic sense of the blind.

The Association carries on activities in the following fields:

(a) Bringing the blind together and organizing daily meetings in the Association's headquarters;

(b) Maintaining an orchestra which participates in various occasions and ceremonies;

(c) Issuing publications and magazines concerned with the blind and the activities of the Association;

(d) Organizing a sports league for the blind which includes various recreational games.

The Association is affiliated with the World Blind Union, of which Democratic Yemen is a member; a representative of the Department of Local Government participates in meetings of the Union. The Association is also in
touch with similar organizations and associations in friendly and fraternal
countries, such as the Kuwaiti Care Association, the Libyan Light Association
and the Association for the Care of the Blind in Tunisia. In 1980, there was
an attempt on the part of the Association to contact the Middle East Committee
for the Care of the Blind when participating in the Arab Camp held in Bahrain
in 1980.

The Association faces the following difficulties:

(a) Lack of an annual budget;

(b) Cramped headquarters, which hamper expansion of the activities of the Association;

(c) Lack of artistic and cultural facilities (book and sound recording libraries);

(d) Lack of university qualifications and internal and external training courses for care workers.

IV. INSTITUTES AND SERVICES

There are Institutes for the Care of the Blind in Aden and Al-Mukalla in
Hadhramawt Governorate, founded in 1951 and 1972 respectively. After
independence on 30 November 1967 the work of both Institutes was organized by
their supervisory body, the Ministry of Labour and Social Affairs; they now
come under the Department of Local Government. The Institutes have the
following objectives:

(a) To provide care and rehabilitation to the blind and to train them in
certain skills and trades which match their physical abilities, thus to
enable them to earn a living by themselves and to serve the community;

(b) To prepare blind children for everyday life in their own environment;

(c) To impart to blind children a sense of pride in their country and
their Arab roots.

A. Institute of Light for the Blind, Aden

The Institute of Light for the Blind was founded in 1951 by the Aden
Association with private donations. It moved to its present building in
Al-Ma'alla in 1960 (its premises cover one acre). It provided financial and
material assistance, but had no well-developed study or vocational departments
to raise the economic, social and cultural level of the blind.
1. Vocational Department

During the Three-Year Development Plan (1971/72-1973/74), the Study and Vocational Departments of the Institute were renovated. The Institute now has a Vocational Department with 12 full-time trainees, not counting part-time external trainees. There are four instructors, two male and two female, all of whom have secondary-school qualifications; one of the female instructors has had training in Egypt and one of the male instructors has a diploma from a music institute. Trainees engage in basket weaving and palm-leaf plaiting.

2. Study Department

The Study Department comprises three classes of the common primary education cycle (eight years). The total number of pupils at the Institute is 13, with 8 (6 male and 2 female) in the first grade, 2 in the second grade and 3 in the seventh grade. After completing the primary level in the Institute pupils are transferred to secondary schools for the sighted. While at the primary level in the Institute they follow the Ministry of Education curriculum with teaching materials printed in Braille. In the past few years the Institute has sent some of its pupils to government offices for training as switchboard operators in those offices. In 1988 the number of blind people working as switchboard operators was around 65.1/ The Institute also runs literacy classes and it has planned a campaign to eradicate illiteracy among blind government workers.

The Institute provides health care for the blind, and in co-ordination with the Ministry of Health it arranges for doctors to examine the blind (one day a week). Some trainees in the Institute have been given training in nursing.

The State broadcasts radio and television programmes on the activities and hobbies of the blind in order to familiarize the public with them and to change popular conceptions, thereby giving the blind self-confidence in their own abilities and their capacity to develop them.

In 1987, the Association for the Blind formed an orchestra which plays at various ceremonies and other occasions. The Institute faces difficulties owing to the scarcity of State funds. As a result, it is unable to expand its vocational training programme or to diversify the trades in which it trains its students. It also occupies cramped quarters, which does not favour the admission of blind pupils from other governorates. The Institute can take six pupils as boarders. The building also lacks a physiotherapy room and a cultural club.

1/ Association for the Blind, The Blind and the Contexts of their Activities (in Arabic) (Aden, 1989).
B. Institute of Light for the Blind, Hadhramawt

The Institute of Light for the Blind in Hadhramawt Governorate was founded in 1972, further developed during the First Five-Year Plan for Economic and Social Development (1974-1978) and inaugurated in 1975. The Institute's Vocational Department has 32 full-time trainees, who are given a monthly allowance of YD 25 while in training, which lasts between one and two years, after which trainees are given full-time employment in one of the Institute's workshops. There are six instructors. Trainees engage in various types of palm-leaf plaiting (2), bookbinding (3), decoration (4), handweaving (5) and training as switchboard operators. There is also a Study Department where pupils follow the Ministry of Education curriculum in Braille; other tactile study-aids are also used and music is a core subject. There are nine pupils in the Institute.

The Institute's orchestra participates in various celebrations and other national and international occasions. The Institute takes part in exhibitions organized on national occasions and it participates in camps organized by the Regional Bureau for Arab and Islamic States for the Integration of the Blind. The Institute organizes study trips to archaeological sites. It also holds festive events in rural areas, ploughing the proceeds back into the Institute.

C. House of the Elderly and the Disabled, Aden

The House of the Elderly and the Disabled was founded at Shaikh Uthman, in Aden Governorate in 1956, on grounds covering one acre. It provides care to the elderly and the disabled in separate sections for men and women. In 1988 there were 28 elderly men and 11 elderly women in care. There were also two boys and two girls. Services are managed by a director, a head nurse and a secretary. In all, 20 nurses work in the House, 16 female and 4 male. General staff totals 14 (cooks, cleaners, dishwashers, a driver, a guard, etc.).

The House has difficulty in providing appropriate services to inmates, owing to the age of the building, which needs to be rebuilt and renovated; services also need to be developed.

In addition to providing the disabled with opportunities for study in the House, certain categories of the disabled, such as the deaf and dumb, the mentally retarded and paralytics are sent to other institutions. If there are no opportunities for study in institutions within the country these categories are sent to Kuwait and the United Arab Emirates.
Table 5. Pupils in educational institutions for the disabled in Kuwait and the United Arab Emirates in 1986

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Pupils in Kuwait</th>
<th>Pupils in Arab Emirates</th>
<th>Total</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf, dumb</td>
<td>17</td>
<td>6</td>
<td>23</td>
<td>Primary, preparatory</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>11</td>
<td>-</td>
<td>11</td>
<td>Primary, intermediate, secondary</td>
</tr>
<tr>
<td>Paralytics</td>
<td>8</td>
<td>-</td>
<td>8</td>
<td>Primary, intermediate, secondary</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>6</strong></td>
<td><strong>42</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Department of Local Government, Committee to Study the Conditions of the Disabled, *Study of the Conditions of Disabled Children in Democratic Yemen* (in Arabic) [no date of publication], p. 7.

Other groups also need to be sent abroad for study. The number of persons seeking grants for such study is 90, distributed according to disability as follows:

Table 6. Children seeking grants for study abroad in 1986

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Number of persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf, dumb</td>
<td>11</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>49</td>
</tr>
<tr>
<td>Paralytics</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

**Source:** Department of Local Government, Committee to Study the Conditions of the Disabled, *Study of the Conditions of Disabled Children in Democratic Yemen* (in Arabic) [no date of publication], p. 7.
V. NUMBER OF DISABLED

There are no statistics available in Democratic Yemen which indicate the extent of the problem or the various types of disability. No questions on disability were included in the General Census of Population and Housing of 1973, however these questions were taken into consideration in drawing up the return forms for the Second General Census of Population, Housing and Installations of 1988, which included a questionnaire for disabled persons to ascertain the origin (congenital, acquired) and type of their disability (missing one hand, both hands, one leg, both legs, blind, one-eyed, deaf or dumb, feeble-minded, paralysed, other).

The first and second phases of the Economic and Social Survey carried out in certain regions of the country in 1974-1975 included some questions on the disabled. The survey took in Abyan and Hadhramawt Governorates and showed that acquired disabilities were more common than congenital disabilities, comprising 78 per cent in the regions of Al-Mukalla and Ash-Shihr in Hadhramawt Governorate, 74 per cent in Saywun District, Hadhramawt Governorate and 77 per cent in Abyan Governorate. Congenital disabilities accounted for 22 per cent in Al-Mukalla and Ash-Shihr, Hadhramawt Governorate, 26 per cent in Saywun District, Hadhramawt Governorate and 23 per cent in Abyan Governorate.

A study of disabled persons in Aden Governorate was undertaken by the Department of Local Government in 1980 on a sample of 2,821 persons gave 1,719 males or 60.9 per cent and 1,102 females or 39.1 per cent. Of those figures, 24 per cent of males and 21.8 per cent of females were in the youngest, 0-14 age group; 55.3 per cent of males and 53.6 per cent of females were in the 15-59 age group; and 20.5 per cent of males and 24.5 per cent of females were in the 60 and over age group. Combined percentages for males and females together were 23.3 per cent in the 0-14 age group, 54.6 per cent in the 15-59 age group and 22.1 per cent in the 60 and over age group.
Table 7. Distribution of disabilities according to age and type in Aden Governorate, 1980

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>0-4</td>
<td>70</td>
<td>4.1</td>
<td>44</td>
</tr>
<tr>
<td>5-9</td>
<td>165</td>
<td>9.6</td>
<td>85</td>
</tr>
<tr>
<td>10-14</td>
<td>181</td>
<td>10.5</td>
<td>112</td>
</tr>
<tr>
<td>15-19</td>
<td>169</td>
<td>9.8</td>
<td>106</td>
</tr>
<tr>
<td>20-24</td>
<td>102</td>
<td>5.9</td>
<td>67</td>
</tr>
<tr>
<td>25-29</td>
<td>87</td>
<td>5.1</td>
<td>43</td>
</tr>
<tr>
<td>30-34</td>
<td>82</td>
<td>4.8</td>
<td>57</td>
</tr>
<tr>
<td>35-39</td>
<td>87</td>
<td>5.1</td>
<td>57</td>
</tr>
<tr>
<td>40-44</td>
<td>108</td>
<td>6.3</td>
<td>72</td>
</tr>
<tr>
<td>45-49</td>
<td>109</td>
<td>6.3</td>
<td>69</td>
</tr>
<tr>
<td>50-54</td>
<td>117</td>
<td>6.8</td>
<td>78</td>
</tr>
<tr>
<td>55-59</td>
<td>90</td>
<td>5.2</td>
<td>42</td>
</tr>
<tr>
<td>60 and over</td>
<td>352</td>
<td>20.5</td>
<td>270</td>
</tr>
<tr>
<td>Total</td>
<td>1 719</td>
<td>100.0</td>
<td>1 102</td>
</tr>
</tbody>
</table>

Source: Department of Local Government, Office of Planning and Development, Study of the Disabled in Democratic Yemen (in Arabic) [no date of publication], p. 8.

The economic and social study carried out in Aden Governorate in 1980 showed a rise in the proportion of males and females with partial paralysis, 21 per cent; mental weakness, 20.4 per cent; and blindness, 11.5 per cent. Table 8 gives the distribution of disabled persons.
### Table 8. Type of disability according to sex in Aden Governorate, 1980

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>Blindness</td>
<td>205</td>
<td>6.70</td>
<td>147</td>
</tr>
<tr>
<td>Poor sight</td>
<td>126</td>
<td>4.12</td>
<td>115</td>
</tr>
<tr>
<td>Deafness</td>
<td>165</td>
<td>5.40</td>
<td>106</td>
</tr>
<tr>
<td>Dumbness</td>
<td>134</td>
<td>4.39</td>
<td>118</td>
</tr>
<tr>
<td>Loss of hand</td>
<td>46</td>
<td>1.50</td>
<td>16</td>
</tr>
<tr>
<td>Loss of leg</td>
<td>68</td>
<td>2.22</td>
<td>31</td>
</tr>
<tr>
<td>Loss of both legs</td>
<td>4</td>
<td>0.13</td>
<td>7</td>
</tr>
<tr>
<td>Partial paralysis</td>
<td>417</td>
<td>13.64</td>
<td>225</td>
</tr>
<tr>
<td>Total paralysis</td>
<td>41</td>
<td>1.34</td>
<td>23</td>
</tr>
<tr>
<td>Mental weakness</td>
<td>393</td>
<td>12.85</td>
<td>231</td>
</tr>
<tr>
<td>Loss of eye</td>
<td>63</td>
<td>2.06</td>
<td>27</td>
</tr>
<tr>
<td>Leprosy</td>
<td>7</td>
<td>0.23</td>
<td>3</td>
</tr>
<tr>
<td>Nervous diseases</td>
<td>25</td>
<td>0.82</td>
<td>19</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>57</td>
<td>1.86</td>
<td>31</td>
</tr>
<tr>
<td>Other</td>
<td>112</td>
<td>3.66</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>1863</td>
<td>60.92</td>
<td>1189</td>
</tr>
</tbody>
</table>


In a study of the situation of the disabled in Democratic Yemen undertaken by the Department of Local Government in 1981, the number of disabled was estimated at 126,886, distributed according to governorate as follows:

### Table 9. Estimated number of disabled according to governorate in 1981

<table>
<thead>
<tr>
<th>Governorate</th>
<th>1981 population (thousands)</th>
<th>Estimated number of disabled persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aden</td>
<td>357</td>
<td>46 000</td>
</tr>
<tr>
<td>Lahej</td>
<td>336</td>
<td>60 480</td>
</tr>
<tr>
<td>Abyan</td>
<td>382</td>
<td>6 876</td>
</tr>
<tr>
<td>Shabwah</td>
<td>199</td>
<td>2 985</td>
</tr>
<tr>
<td>Hadramawt</td>
<td>603</td>
<td>9 045</td>
</tr>
<tr>
<td>Al-Mahrah</td>
<td>75</td>
<td>1 500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 952</strong></td>
<td><strong>126 886</strong></td>
</tr>
</tbody>
</table>

### Table 10: Estimated Population According to Age Group, Sex and Governorate, 1988

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Aeden</th>
<th>Lahj</th>
<th>Abyan</th>
<th>Shabwah</th>
<th>Hadramawt</th>
<th>Al-Mahrah</th>
<th>Country-wide total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td>0-4</td>
<td>35</td>
<td>35</td>
<td>70</td>
<td>36</td>
<td>35</td>
<td>71</td>
<td>44</td>
</tr>
<tr>
<td>5-9</td>
<td>35</td>
<td>32</td>
<td>67</td>
<td>36</td>
<td>34</td>
<td>70</td>
<td>43</td>
</tr>
<tr>
<td>10-14</td>
<td>27</td>
<td>21</td>
<td>48</td>
<td>25</td>
<td>23</td>
<td>48</td>
<td>28</td>
</tr>
<tr>
<td>15-19</td>
<td>20</td>
<td>17</td>
<td>37</td>
<td>16</td>
<td>18</td>
<td>34</td>
<td>17</td>
</tr>
<tr>
<td>20-24</td>
<td>15</td>
<td>15</td>
<td>30</td>
<td>11</td>
<td>13</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>25-29</td>
<td>18</td>
<td>16</td>
<td>34</td>
<td>14</td>
<td>14</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>30-34</td>
<td>17</td>
<td>13</td>
<td>30</td>
<td>10</td>
<td>12</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>35-39</td>
<td>17</td>
<td>12</td>
<td>29</td>
<td>11</td>
<td>11</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>40-44</td>
<td>11</td>
<td>7</td>
<td>18</td>
<td>7</td>
<td>8</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>45-49</td>
<td>9</td>
<td>6</td>
<td>15</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>50-54</td>
<td>7</td>
<td>6</td>
<td>13</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>55-59</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>60-64</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>65-69</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>70 and over</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total**: 226 191 417 193 199 392 220 226 446 109 123 232 336 368 704 43 44 87 1 127 1 151 22 787

VI. CONCLUSION

The following measures should be adopted:

1. To develop care services for the disabled and the elderly in both the Institutes for the Blind and the House of the Elderly and the Disabled in Shaikh Uthman, Aden;

2. To find specialized management and scientifically qualified personnel to work in the field of care for the disabled in the above-mentioned institutions;

3. To expand the buildings of the Institutes for the Blind and to equip them with a cultural club, library, sports hall and physiotherapy room for the disabled;

4. To improve boarding facilities and increase their capacity, and to improve the quality of food served in the Institute's cafeteria;

5. To create specialized institutes for the various categories of the disabled: the deaf, the dumb, the paralytic;

6. To give the institutes and the House of the Elderly and the Disabled statutes to enable them to provide the appropriate health and social care to the disabled;

7. To study the professions and trades for which the disabled could be trained in order to provide them with opportunities for employment;

8. To have the media devote attention to programmes on the activities of the disabled and their integration in the community in order to make public opinion aware of their problems and to change social attitudes towards them so that the community may provide social care and assistance to the disabled;

9. To organize a training course for staff in the Institutes for the Blind and social welfare officers for the disabled.
References

Helander, Einar. The principles of community-based rehabilitation. Geneva, 

Henley, David (Consultant to Rädda Barnen [the Swedish Save the Children 
Federation]). Rehabilitation for all in the People's Democratic Republic 

- دستور جمهورية اليمن الديمقراطية الشعبية الصادر في عام 1978.
- قانون العميل الأساسي رقم (14) لعام 1978 "جمهورية اليمن الديمقراطية الشعبية".
- قانون الشأن الاجتماعي للعاملين رقم (1) لعام 1980، وزارة العميل والخدمة 
المدنية - جمهورية اليمن الديمقراطية الشعبية.
- الإدارة العامة للحكم المحلي، بحث عن وضع المكفوفين في اليمن 
الديمقراطي، دائرة التخطيط والتنمية - عدن، أيار/مايو 1978.
- الإدارة العامة للحكم المحلي، دراسة عن وضع المكفوفين عن الأطفال في 
اليمن الديمقراطية، إعداد لجنة دراسة وضع المكفوفين المشكلة بقرار 
مجلس الوزراء رقم (78) لعام 1981.
- الإدارة العامة للحكم المحلي، السنة الدولية للمكفوفين، جمهورية اليمن 
الديمقراطية الشعبية 1981، دائرة التخطيط والتنمية - عدن، كانون 
الثاني/يناير 1983.
- الإدارة العامة للحكم المحلي، الدراسة الاجتماعية والاقتصادية للمكفوفين، 
محافظة عدن، 1980.
- جمعية رعاية المكفوفين، تنظيم وتجديد أصليّة الرعاية الاجتماعية السائدة 
حاليا في مهد النور للمكفوفين، محافظة عدن 1989.
- النظام الداخلي لجمعية رعاية المكفوفين، بدون سنة الإصدار.
- وزارة التخطيط، الإعداد الأساسية في مشكلة الإعاقة (بدون سنة الإصدار).
- الجهاز المركزي للإحصاء، التعداد العام الثاني للسكان والبيئاكن والبيئات 
- الجهاز المركزي للإحصاء، كتاب الإحصاء السنوي لعام 1988، العدد الخامس، 
XXII. THE SITUATION OF THE DISABLED IN EGYPT

by

M. A. S. el-Banna
Summary

According to the latest census of 1986, the population of Egypt was 50,445,000. The number of disabled people is around 5 million persons, while some 1.5 million people are in need of active rehabilitation services. Data on disabled persons in the 1976 census and the Health Interview Survey (1979-1985) are presented. The results are classified according to the method used by the World Health Organization (WHO). The prevalence rate (PR) of disability in the Health Interview Survey was 1,522 per 100,000. Disability was more frequent in rural than in urban areas, especially in rural areas without health centres.

The rate of disability tended to increase gradually in the young, remain stationary in middle age, and increase rapidly in old age. Disability was more frequent in males than in females. Chronic illness was responsible for 43.5 per cent of all cases of disability, congenital defects 20.5 per cent, non-work accidents 6.8 per cent, work accidents 4.8 per cent and other unknown causes 24.4 per cent. Visual impairment had a PR of 633 per 100,000. It was more prevalent in rural areas, especially in those areas without health centres; it was lowest in young people, then rose gradually and reached a peak in people over 60. Partial impairment was more frequent than total blindness (2:1). Hearing impairment had a PR of 205/100,000. Impairment increased gradually with age, becoming rapid in old age. Partial hearing was more common than complete deafness. Locomotor impairment was more frequent in urban than in rural areas. It was classified into lower limb impairment, upper limb impairment and vertebral column impairment. It was more frequent in people aged 20-30 and in those over 60. Mental impairment, which includes the mentally handicapped and mentally ill had a PR of 122/100,000. It included only severe cases. The incidence of mental impairment was most marked in people aged 20-30, and less marked in the over 60s. A detailed analysis of the duration, management and the effect of disability on work is presented, together with a series of tables and figures. Services for the disabled in Egypt are provided by the Ministry of Health, Ministry of Education, Ministry of Social Affairs, Ministry of Manpower, Ministry of Information and Ministry of Defence. Egypt's rehabilitation law lays down a quota of 5 per cent of jobs to be reserved for the disabled. These services are explained and policy issues are discussed.

Summary of recommendations

With the adoption of the United Nations Decade of Disabled Persons, 1983-1992 and the World Programme of Action concerning Disabled Persons, every effort should be made to expand the participation and membership of disabled people in community life and to intensify governmental and non-governmental action to achieve the goals of the Decade. A recommended programme of action to be implemented nationally, and perhaps co-ordinated regionally and internationally, is presented. This includes the following: the prevention of disability, especially that caused by congenital defects and work accidents,
early detection and intervention, the expansion of special education programmes and the establishment of a pre-school community-based service for disabled children and their families, the development of vocational rehabilitation services and employment for the severely disabled, the rehabilitation of elderly persons, the application of technology, the removal of environmental barriers and public campaigns to project a more positive image of the disabled, the training of rehabilitation staff and co-ordination with the United Nations to improve the lives of the disabled.

A. Basic information

According to the latest census of 1986, the population of Egypt was 50,455,000. The annual population growth rate was 1.5 per cent at the beginning of the century. Thereafter it fell for a period and began to rise rapidly to 2.5 per cent in the early 1960s; between 1980 and the present, it reached 3 per cent. There are 104.7 males for every 100 females. The population inhabits about 6 per cent of the total area of Egypt, which is 1 million square kilometres. According to 1986 census, 43.3 per cent of the population lived in urban areas and 56 per cent lived in rural areas. Sixty per cent of the total urban population lived in greater Cairo and Alexandria. The population density was over 1,450 persons per square kilometre, but in Cairo the density reached 26,148 persons per square kilometre. Thirty-four per cent of the population was under 12 years of age and 3 per cent was over 65 years.

The number of disabled persons in Egypt, as declared officially by the Government, public agencies and the media, is 5 million persons. This figure follows the World Health Organization's (WHO) estimate of 10 per cent disability in any population. However, there is no reliable statistical proof of the accuracy of this number.

Nevertheless, Egypt is fortunate in that there has been a national census every 10 years since 1907 containing data on disabilities. The latest three censuses were in 1960, 1976 and 1986. The results of the 1986 census have not yet been published.

In the 1907 census, 4.7 per cent of the Egyptian population was found to be disabled utilizing only four categories of impairment. In the 1960 and 1976 censuses more data on additional categories of impairments, classified according to types by age, sex distribution and occupational attainment was obtained. The population of Egypt in 1960 was 25,984,101; disabled persons constituted 1.6 per cent of the population.

The population of Egypt in the 1976 census was 36,510,849; disabled persons constituted 0.3 per cent of the population. There is no doubt that the number of disabled persons in the 1976 census was underestimated. Tabulations of statistics on disabled persons in 1907, 1960 and 1976 are included in tables 1 and 2 for comparison.
B. Health Interview Survey

After the results of the 1976 census were published, it became evident that realistic up-to-date information on disabilities in Egypt was urgently needed. Consequently, it was decided to include disability in the Health Interview Survey (HIS). This Survey formed part of a five-year national research project for the period 1977 to 1984. The main objective of this project was to collect basic information on the health status of Egyptians, as well as related factors which affected this.

The HIS was carried out on a sample of 1 per cent of the population in 20 governorates, including Cairo, and according to the 1976 census it was representative of the whole of Egypt. The sample covered 55,174 households: 23,220 in urban areas, 26,189 in rural areas with health centres and 5,765 in rural areas without health centres. These families included 225,737 individuals, 48,607 of whom were children in the pre-school age group and 177,130 others were over six years of age.

A controlled selection technique was used to divide the sample into three cycles, each representing the nation as a whole. The final results included the average of each cycle. This technique produced estimates of rare conditions and improved the precision of the estimation. Considerable care was taken over definitional issues of disability.

The classification scheme applied in the Survey was the World Health Organization (WHO) 1980 international classification. The data of the survey was presented as follows:

1. Prevalence rate of disability

(a) Of the total sample of 225,737 persons, 3,436 were recorded as being disabled, giving a prevalence rate (PR) of 1,522 per 100,000. From this it can be concluded that 1.5 per cent of the population of Egypt was disabled;

(b) Effect of the area: disability was found to be slightly more frequent in rural than in urban areas, and more frequent in rural areas without health centres.

(c) Age: the disability rate tended to increase gradually in the young, increase rapidly during old age and remain stationary in middle age.

(d) Sex: disability was more frequent in males than in females, with a ratio of 1.5:1.0.

2. Types of impairment

(a) Visual impairment

The incidence of visual impairment was 28.3 per cent; the PR was 633 per 100,000 persons. The PR for total blindness was 203 per 100,000 people.
Partial impairment was at least twice as frequent as total blindness (2.2:1.0 in rural areas and 2.0:1.0 in urban areas), for all ages. Visual impairment was most common in rural areas, especially in those without health centres.

(b) **Hearing impairment**

The PR of hearing impairment was 209 persons per 100,000. It was slightly more frequent in rural than in urban areas. Partial hearing impairment was more frequent than complete deafness (the ratio was 1.2:1.0). Complete deafness predominated over partial impairment in the newly born and young, while the reverse was true for the middle-aged and elderly. The PR of complete deafness was 94 per 100,000 persons.

(c) **Speech impairment**

The average PR of speech impairment was 189 per 100,000 persons. Impairment was more frequent in urban than in rural areas. Complete speech impairment was slightly more frequent than partial impairment.

(d) **Locomotory impairment**

(i) The PR of lower limb impairment was 653 per 100,000 persons. It was found to be more frequent in urban than in rural areas;

(ii) The PR of upper limb impairment was 308 per 100,000 persons and was found to be more frequent in people of an active age (20-30 years); it affected the right side more than the left side;

(iii) The PR of vertebral column impairment was 53 per 100,000 persons; it was found to be slightly more frequent in urban than in rural areas, gradually increasing with age and becoming more common in old age.

(e) **Mental impairment**

Including both the mentally handicapped and mentally ill, the PR of mental impairment was 122 per 100,000 persons. Mental impairment was more frequent in urban areas than in rural areas. Impairment peaked at 20-30 years and was less marked in people over 60.

(f) **Chronic ill-health disability**

The PR for chronic ill-health disability was 77 per 100,000 persons. There was no difference with regard to area, but there was an abrupt rise in frequency after 60 years of age.

3. **Causes of disability**

In the total sample interviewed, the causes of disability were as follows:

(a) Chronic illness (responsible for 43.5 per cent of all disabilities);
(b) Congenital causes (20.5 per cent);
(c) Other causes (20.4 per cent);
(d) Non-work accidents (6.8 per cent);
(e) Work accidents (4.8 per cent);
(f) Unknown causes (4.0 per cent).

4. Duration of disability

Calculated from the date of onset to the date of the interview in the Survey, the duration of disability was described as:

(a) Short: less than 20 years;
(b) Moderate: from 20-50 years;
(c) Long: more than 50 years.

(a) Disability of short duration

In the sample, 67.5 per cent of cases had disabilities which had lasted for less than 20 years, of which 46.7 per cent had a duration of less than 10 years. This was more evident in urban areas than in rural areas, and found to be slightly more common among males than among females. It covered all the cases at the age of 20 years, about 45 per cent of cases in middle age (20-50 years) and more than half the cases (60 per cent) in old age (more than 50 years).

(b) Disability of moderate duration

Generally, this covered 20.9 per cent of all cases in the sample. It was more frequent in rural areas than in urban areas, and slightly more frequent among females than among males. It constituted half of the cases in middle age and decreased gradually with old age.

(c) Disability of long duration

Generally, this constituted 5.9 per cent of all cases. It was more frequent in rural than in urban areas, and was slightly more frequent among females than among males. The age group most affected was the over 50s.

(d) Disability of unknown duration

This constituted 5.7 per cent of all cases.

5. Effect of disability on work

The disabled in the Survey were divided into three categories:

(a) Those with a definite work status before being disabled. They represented 74.7 per cent of the sample. The ratio of males to females was (1.26:1). It was found that 38.9 per cent of these people were able to work
after being disabled; the other 60.1 per cent were unable to work. Of those who were able to work again, 18.8 per cent went back to the same work after being disabled.

(b) Those with an unknown work status before being disabled. They represented 5.6 per cent of disabled persons. The rate was almost the same in both urban and rural areas and for both sexes.

(c) Those with an unknown work status before being disabled, or those who gave no definite answer. They represented 19.7 per cent of the total sample. The rate was almost the same in both rural and urban areas, but was more frequent among females than among males (2.3:1) in both areas.

6. Management of disability

It was found that 38.8 per cent of disabled persons needed the help of other human beings, mostly for daily living activities such as walking, dressing, climbing stairs, etc. Also 8.8 per cent of the disabled needed medical treatment, 7.3 per cent needed physical therapy and 6 per cent needed surgical treatment. The percentage of the disabled fitted with prostheses and orthoses was 9.9 per cent. For the total sample, insurance covered 5.9 per cent of the costs involved and compensation received covered 1.9 per cent.

7. Conclusion

According to the HIS,\(^1\) which is the most recent and scientifically-controlled survey to be carried out, 3,436 of the total sample of 225,737 persons were disabled, which gives a PR of 1,522 per 100,000 persons. This suggests that there are 761,000 disabled persons in the whole of Egypt. Careful analysis of this Survey reveals that mild degrees of mental handicap, and mild forms of hearing impairments were not recorded. If proper estimates of these cases were to be added, the percentage of the disabled in Egypt would be around 3 per cent.

However, if cases of mild locomotory disorders and physical disability were also added, the percentage of the disabled in Egypt would be around 10 per cent. Therefore, if the number of disabled is estimated to be 10 per cent of the population, those in need of active rehabilitation services would be around 3 per cent.

C. Services for the disabled in Egypt

Services for the disabled are provided by various governmental and private organizations. The main ministries involved are the Ministry of Social Affairs, the Ministry of Education, the Ministry of Manpower, the Ministry of Defence and the Ministry of Information.

---

\(^1\) Tables 1 to 3 and figures I to IX show the various statistical results of the Survey.
1. The Ministry of Education

The Ministry of Education is responsible for educational services for the disabled through its special educational programme. The special educational programme is conducted in special schools and covers the following disabilities:

(a) The blind and partially sighted. Children who are completely blind and have a visual acuity of less than 6/60 after correction with glasses can apply to attend schools for the blind and partially sighted from the age of 6-8 years. Children are eligible to continue to preparatory and secondary level up to university after six years in primary education.

There are 16 such schools in Egypt located in Cairo, Alexandria and other governorates with a student enrolment of 1,070.

Schools for the partially sighted admit children from the age of 6-8 years who have a visual acuity of not more than 6/24 and less than 6/60 after correction by glasses. There are 10 schools (one in each governorate) with a student enrolment of 330.

There are also a number of vocational preparatory schools which cover the three years after primary education and prepare students for employment.

(b) The deaf and partially deaf. Specialized schools admit children between the ages of 3 and 7 who have a hearing level of between 120-70 decibels (dB) in the best ear and a hearing level of between 70-50 dB in the worst if they are of average intelligence but have no vocabulary. Schools for the partially deaf admit children with a hearing level of between 70 and 50 dB if they are of average intelligence and have a developed vocabulary that enables them to cope with the programme. They also admit children with hearing of between 50 and 25 dB if they wear a powerful hearing aid but are unable to continue in a normal school because of insufficient vocabulary. The deaf and partially deaf can continue their primary education for eight years before going on to preparatory schools for three years of vocational training. There is no secondary education for the deaf other than vocational training. There are 30 primary and 25 preparatory schools for the deaf located throughout the country, with a total enrolment of 4,833 students and 711 teachers.

(c) The mentally handicapped. Mentally handicapped children are admitted to schools known as schools for intellectual development. Children with an intelligence quotient (IQ) of between 50 and 70 are admitted to these schools between the ages of 6 and 12 provided they are psychologically stable. Students attend the primary stage for eight years and can go on to a vocational preparatory stage for a further three years. The total enrolment is 3,788 students. The total enrolment of handicapped students in the special education programme in Egypt is as follows:
Mentally retarded 4,656
Deaf 4,833
Blind 1,031
Partially sighted 1,970

Most schools are boarding schools. The decision to admit children to these schools is taken by the Committee for School Health Services on the basis of a medical examination to measure their vision and hearing and intellectual capacity. In addition, after an interview with the family, the social worker of the school makes an assessment and follows up each student individually. All rules for admission, curricula, examinations and various regulations are controlled by ministerial decree.

(d) The physically handicapped are fully integrated into normal schools.

2. The Ministry of Social Affairs

The Ministry of Social Affairs is responsible for the care of all disabled persons in Egypt. This service is regulated by Law No. 39 of 1975 on rehabilitation. These services are provided through the following:

(i) Rehabilitation offices. About 65 of these offices are distributed all over the country. They provide basic rehabilitation services for all of the cases referred to above, including medical, social and vocational evaluations, the provision of mobility aids, prosthetic and orthotic appliances and vocational training. Each case is followed up until a final placement is made. These rehabilitation offices basically supply community services but they can refer any case for specialized care and further treatment if needed.

(ii) Comprehensive rehabilitation centres. There are 35 centres distributed all over the country. Most specialize in various disabilities such as mental handicap, deafness, visual impairment and blindness and physical disability. Centres for the physically disabled have prosthetic and orthotic workshops and physical therapy facilities. In these comprehensive rehabilitation centres most of the staff are specialists in a particular field and research and demonstration programmes for the care of disabled have been carried out.

(iii) Sheltered workshops. These are intended for those with severe physical disabilities, the mentally handicapped, convalescent tuberculosis (TB) cases and those suffering from leprosy.

(iv) Private organizations. There are around 150 private organizations caring for the disabled, such as the Wafa wa Anal Society, the Society for the Future, the Right to Live, etc.
(a) Research programme

The Ministry of Social Affairs has an elaborate programme of rehabilitation research. This programme started in 1962 in conjunction with the Department of Health, Education and Welfare of the United States, then with the National Institute for Rehabilitation Research in Washington, D.C. The programme is now independent. More than 25 research programmes and projects have been carried out, e.g. the rehabilitation of the rural blind, rehabilitation of the deaf (using the Gouberina method), the severely disabled, psychiatric cases, drug abuse, the training of rehabilitation counsellors, programme evaluation, optic aids for people with poor vision, rehabilitation engineering, work evaluation, the homebound, geriatrics and the manufacture of prostheses and orthoses. The Ministry also supervises sport for the disabled. About 35,000 disabled people are involved each year. According to Law No. 39 of 1975 on rehabilitation, 5 per cent of all jobs in private and government enterprises employing more than 50 workers are reserved for the handicapped. The Ministry of Social Affairs issues a rehabilitation certificate for the handicapped after their vocational training so that they can be employed according to the law on rehabilitation.

3. The Ministry of Health

The Ministry of Health is responsible for primary health care throughout the country, including preventive measures and immunization. Medical and surgical treatment is provided in hospitals and in specialized centres. In 1976 the Ministry established the Poliomyelitis Institute for the control and treatment of this disease. Massive immunization campaigns have brought poliomyelitis under control to a great extent.

There is an orthotic workshop for braces in the Poliomyelitis Institute. There is also a hearing department for the provision of hearing aids and a few classes for primary education for the hard of hearing and poliomyelitis sufferers. Medical rehabilitation is practised in the general hospitals. The Ministry of Health also conducts an action research programme in community-based rehabilitation.

4. The Ministry of Manpower

The Ministry of Manpower is responsible for the employment of all disabled persons in Egypt, provided that every disabled person possesses a rehabilitation certificate from the Ministry of Social Affairs indicating the job or jobs the holder is capable doing, plus other relevant information about his/her disability. Disabled persons are registered in a special register in the offices for the employment of the disabled in the Ministry of Manpower. They are then provided with a letter of employment for suitable governmental or private agencies within the employment quota of 5 per cent laid down in Law No. 39 of 1975. All governmental and non-governmental agencies in Egypt which employ more than 50 persons must keep a register of disabled persons working in the agency. The staff of the Ministry of Manpower inspect these registers
and impose a penalty on any agency which breaks the quota system for the disabled. The penalty consists of a fine of 100 Egyptian pounds (LE) and imprisonment for one month.

5. The Ministry of Defence

The Ministry of Defence is responsible for rehabilitation of army staff and veterans. The programme is implemented in the departments of physical medicine and rehabilitation in military hospitals. The Ministry established the Agoza Rehabilitation Centre in Cairo for the comprehensive care of all disabled adults in 1956. The Centre is the second largest rehabilitation facility in Egypt after the Wafa wa Amal Society. The centre contains an out-patients department, 200 rehabilitation beds for people with severe disabilities (quadriplegia or paraplegia) a prosthetic and orthotic workshop, an occupational therapy department, a residential facility and homes for the disabled with independent training and long-term living facilities. The Centre caters for both civilian and army disabled.

6. The Ministry of Information

This year three television programmes are dedicated to the disabled: one for sports for the disabled, the second entitled "The challenge for the deaf" (using sign language) and the third deals with the integration of the disabled into the community.

7. Training of rehabilitation personnel

There are three universities in Egypt offering a Master of Arts (MA) degree and Ph.D programme in physical medicine and rehabilitation. The main focus is on physical disability and physical therapy. Some of the colleges of education and schools of social work give MA and occasionally Ph.D. degrees. The Ministry of Education has a special educational social rehabilitation programme for teachers in special education. This programme has two levels. The first level is for teachers in elementary schools. The teachers must spend five years in the Abbesia College of Education after obtaining preparatory school certification. They then spend one year in special education. The second level is for teachers in special education after the elementary school level. Teachers must hold a baccalaureate and a one-year diploma in a specific area of special education. This year the Ministry of Education requires that all teachers in special education must have a baccalaureate. There is still no university programme in special education in the 12 colleges of education in Egypt.

The Council of Research in the Ministry of Social Affairs began to offer a two-year course for rehabilitation counsellors in 1975. Fifty-five counsellors have graduated from this programme. The course has now been shortened to one year. Almost all of the training of social workers and psychologists working in rehabilitation is based on on-the-job training with a few short courses.
Vocational instructors in the sheltered workshop and institutions are graduates from technical secondary schools who are trained on the job. A few years ago, formal education for prosthetists and orthotists began at the technical secondary level. Two years are spent in the Poliomyelitis Institute before students graduate as grade II technicians in the field. University degrees in physical therapy (MA and Ph.D.) are offered at the Higher Institute of Physical Therapy, which is part of the Faculty of Medicine. There is no special school for occupational therapy in Egypt.

8. Government policy

Official government policy is based on the following:


(b) The ministerial decrees issued by the Ministry of Social Affairs regarding the regulations of rehabilitation programmes according to the law.

(c) The ministerial decrees issued by the Ministry of Education to control the special education programmes.

(d) Models for services to be offered by institutions, which are based on the results of rehabilitation research demonstration projects, e.g. the programme of the Egyptian Institute of Vocational Evaluation and Rehabilitation Engineering of the Council of Rehabilitation Research.

Law No. 39 states that every disabled person has the right to receive rehabilitation services. These services are provided free of a charge for citizens with low incomes, as specified by a decree issued by the Ministry of Social Affairs.

The law mainly focuses on services for the adult disabled. A quota of 5 per cent of jobs is reserved for the disabled. There is a penalty for any agency that breaks this rule. The law gives the disabled the right to prosecute the employer if they are eligible for the job but not employed, and they also have the right to receive a salary for the period of one year if during this time they have no job. In spite of the penalty and the right to prosecute, grievances against employing agencies are rarely taken to court. This is mainly because the disabled themselves do not know their rights or are unable to take a case to court. The employment of the disabled within the quota system works well for the mildly to moderately disabled, but the severely disabled face enormous difficulties. This is mainly owing to barriers at home or in the work place, the lack of vocational training programmes for the severely disabled and the difficulty of transportation. The Government offers free public transport to disabled persons, gives priority to the installation of telephones for the blind and a tax exemption of LE 1,500 for the private, modified cars of the disabled. Also under the law, mobility aids, wheelchairs, tricycles, braces and artificial limbs,
physical therapy, vocational training, hearing aids, glasses and dentures are standard services offered to the disabled. Institutions that care for the disabled are still considered the ideal solution for rehabilitation by policy makers.

The planning and organization of rehabilitation services is carried out separately by various ministries and organizations. According to the rehabilitation law, a Supreme Council for Rehabilitation was established. It is chaired by the Minister of Social Affairs, with 10 under-secretaries from the various ministries and six persons with a special interest who are prominent in the rehabilitation field as members. The main responsibility of the Supreme Council for Rehabilitation is to draw up a national disability policy and to plan and co-ordinate services for the disabled. Unfortunately, the Council has held only a few meetings. Special education for disabled children starts at the age of six years, but only those with certain types of disability are accepted, e.g. there is no programme for severely mentally handicapped children. There is no comprehensive rehabilitation programme for disabled children under six years of age and their families.

Policies involving active programmes for the prevention of disability, early detection and early intervention, community-based rehabilitation programmes, employment of the severely handicapped, environmental adaptation, the application of technology and normalization are still either in the planning or experimental stage.

9. Recommendations

Since the introduction of rehabilitation services in Egypt in 1952, much has been achieved and many programmes for the care of the disabled have been implemented. In spite of these programmes and the institutions that have been established and the efforts of professionals and non-governmental organizations to improve the lifestyle of the disabled, it is still apparent that individuals with disabilities are plagued by economic insecurity, personal frustration and dependence on others. After the success of the 1981 International Year of Disabled Persons, the Government and the public have focused more attention on integrating the disabled into society. It was realized that much work was needed to change the negative attitudes of the able towards the disabled. The United Nations Decade of Disabled Persons 1983-1992 and the World Programme of Action concerning Disabled Persons provide an opportunity to maximize efforts to achieve equal participation of disabled persons in social life and development. Action should be intensified in an effort to achieve the goals of the Decade. This should be on a national, regional and international basis. The following is a list of recommended programmes:

(a) Special attention should be given to ways of preventing disability. For example, it was found that 20 per cent of the causes of disability could be attributed to congenital defects; 67 per cent of the parents of disabled
people were close blood relatives. Accidents, including work accidents, accounted for 10 per cent of the causes of disability. Most of these cases could be prevented by appropriate intervention;

(b) A policy of early detection and early intervention should be adopted and followed in a community. A national register of disabled children should be established to assist follow up and evaluation;

(c) Programmes for special education should be integrated with services for disabled children, regardless of the type or degree of disability. Every child must be treated as a separate case and the family, particularly the mother, should be regarded as a partner in special education. Education should begin as early as possible, and a pre-school community-based programme for disabled children, whether home-based or centre-based, which involves parents is vital. Disabled children should be accepted in normal schools wherever possible. Special attention should be given to the training of teachers in special education and resource information centres should be established;

(d) Low-cost vocational rehabilitation models should be developed and adapted to the new employment realities. Special attention should be given to vocational rehabilitation and the employment of the severely disabled. Support should be given to programmes dealing with functional assessment and the vocational evaluation of the disabled;

(e) The concept of community-based rehabilitation should be adopted, especially in rural areas and in areas where there are no services for the disabled. Programmes to establish rural rehabilitation services should be introduced;

(f) Rehabilitation staff at all levels and in the various disciplines should be trained more thoroughly;

(g) The use and application of new technology in all fields of rehabilitation should be encouraged;

(h) Although the number of persons above 65 years of age represents only 3.4 per cent of the total population, this figure is expected to increase over the next few years. Nearly 30 per cent of the elderly suffer from one disability or another, so it is important to develop plans for the care of disabled elderly people;

(i) The disabled must be totally integrated into the community on an equal basis and their participation in all rehabilitation programmes is extremely important. Environmental barriers should be eliminated. Recreation, sport and art for the disabled should be fully integrated into the rehabilitation programme. Public campaigns and programmes to increase awareness of disability are needed. Special work positions for disabled individuals that will allow them to fulfill their potential and use their
abilities are vital for the creation of a true and proper image of disabled people;

(j) All of the above recommendations should be co-ordinated with the United Nations Decade of Disabled Persons and the World Programme of Action concerning Disabled Persons.
Table 1. Types of impairments encountered in the 1907, 1960 and 1976 Egyptian censuses and in the Health Interview Survey (HIS)

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>Census 1907</th>
<th>Census 1960</th>
<th>Census 1976</th>
<th>HIS 1979-1984</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SENSORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blind (total loss)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Partial loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Loss of one eye</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td><strong>Hearing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaf (total loss)</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Partial loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Speech</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mute (total loss)</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Partial loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>PHYSICAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locomotor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amputee: One or both arms</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>One or both legs</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>General: Upper limb disability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Lower limb disability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Vertebral column disability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Visceral</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General debility</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Disfiguring</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leprosy</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>MENTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental debility (general)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Mentally ill (psychological)</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mentally retarded (intellectual)</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td><strong>MULTIPLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaf-mute</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Type of Impairment</td>
<td>1907</td>
<td>1960</td>
<td>1976</td>
<td>1979-1984</td>
</tr>
<tr>
<td>--------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>SENSORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blind (total loss)</td>
<td>1325</td>
<td>355</td>
<td>68</td>
<td>203</td>
</tr>
<tr>
<td>Partial loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>450</td>
</tr>
<tr>
<td>Loss of one eye</td>
<td>3250</td>
<td>509</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>Hearing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaf (total loss)</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>94</td>
</tr>
<tr>
<td>Partial loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>115</td>
</tr>
<tr>
<td>Speech</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mute (total loss)</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>101</td>
</tr>
<tr>
<td>Partial loss</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>87</td>
</tr>
<tr>
<td><strong>PHYSICAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locomotor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amputee: One or both arms</td>
<td>-</td>
<td>25</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>One or both legs</td>
<td>-</td>
<td>31</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>General: Upper limb disability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>308</td>
</tr>
<tr>
<td>Lower limb disability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>653</td>
</tr>
<tr>
<td>Vertebral column disability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>53</td>
</tr>
<tr>
<td><strong>Visceral</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General debility</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>71</td>
</tr>
<tr>
<td>Disfiguring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leprosy</td>
<td>58</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>MENTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental debility (general)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>122</td>
</tr>
<tr>
<td>Mentally ill (psychological)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mentally retarded (intellectual)</td>
<td>-</td>
<td>49</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>MULTIPLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaf-mute</td>
<td>-</td>
<td>66</td>
<td>34</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 3. **Distribution of disabled persons according to the lines of management adopted**

(By area)

<table>
<thead>
<tr>
<th>Area and number of disabled persons</th>
<th>Need for assistance</th>
<th>Treatment</th>
<th>Need for prosthesis</th>
<th>Insurance</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number %</td>
<td>Number %</td>
<td>Number %</td>
<td>Number %</td>
<td>Number %</td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>571</td>
<td>40.7</td>
<td>440</td>
<td>31.3</td>
<td>185</td>
</tr>
<tr>
<td>No</td>
<td>782</td>
<td>55.7</td>
<td>835</td>
<td>61.0</td>
<td>1,174</td>
</tr>
<tr>
<td>Unknown</td>
<td>51</td>
<td>3.6</td>
<td>129</td>
<td>9.2</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,404</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural with health centres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>616</td>
<td>38.2</td>
<td>319</td>
<td>19.8</td>
<td>118</td>
</tr>
<tr>
<td>No</td>
<td>226</td>
<td>58.1</td>
<td>1,055</td>
<td>71.2</td>
<td>1,657</td>
</tr>
<tr>
<td>Unknown</td>
<td>60</td>
<td>3.7</td>
<td>138</td>
<td>8.6</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,612</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural, without health centres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>145</td>
<td>34.5</td>
<td>80</td>
<td>19.0</td>
<td>19</td>
</tr>
<tr>
<td>No</td>
<td>256</td>
<td>61.0</td>
<td>305</td>
<td>72.6</td>
<td>394</td>
</tr>
<tr>
<td>Unknown</td>
<td>19</td>
<td>4.5</td>
<td>35</td>
<td>8.3</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total rural</strong></td>
<td><strong>420</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>761</td>
<td>37.4</td>
<td>399</td>
<td>19.6</td>
<td>137</td>
</tr>
<tr>
<td>No</td>
<td>1,192</td>
<td>58.7</td>
<td>1,460</td>
<td>71.9</td>
<td>1,853</td>
</tr>
<tr>
<td>Unknown</td>
<td>79</td>
<td>3.9</td>
<td>173</td>
<td>8.5</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td><strong>2,032</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1,332</td>
<td>38.8</td>
<td>839</td>
<td>24.4</td>
<td>322</td>
</tr>
<tr>
<td>No</td>
<td>1,974</td>
<td>57.5</td>
<td>2,295</td>
<td>66.8</td>
<td>3,027</td>
</tr>
<tr>
<td>Unknown</td>
<td>130</td>
<td>3.8</td>
<td>302</td>
<td>8.8</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td><strong>3,436</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 1.

PREVALENCE RATE PER 100,000 PERSONS OF IMPAIRMENTS ENCOUNTERED BY TYPE AND AREA
FIGURE II.

PREVALENCE RATE PER 100,000 PERSONS OF VISUAL IMPAIRMENTS BY AREA AND AGE

URBAN AREAS
RURAL AREAS
TOTAL SAMPLE

AGE GROUP IN YEARS
PREVALENCE RATE PER 100,000 PERSONS OF HEARING IMPAIRMENTS BY AREA AND AGE

AGE GROUP IN YEARS

PR/100,000

URBAN AREAS
RURAL AREAS
TOTAL SAMPLE
PREVALENCE RATE PER 100,000 PERSONS OF SPEECH IMPAIRMENTS BY AREA AND AGE

- URBAN AREAS
- RURAL AREAS
- TOTAL SAMPLE

PR/100,000

AGE GROUP IN YEARS
PREVALENCE RATE PER 100,000 PERSONS OF LOWER LIMB IMPAIRMENTS BY AREA AND AGE

- URBAN AREAS
- RURAL AREAS
- TOTAL SAMPLE

AGE GROUP IN YEARS
PREVALENCE RATE PER 100,000 PERSONS OF
UPPER LIMB IMPAIRMENTS BY AREA AND AGE

PR/100,000

--- URBAN AREAS

--- RURAL AREAS

--- TOTAL SAMPLE

AGE GROUP IN YEARS
FIGURE VII.

PREVALENCE RATE PER 100,000 PERSONS OF MENTAL IMPAIRMENTS BY AREA AND AGE

PR/100,000

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

URBAN AREAS

RURAL AREAS

TOTAL SAMPLE

AGE GROUP IN YEARS
PERCENTAGE OF DISABLED PERSONS BY CAUSE OF DISABILITY AND AREA

- URBAN AREAS
- RURAL AREAS
- TOTAL SAMPLE

CHRONIC DISEASES
CONGENITAL CAUSES
NON-WORK ACCIDENTS
WORK ACCIDENTS
OTHER CAUSES
Figure IX.

Disabled Male:Female Ratio for Different Causes of Disability by Area

- Males in Urban Areas
- Males in Rural Areas
- Males in Total Sample

Relative Ratio

Chronic, Congenital, Non-Work, Work, Other Causes

Females

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Bibliography


Banna, M. Disabled children in Egypt.
XXIII. CARE OF THE DISABLED IN IRAQ

by

Basil al-Husseini
Expert, Ministry of Labour and Social Affairs
Summary

The new trend towards the care and rehabilitation of the disabled has established itself in all communities, although the volume and quality of efforts exerted in this field vary from one community to another according to the material and technical resources available. They are concentrated in two main directions: prevention and treatment and rehabilitation.

Many factors connected with conditions in numerous developing countries are responsible for the high numbers of disabled persons. These countries need help to adopt integrated programmes of action to promote all aspects of prevention, treatment and rehabilitation.

In Iraq, ample efforts have been made in the field of care for the disabled since the mid-1920s. These efforts were organized and centralized by the Ministry of Labour and Social Affairs, Law No. 195 of 1978, which constituted an integrated piece of legislation guaranteeing the provision of social welfare to all sections of society, including the disabled. The Social Welfare Law (Law No. 126) of 1980 proclaimed that care was the right of all disabled persons, and determined the bases on which these services were to be provided according to the type and degree of disability.

As a result, 49 institutes for the care of various types of disability have been established in Iraq. They provide free education and rehabilitation, in addition to health, social, sporting and recreational services, to a total of 4,253 pupils.

Given the overall trend towards care for the disabled, these efforts may be considered an additional burden both on the family and on the community. However, the problem with respect to Iraqi families is the same as for most families in developing countries: the real burden is a moral one, and it requires a great deal of organized effort to make the community more aware of the need to accept disabled persons and to offer them equal opportunities, education and rehabilitation, just as for the non-disabled.
INTRODUCTION

There has been a notable change in attitudes towards the disabled in the twentieth century. Efforts have been made to provide organized care and rehabilitation to the disabled and to help them to play numerous roles in the community which are commensurate with their abilities. All these efforts are aimed at helping them to become self-reliant and to adjust and integrate in their communities. This trend has put an end to the old view of the disabled as a burden on society and has given rise to radical changes in the type and volume of care provided to this category of people, who used to be merely the object of sympathy and pity.

This new trend has been reinforced by the great expansion of theoretical knowledge in numerous social sciences such as general sociology, psychology, medical sociology and other fields. This has provided a social framework within which the efforts of numerous government and non-government institutions have been concerted to provide care to the disabled in a well-organized manner.

Following the First World War vocational rehabilitation, in the precise technical meaning of the word, began to play a role in the care and services provided to persons with various types of disability. Such care and services had previously been limited to physical rehabilitation.\(^1\) Vocational rehabilitation became especially important after the Second World War as a result of the rise in the numbers of disabled war veterans. This activity became characteristic of many advanced industrial countries, which began to unify, expand and modernize their many rehabilitation programmes. These programmes were given a legal framework by numerous laws enacted during and after the war.\(^2\)

The Universal Declaration of Human Rights of 1945 gave an international dimension to the question of care of the disabled. It was followed by the Declaration of the Rights of the Child of 1959,\(^3\) which defended equal rights for children and urged that they should be protected from impairment,

---


\(^2\) Mukhlis Mugharbel, "Training and rehabilitation of the disabled in the community: aspects of applied experiments", paper presented to the Study Workshop on Care of the Disabled in the Arab Gulf Countries, Manama, 1981, p. 52 (in Arabic).

\(^3\) General Assembly resolution 1386 (XIV).
given the special treatment, education and care required by any disabilities they might suffer from, and that disabled children should be guaranteed both material and moral security. International efforts with a degree of co-ordination and collaboration in the field of care of the disabled resulted in numerous documents such as the Declaration on the Rights of Mentally Retarded Persons (1971) and Economic and Social Council resolution 1921 (LVIII) on the prevention of disability and rehabilitation of disabled persons, as well as various other resolutions and documents issued by specialized international agencies such as UNESCO and the United Nations Children's Fund (UNICEF).

Services and care provided to the disabled in the advanced countries have developed greatly both in terms of quantity and quality. In the developing countries such care is still well below the required level, in spite of the fact that these countries contain 80 per cent of the total number (over 500 million) of disabled persons in the world.

There are many factors responsible for the high number of disabled persons, including wars, armed struggles and other forms of violence and destruction, poverty, hunger and epidemics, as well as the high proportion of poor families burdened by difficult living conditions, malnutrition, crowded and insanitary living quarters, high illiteracy rates, a low awareness of basic social services and health and education measures, insufficient knowledge about the origins, prevention and treatment of disability, insufficient care and primary health care treatment programmes and other factors noted in the World Programme of Action Concerning Disabled Persons. 1/ Most of these factors are connected with the current situation of numerous developing countries, which calls for comprehensive treatment and the concerted efforts of all the advanced countries and specialized international organizations to help these countries to initiate an integrated programme of action, including all the prevention, treatment, education and rehabilitation measures proposed by the World Programme of Action.

I. CARE OF THE DISABLED IN IRAQ

Concern for the disabled in Iraq began in the mid-1920s, when such activity was considered a form of charity. For that reason care was undertaken by non-governmental associations and religious institutions, which set up homes to provide shelter and education for the disabled.

These associations were unable to expand the scope of their activities or to continue them. It was thus necessary for the State to intervene with its material and technical resources. This task was shared among the Ministries

of Labour and Social Affairs, the Interior, Education and Health. However, the large number of authorities responsible for care of the disabled and the lack of co-ordination between them gave rise to overlapping and duplication in their activities. This situation was amended by the issuance of the Ministry of Labour and Social Affairs, Law No. 195 of 1978, which linked all the institutes for the disabled under an Office of Care for the Disabled in the State Organization for Social Welfare, now called the Office of Social Welfare.

The Institute for the Care and Rehabilitation of the Blind, established in Baghdad in 1949, carried out some rehabilitation activities, but the first organized efforts began after the issuance of the Vocational Rehabilitation Law (Law No. 136) of 1967. Then, in co-operation with the International Labour Organisation (ILO), a project to set up rehabilitation programmes was examined, following which the Vocational Rehabilitation Institute was inaugurated in 1968. The Vocational Rehabilitation Law was abolished with the issuance of the Labour Law (Law No. 151) of 1970. This Law provided for the creation of the Central Office for Vocational Rehabilitation, which assumed full responsibility for this field. Subsequently, a number of resolutions were issued which exempted the equipment and appliances used in institutes for the disabled, together with cars and other equipment and accessories imported for the disabled, from customs duties or other government taxes. These resolutions also stipulated that disabled persons should be employed in government offices and the socialist sector, according to their abilities, and as an exception to the provisions of the Labour Law.

Finally, the Social Welfare Law (Law No. 126) of 1980 was issued as an integrated piece of legislation guaranteeing social welfare to all sections of society in need of such welfare, including the disabled. The Law pledged full social welfare for all categories and classes of society, to be applied progressively as the necessary resources were developed.

The Social Welfare Law clearly reflected the political philosophy and orientation of the leadership concerning the provision of social welfare, especially for the disabled. There was also concern for the preventive aspect, as well as for treatment, education and rehabilitation. Article 7 of the Law noted the efforts of the State to reduce disability in the community and the care of the State for the physically and mentally disabled through the provision of education, rehabilitation and employment according to their abilities, in order to integrate them in the community. The State also endeavours to provide material, health and social care for the disabled who are completely unable to work. Article 45 of the Law stressed this aspect by stating that all the disabled had a right to receive rehabilitation and care free of charge from the State. The bases on which these services were to be provided were determined according to the degree of disability. The disabled are either rehabilitated and returned to the jobs and professions they used to work in before becoming disabled, or they are rehabilitated to prepare them for other jobs and professions better suited to their abilities. This is done by making use of scientific, technical and educational resources.
Severely disabled persons who are only partially able to work are directed to grant-supported workshops, to manufacturing co-operatives or to any other type of work which is suited to their actual abilities.

Article 45 did not neglect the care needed by persons completely unable to work, severely disabled persons or the elderly. It suggested that centres and complexes should be established for social, medical and psychiatric care in which all services would be integrated in such a way as to guarantee a calm and dignified life.

Thus the 1980s have witnessed a great expansion in social activities directed towards the care and rehabilitation of the disabled, according to the programme defined by the Social Welfare Law. A Centre for the Diagnosis of Disability has been established. This technical body admits disabled persons, diagnoses the nature and degree of their disability and prescribes both the treatment and the specialized institute to which the disabled should be referred, taking into account their place of residence.

A. Specialized institutes

There are 49 specialized institutes in Baghdad and the provinces for various types of disability, of which 26 are located in Baghdad, as shown in table 1. The capacity of these institutes is 4,851, whereas the actual number of disabled students is 4,153. Thus, there is a surplus capacity for a further 698 students.

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Number of institutes</th>
<th>Capacity</th>
<th>Patients</th>
<th></th>
<th>Surplus capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>Nineveh</td>
<td>3</td>
<td>290</td>
<td>147</td>
<td>50</td>
<td>197</td>
</tr>
<tr>
<td>Salah Al-Deen</td>
<td>1</td>
<td>50</td>
<td>22</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>Ta'meem</td>
<td>2</td>
<td>160</td>
<td>71</td>
<td>16</td>
<td>87</td>
</tr>
<tr>
<td>Baghdad</td>
<td>26</td>
<td>225</td>
<td>149</td>
<td>975</td>
<td>300</td>
</tr>
<tr>
<td>Anbar</td>
<td>1</td>
<td>100</td>
<td>34</td>
<td>14</td>
<td>48</td>
</tr>
<tr>
<td>Babylon</td>
<td>2</td>
<td>110</td>
<td>44</td>
<td>27</td>
<td>71</td>
</tr>
<tr>
<td>Kerbela</td>
<td>2</td>
<td>180</td>
<td>79</td>
<td>50</td>
<td>129</td>
</tr>
<tr>
<td>Najaf</td>
<td>2</td>
<td>140</td>
<td>96</td>
<td>39</td>
<td>135</td>
</tr>
<tr>
<td>Wasit</td>
<td>1</td>
<td>100</td>
<td>32</td>
<td>23</td>
<td>55</td>
</tr>
<tr>
<td>Maysan</td>
<td>1</td>
<td>40</td>
<td>22</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Basrah</td>
<td>3</td>
<td>250</td>
<td>53</td>
<td>22</td>
<td>75</td>
</tr>
<tr>
<td>D'hok</td>
<td>1</td>
<td>30</td>
<td>20</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Arbil</td>
<td>4</td>
<td>176</td>
<td>91</td>
<td>35</td>
<td>126</td>
</tr>
</tbody>
</table>

| Total       | 49                  | 4851     | 2860     | 1293     | 4153             | 698      |
The figures given in table 1 show that patients in these institutes are predominantly male.

1. Institutes for the deaf and dumb

There are 17 institutes for the deaf and dumb and the hard of hearing, including five in Baghdad and one in each of the other governorates, as shown in table 2.

Disabled children are admitted to these institutes from the age of three so that rehabilitation and education may begin early. Studies continue until the age of fifteen, when the children are transferred to vocational rehabilitation centres.

The activities of these institutes are not restricted to education and rehabilitation; they also provide numerous health, social, recreation and sporting facilities.

Table 2. Institutes for the deaf and dumb and hard of hearing in Baghdad and the provinces

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of institute</th>
<th>Governorate</th>
<th>Year of foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17 July</td>
<td>Baghdad</td>
<td>1951</td>
</tr>
<tr>
<td>2</td>
<td>Hope</td>
<td>Baghdad</td>
<td>1955</td>
</tr>
<tr>
<td>3</td>
<td>The Groves</td>
<td>Baghdad</td>
<td>1980</td>
</tr>
<tr>
<td>4</td>
<td>Care</td>
<td>Baghdad</td>
<td>1980</td>
</tr>
<tr>
<td>5</td>
<td>Sunrise</td>
<td>Baghdad</td>
<td>1981</td>
</tr>
<tr>
<td>6</td>
<td>Hope</td>
<td>Baghdad</td>
<td>1981</td>
</tr>
<tr>
<td>7</td>
<td>Hope</td>
<td>Basrah</td>
<td>1980</td>
</tr>
<tr>
<td>8</td>
<td>Hope</td>
<td>Kerbela</td>
<td>1980</td>
</tr>
<tr>
<td>9</td>
<td>Hope</td>
<td>Najaf</td>
<td>1980</td>
</tr>
<tr>
<td>10</td>
<td>Hope</td>
<td>Babylon</td>
<td>1983</td>
</tr>
<tr>
<td>11</td>
<td>Hope</td>
<td>Arbil</td>
<td>1980</td>
</tr>
<tr>
<td>12</td>
<td>Hope</td>
<td>D'hok</td>
<td>1980</td>
</tr>
<tr>
<td>13</td>
<td>Hope</td>
<td>Sulaimaniya</td>
<td>1982</td>
</tr>
<tr>
<td>14</td>
<td>Hope</td>
<td>Wasit</td>
<td>1983</td>
</tr>
<tr>
<td>15</td>
<td>Hope</td>
<td>Maysan</td>
<td>1983</td>
</tr>
<tr>
<td>16</td>
<td>Baath Charity</td>
<td>Anbar</td>
<td>1975</td>
</tr>
<tr>
<td>17</td>
<td>Hope</td>
<td>Salah Al-Deen</td>
<td>1982</td>
</tr>
</tbody>
</table>

It should also be mentioned that social research plays an important part in the activities of these institutes. Social researchers study the case of each disabled child and decide how to co-operate with him, his family and the administration of the institute in order to cope with all the difficulties
Field studies carried out by the National Centre for Social and Criminal Research suggest that the cause of hearing disabilities is for the most part either hereditary or owing to complications at birth or disease. The impact of all of these three factors could be reduced by stepping up preventive measures in co-operation with the Ministry of Health.1/

2. Institutes for the mentally retarded

Institutes for the mentally retarded are aimed at providing care for the mentally and psychologically disabled, as well as education that is suited to their mental level, including reading, arithmetic, basic biology, art and sports, with special emphasis on self-care programmes, in addition to cultural, social, recreational and sporting activities.

There are 15 such institutes in Iraq, including eight in Baghdad and one in each of the governorates given in table 3.

Table 3. Institutes for the mentally retarded in Baghdad and the provinces

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of institute</th>
<th>Governorate</th>
<th>Year of foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hope</td>
<td>Baghdad</td>
<td>1968</td>
</tr>
<tr>
<td>2</td>
<td>Guidance</td>
<td>Baghdad</td>
<td>1981</td>
</tr>
<tr>
<td>3</td>
<td>Ar-Rawabi</td>
<td>Baghdad</td>
<td>1981</td>
</tr>
<tr>
<td>4</td>
<td>Sisters</td>
<td>Baghdad</td>
<td>1983</td>
</tr>
<tr>
<td>5</td>
<td>Sanabil</td>
<td>Baghdad</td>
<td>1980</td>
</tr>
<tr>
<td>6</td>
<td>7 April</td>
<td>Baghdad</td>
<td>1982</td>
</tr>
<tr>
<td>7</td>
<td>Qadisiya</td>
<td>Baghdad</td>
<td>1983</td>
</tr>
<tr>
<td>8</td>
<td>Fidelity</td>
<td>Baghdad</td>
<td>1985</td>
</tr>
<tr>
<td>9</td>
<td>Hope</td>
<td>Ta’meem</td>
<td>1982</td>
</tr>
<tr>
<td>10</td>
<td>Hope</td>
<td>Babylon</td>
<td>1983</td>
</tr>
<tr>
<td>11</td>
<td>Hope</td>
<td>Najaf</td>
<td>1980</td>
</tr>
<tr>
<td>12</td>
<td>Hope</td>
<td>Nineveh</td>
<td>1982</td>
</tr>
<tr>
<td>13</td>
<td>Hope</td>
<td>Basrah</td>
<td>1980</td>
</tr>
<tr>
<td>14</td>
<td>Hope</td>
<td>Kerbela</td>
<td>1982</td>
</tr>
<tr>
<td>15</td>
<td>Hope</td>
<td>Sulaimaniya</td>
<td>1984</td>
</tr>
<tr>
<td>16</td>
<td>Hope</td>
<td>Arbil</td>
<td>1983</td>
</tr>
</tbody>
</table>

Source: Ministry of Labour and Social Affairs, Office of Care for the Disabled, The Experience of Iraq with the Disabled (Baghdad, 1985) p. 21, (in Arabic).

In 1988 a special research programme was undertaken to assess the services provided to the disabled in general and to the mentally disabled in particular. It encompassed all the aspects of such care from diagnosis and admission to the institutes, the division of pupils into groups, the promotion from one group to the next, their final transfer to vocational rehabilitation centres, etc. The proposals and recommendations of the study have been implemented and it is hoped that there will be a significant improvement in the quality of services this year.

3. Institutes for the blind

Care for the blind is foremost among the services provided to the disabled in Iraq. The efforts of non-governmental associations and religious institutions have been concentrated on this category of the disabled since the 1920s. The involvement of the State began in 1959 when a network of institutions for the blind was set up. When the Social Welfare Law (Law No. 126) of 1980 was issued, the Centre for the Care of the Blind was established to provide social, health and education services and facilitate the integration of the blind in the community. A number of other institutes for the blind were set up in various parts of the country, as can be seen from table 4.

Table 4. Institutes for the blind according to Governorate

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of institute</th>
<th>Governorate</th>
<th>Year of foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Institute for the Care and Rehabilitation of the Blind</td>
<td>Baghdad</td>
<td>1949</td>
</tr>
<tr>
<td>2</td>
<td>Institute for the Care and Rehabilitation of the Blind</td>
<td>Basrah</td>
<td>1977</td>
</tr>
<tr>
<td>3</td>
<td>Institute for the Care and Rehabilitation of the Blind</td>
<td>Arbil</td>
<td>1980</td>
</tr>
<tr>
<td>4</td>
<td>Cultural Centre of Light for the Blind in Baghdad</td>
<td>Baghdad</td>
<td>1981</td>
</tr>
</tbody>
</table>


Blind pupils in these institutes study the normal Ministry of Education curriculum at both the primary and intermediate levels, using Braille for reading and writing and the Taylor method and abacuses for mathematics.
Pupils in these institutes achieved 100 per cent pass rates in their final examinations and were ranked first among all schools in the country for three consecutive years.1/

4. Physical disability

There are two institutes in Baghdad for the physically disabled: the Institute of Happiness and the Beacon Institute, located on the banks of the Tigris. Pupils study the same curriculum as in normal schools and are provided with medical and recreational facilities.

5. The totally disabled

This category includes the elderly and the severely disabled, who are catered for by six institutes for the elderly which form an important link in the network of care services.

6. Sheltered workshops and co-operative associations

Sheltered workshops and co-operative associations constitute the stage at which all the abilities and skills acquired by pupils in the educational institutes are put to use. This type of activity has been especially important since the beginning of this year when, in co-operation with the Resident Representative of the United Nations Development Programme (UNDP), work began to implement a project to expand and reinforce vocational rehabilitation programmes. This project is supported by UNDP and the Arab Gulf Programme for United Nations Development Organizations (AGFUND), and is aimed at training 100 instructors for vocational rehabilitation in sheltered workshops.

II. SOCIAL AND ECONOMIC CONSEQUENCES OF DISABILITY

If it is agreed that the disabled are in need of special care, this implies that an extraordinary effort should be made in this respect and that in particular this could constitute an additional burden on the family and on the community in general.

However, the problem for families in the developing countries is that the moral burden is heavier than the material one: for example, many families are reluctant to admit the existence of disabled persons in the family. For this reason statistics on disabilities and their trends and origins in the developing countries are rarely as precise as one would like. This does not

1/ Ministry of Labour and Social Affairs, Office of Care for the Disabled, The Experience of Iraq with the Disabled (Baghdad, 1985), p. 25.
mean that the additional costs of educating and rehabilitating the disabled should be felt as a real burden on the community or the family, especially if there is a trend towards comprehensive care which may require high technology. At the same time, if the disabled are not given education, rehabilitation and employment and their abilities are not fully utilized, the category of dependants will expand in relation to that of providers.

The problem of disability in Iraq does not constitute a material burden on the family. Services provided by the institutes are free of charge, including transport to and from the institutes, various aids and the initial diagnosis of the type and degree of disability by the Centre for the Diagnosis of Disability. The real burden is the moral one, which requires a great deal of organized effort to make the community more aware of the need to accept disabled persons and to offer them equal opportunities, education and rehabilitation, the same as for the non-disabled. Nevertheless, comprehensive care for the disabled remains costly for the developing countries and constitutes an additional strain on their already limited resources.
XXIV. DISABILITY IN JORDAN

by

Abdallah al-Khatib
General Union of Voluntary Societies
Jordan
CONTENTS

Summary................................................................. 379
Introduction.......................................................... 381

Chapter

I. DISABILITY AND STATISTICS ................................... 382
II. SERVICES AND INSTITUTIONS FOR THE DISABLED .......... 385
   A. Hearing disabilities ........................................ 387
   B. Sight disabilities ........................................... 388
   C. Physical disabilities ....................................... 388
   D. Cerebral palsy ............................................... 389
   E. Mental disabilities ......................................... 389
   F. Multiple disabilities ...................................... 390
III. ANALYSIS OF DISABILITY TRENDS ......................... 390
IV. SOCIAL AND ECONOMIC IMPACT OF DISABILITY .......... 392
V. GOVERNMENT POLICIES ......................................... 393
VI. RECOMMENDATIONS ............................................ 395

LIST OF TABLES

1. Disabled persons according to disability.................... 384
2. Number of disabled persons according to age................ 385
4. Numbers of the disabled in care according to sector (1979–1988).... 386
5. Services provided to the disabled in 1988.................... 387
6. Blind persons under 18, according to educational status .... 388
Summary

During the past two decades there has been considerable interest in the problem of the disabled in Jordan, both in prevention and care, with a view to curtailing disability, whether caused by heredity or accidents, in addition to creating facilities for the care of the disabled in special centres or attempting to integrate them in the community.

There have been many obstacles to achieving the aspirations of those concerned with the disabled, first and foremost the dearth of funds and trained staff, the lack of conviction on the part of policy-makers and planners of the benefit of investing in the disabled and cultural attitudes in the community towards the disabled.

It is difficult to speak of disability in terms of figures, because there are no exact statistics on the subject, and because the Government is not willing to defray the costs of such an expensive undertaking. Consequently, people working with the disabled commonly assume an international norm of 10 per cent of the community being disabled in one way or another. The only attempt at a census of the disabled in Jordan has been the survey of voluntary social work undertaken by the Queen Alia Fund in 1979, which recorded 18,829 disabled persons of the categories defined by the study, which were the deaf, the dumb, the blind, paralytics, amputees, the mentally retarded and the psychologically disturbed. The resulting proportion was less then the 10 per cent expected by international estimates. One of the more important results of the study was that over 50 per cent of the disabled were born to parents who were closely related.

Services for the disabled in Jordan only cover a small portion of the disabled. They are provided by the government and voluntary sectors. The government sector comprises 11 centres serving no more than 975 disabled persons and the voluntary sector comprises 42 centres serving 4,315 disabled persons. Disabilities for which care is provided include hearing, speech, sight, physical disabilities, cerebral palsy, mental retardation and multiple disabilities.

Factors which contribute to disability are intermarriage with close relatives, allowing anyone who feels like it to get married and traffic accidents. This does not augur well for a reduction of the disability rate in Jordan.

It is evident that the problem of disability does not concern the disabled person alone, but extends to his family and local community. It has become apparent that the community suffers numerous social, economic and psychological consequences of disability. Among the foremost of these are the inactivity of a high proportion of the work-force, the high costs of care for the disabled, a feeling of frustration and inferiority in families with disabled children and the inability of the community to provide the necessary
funds to cope with this problem. All these factors lead us to stress the urgent need for national policies aimed at treating this problem with the seriousness it deserves. This assumes that the disabled should be granted the same rights as other citizens and that they have a right to medical care, individually adapted physiotherapy, instruction, education, training, readjustment, care and guidance, which should all help them to optimize their capacity and faculties. It should be stressed that disability is not only a problem of social care, but also of persons in all aspects of everyday life, with the aim of integrating them in the community. The following recommendations should be taken into account in developing the country's capabilities for dealing with the problem of the disabled:

(a) To establish a study and documentation centre for the disabled;

(b) To boost public awareness of the problem of the disabled;

(c) To adopt a policy of mainstreaming the disabled in the community in all their activities;

(d) To create a national centre for the scientific diagnosis of disability;

(e) To increase funds allocated to government institutions for the disabled and to support the voluntary sector working in this field;

(f) To draw up appropriate legislation to prevent hereditary disabilities and to draft an advanced law to safeguard the full potential of disabled persons;

(g) To set up an appropriate education, care and rehabilitation programme which would achieve optimum utilization of the disabled person's faculties, abilities and potential to integrate in his community;

(h) To provide trained instructors to work with the disabled in all aspects of everyday life, education, guidance, vocational, functional and sensorial rehabilitation.

These aspects are only the beginning of the long and arduous road upon which we must embark.
INTRODUCTION

In recent years there has been noticeable concern for the problem of disability in Jordan. In spite of some activity from the beginning of the 1970s, efforts began in earnest with the International Year of Disabled Persons (1981), concentrating on the dual aspects of prevention and care, with a view to curtailing disability, whether hereditary or arising from accidents, as well as providing facilities for the care of the disabled in special centres or attempting to integrate them in the community by means of legislation granting the disabled the same right to welfare and care as for the non-disabled.

Jordan's potential has been limited and numerous obstacles have impeded the successes hoped for in the endeavour to provide care for the disabled. The most outstanding of these obstacles have been the lack of material potential and the lack of conviction on the part of policy-makers and planners of the utility of investing for the disabled. There is also the cultural dimension of the vision Arab societies have of the disabled. In Arab culture, disability has traditionally been seen as something shameful, a trial or an ordeal to be endured by the family that has in its midst a disabled person. Thus, Arab families have often been loath to admit that they have a disabled child, for fear that would be considered a disgrace which lowered the family's standing among its neighbours. Furthermore, some people feel disability is a divine tribulation visited upon the family with the aim of testing their belief in God and that we are bound to accept such a misfortune with faith and forbearance. Numerous problems, therefore, have their roots in these social attitudes, which are still widespread and difficult to overcome.

Because of these problems, those concerned with the disabled have fought a constant struggle to attract the attention the disabled enjoy today in Jordan. And yet we feel that we are still only at the beginning of the road. However, many gains have been made, among the most prominent of which are the concern of the government sector to serve these categories, the increase in public awareness of disability and the realization of the need to curtail it.
I. DISABILITY AND STATISTICS

Although it may be easy to speak of disability and its various types, it is difficult to give exact figures. Among the more important reasons for this are the following:

(a) Concern for the disabled is recent, having arisen mainly over the past two decades, and especially since the International Year of Disabled Persons (1981), when popular and official pressure began to be felt to recognize the rights of the disabled, as laid down by international charters.

(b) Popular attitudes to the disabled, where families often try to conceal disabled persons or refuse to admit that they have a disabled person in the family, are not conducive to ascertaining the true number of disabled persons or to classifying them. This in turn means that the disabled person does not obtain the care and rehabilitation services that could help him to cope with life. It should be noted that until recently, Arab societies, including Jordanian society, treated this category as a negligible quantity, and the educational system, directly or indirectly, reinforced this tendency by ignoring any potential or capacities that might be developed in disabled children. Schools, families and the community all treated the disabled as though it was the end of the road for them; any investment in their favour was felt to be a burden on the State, schools and society.

(c) There has been a lack of trained human resources and funds with which to carry out surveys of the disabled. This is one of the main factors which has contributed to the present state of affairs. Furthermore, the last general population census about ten years ago elicited no information on the disabled.

(d) There is no national register of disabled persons compiled from various sources of health information such as medical surgeries and hospitals. This means it is impossible to ascertain or confirm the number of disabled persons who consult such services or use such statistical information for the design of future programmes for the disabled.

(e) Families and institutions working in this field do not have sufficient diagnostic capacity to determine the nature or level of the disability, and this may hamper the efforts of institutions to obtain information on this problem. As a result, those concerned with the disabled resort to using disability rates which are generally accepted internationally for advanced and developing countries and used by international organizations for the disabled.

Before reviewing the efforts exerted in Jordan to obtain statistics on the subject, it may be appropriate to look first at the statistics available at the world level on disability. Despite the lack of exact statistics on the disabled in Jordan or the Arab world, apparently some 10 per cent of the
population of any country may be classified as disabled. This is of course apart from the socially or psychologically disabled, to whom the definition of disability as recognized by specific categories does not apply. In our case, this means we are speaking of 300,000 disabled persons in Jordan, 13–15 million in the Arab world out of a world-wide total of 500 million. Of these at least 350 million live in developing countries, of which the Arab countries are considered a part.

A study by the United Nations stresses that the problem appears particularly acute when we consider that of 150 million disabled children in the world, 120 million live in the developing countries. Preliminary United Nations estimates suggest that by the end of the century the number of disabled persons will reach 600 million, of which over 500 million will be in the developing countries. At this rate it may be expected that Jordan will have 350,000 disabled persons and the Arab world close to 20 million, which will be disastrous for development programmes in Jordan and the Arab world.

Work with the disabled began as a result of scattered personal initiatives, unprompted by studies or surveys. Concern for the blind began in the 1930s, however concern for the physically disabled and disabilities resulting from the Arab-Israel wars began in earnest in 1948, when institutions were established to care for war veterans. After 1967 interest arose in various categories of the disabled and a number of care centres for the disabled were set up, providing information on the number of patients in care and on their waiting lists. In all cases, the capacity of these centres was limited and could not cope with the numbers of potential patients – a centre providing care to 50 patients might have a waiting list of several hundreds. Statistical information on numbers began with these centres. However, the main statistical effort came from the study on voluntary social work undertaken by the Queen Alia Fund in 1979, which provided a number of indicators. The study was aimed at obtaining basic information on a number of social and economic characteristics of the disabled and on services available in Jordan. Information was obtained on the number of the disabled and their categories according to specific social and economic variables.

A total of 18,829 disabled persons were recorded by the survey of the disabled according to the categories defined by this study, which were the deaf, the dumb, the blind, paralytics, amputees, the mentally retarded and the psychologically disturbed. This is less than the 10 per cent predicted by international estimates. Consequently, over 90 per cent are not included in the statistics, for reasons that are predominantly social and connected with community and family attitudes towards the disabled. According to the study, paralytics were the biggest category of the disabled, with 30.5 per cent of the total number of disabled persons recorded, followed by the mentally retarded (25.9 per cent), the deaf and dumb (16.9 per cent) and the blind (11.2 per cent). The results of the study are given in table 1.

The study also noted that over 50.2 per cent of the disabled had received no services of any kind, whether medical care, education, rehabilitation,
instruction or social care, or any integrated services. Medical care was provided to 30.2 per cent, education to 7.5 per cent, rehabilitation to 1.2 per cent, social care to 2.4 per cent, medical instruction to 2.7 per cent; social instruction did not exceed 0.4 per cent and integrated services were provided to no more than 1.1 per cent. Table 2 gives the number of disabled persons according to age.

Table 1. Disabled persons according to disability

<table>
<thead>
<tr>
<th>Disability</th>
<th>Number of disabled</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf and dumb</td>
<td>3 193</td>
<td>16.9</td>
</tr>
<tr>
<td>Blind</td>
<td>2 008</td>
<td>11.2</td>
</tr>
<tr>
<td>Deaf, dumb and blind</td>
<td>1 704</td>
<td>9.1</td>
</tr>
<tr>
<td>Deaf and blind</td>
<td>40</td>
<td>0.2</td>
</tr>
<tr>
<td>Partially paralysed</td>
<td>4 857</td>
<td>25.8</td>
</tr>
<tr>
<td>Totally paralysed</td>
<td>926</td>
<td>4.7</td>
</tr>
<tr>
<td>Loss of hand</td>
<td>246</td>
<td>1.3</td>
</tr>
<tr>
<td>Loss of leg</td>
<td>352</td>
<td>1.9</td>
</tr>
<tr>
<td>Loss of arm</td>
<td>78</td>
<td>0.4</td>
</tr>
<tr>
<td>Loss of hand and foot</td>
<td>11</td>
<td>0.1</td>
</tr>
<tr>
<td>Loss of leg and arm</td>
<td>9</td>
<td>0.1</td>
</tr>
<tr>
<td>Severely retarded</td>
<td>2 127</td>
<td>11.3</td>
</tr>
<tr>
<td>Slightly retarded</td>
<td>2 741</td>
<td>14.6</td>
</tr>
<tr>
<td>Emotionally disabled</td>
<td>457</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18 829</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

It should be noted that approximately 53.3 per cent of the total recorded were under 15 and 64.1 per cent were under 20. One of the most important findings of this study was that over 50 per cent of the disabled were born to parents who were closely related (often first cousins). This is a prominent feature of the problem of the disabled, to which we are trying to draw attention in our campaign to curtail disability.

Apart from this study, no other notable efforts have been made in the field of statistics. Indeed, we might not be in position to obtain figures on the disabled if an integrated plan had not been devised for all cases of disability to be reported at birth and for cases of disability resulting from diseases or accidents to be recorded. This requires the co-operation of both the family and the health institution, including the family doctor, the obstetrician or the midwife. A national register of the disabled will have to be set up as well as a centre for the diagnosis of disabilities in order to obtain information about the situation of the disabled and to list the services available to them in Jordan.
Table 2. Number of disabled persons according to age

<table>
<thead>
<tr>
<th>Age group</th>
<th>Number of disabled</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>1,546</td>
<td>8.2</td>
</tr>
<tr>
<td>5-9</td>
<td>4,660</td>
<td>24.7</td>
</tr>
<tr>
<td>10-14</td>
<td>3,836</td>
<td>20.4</td>
</tr>
<tr>
<td>15-19</td>
<td>2,025</td>
<td>10.8</td>
</tr>
<tr>
<td>20-24</td>
<td>894</td>
<td>4.7</td>
</tr>
<tr>
<td>25-29</td>
<td>548</td>
<td>2.9</td>
</tr>
<tr>
<td>30-34</td>
<td>565</td>
<td>3.0</td>
</tr>
<tr>
<td>35-39</td>
<td>515</td>
<td>2.7</td>
</tr>
<tr>
<td>40-44</td>
<td>518</td>
<td>2.8</td>
</tr>
<tr>
<td>45-49</td>
<td>462</td>
<td>2.5</td>
</tr>
<tr>
<td>50-54</td>
<td>439</td>
<td>2.3</td>
</tr>
<tr>
<td>55-59</td>
<td>367</td>
<td>2.1</td>
</tr>
<tr>
<td>60 and over</td>
<td>2,434</td>
<td>12.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18,829</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As far as statistics are concerned, the situation will remain the same until the next general population census is carried out, when it will be of the utmost importance to include questions on disability. These questions should be prepared with great care and leave no room for ambiguity or vagueness.

In conclusion, we would say that there are no exact statistics which reflect the situation of the disabled in Jordan. However, the question of services can provide us with the number of the disabled in care in various centres, which is known exactly.

II. SERVICES AND INSTITUTIONS FOR THE DISABLED

To begin with, we should recognize that there is no centre for the diagnosis of disability in Jordan, and therefore numerous factors are involved in determining the presence of a disability. Disabled persons (especially those with mental disabilities, cerebral palsy or multiple disabilities) go from one institution to another in search of the right place or a particular type of care. Disabled persons or their families encounter numerous obstacles in their search for care and often cannot get it, because the capacity of institutions in this field is not sufficient to cope with all the cases needing treatment or care. There was an attempt by an official institution to
create a centre for the diagnosis of disabilities, which soon failed because after having their disability diagnosed, patients could find no vacancies in care centres or institutions for the disabled. It is clear, then, that services to the disabled only cater to a few categories, even though they are in theory concerned with all types of disability. Consequently, it may be noted that these institutions concentrate mainly on young disabled persons not over the age of 18. Table 3 shows the number of government, voluntary and private centres for the disabled between 1979 and 1988.

Table 3. Government, voluntary and private centres for the disabled (1979-1988)

<table>
<thead>
<tr>
<th>Year</th>
<th>Government</th>
<th>Voluntary</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>7</td>
<td>14</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>1983</td>
<td>11</td>
<td>26</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>1988</td>
<td>11</td>
<td>37</td>
<td>5</td>
<td>53</td>
</tr>
</tbody>
</table>

As may be seen from table 3, the number of centres for the disabled went from 21 in 1979 to 39 in 1983, reaching 53 in 1988. It should be noted that voluntary institutions in particular developed their capacity and potential, nearly tripling their numbers during that ten-year period. The private sector also began to devote attention to providing services to the disabled. Table 4 shows the numbers of the disabled in care in the various types of institution.

Table 4. Numbers of the disabled in care according to sector (1979-1988)

<table>
<thead>
<tr>
<th>Year</th>
<th>Government</th>
<th>Voluntary</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>664</td>
<td>1 134</td>
<td>40</td>
<td>1 838</td>
</tr>
<tr>
<td>1983</td>
<td>936</td>
<td>2 257</td>
<td>60</td>
<td>3 253</td>
</tr>
<tr>
<td>1988</td>
<td>975</td>
<td>4 060</td>
<td>255</td>
<td>5 290</td>
</tr>
</tbody>
</table>

Table 4 shows that the voluntary sector carries the greatest burden of providing services to the disabled. It is also clear that development has been most noticeable in the voluntary sector. The increase in capacity of government centres from 1979 to 1988 did not exceed 50 per cent, whereas it
reached 300 per cent or roughly three times in the case of voluntary institutions over the past ten years. It should be noted that these centres provide services to only 2 per cent of the estimated number of disabled persons in Jordan, according to usual international methods of measurement. Table 5 shows the services provided to the disabled in 1988.

Table 5. Services provided to the disabled in 1988

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Government</th>
<th>Voluntary</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centres Patients</td>
<td>Centres Patients</td>
<td>Centres Patients</td>
<td>Centres Patients</td>
</tr>
<tr>
<td>Hearing</td>
<td>3</td>
<td>470</td>
<td>4</td>
<td>500</td>
</tr>
<tr>
<td>Sight</td>
<td>1</td>
<td>95</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Physical</td>
<td>3</td>
<td>195</td>
<td>8</td>
<td>580</td>
</tr>
<tr>
<td>Cerebral palsy</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>1200</td>
</tr>
<tr>
<td>Mental</td>
<td>4</td>
<td>215</td>
<td>15</td>
<td>1305</td>
</tr>
<tr>
<td>Multiple</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>975</td>
<td>37</td>
<td>4060</td>
</tr>
</tbody>
</table>

Note: "Hearing" includes speech disabilities and "Physical" includes partial and total paralysis.

What follows is a cursory review of the work of these services by category of disability.

A. Hearing disabilities

There are currently seven centres (three government and four voluntary) for hearing disabilities caring for a total of 970 children. These centres provide instruction, care and rehabilitation services up to the sixth grade of the primary cycle, when they are given vocational and social rehabilitation. These are all day-care centres, providing transport to and from the pupils' homes, as well as lunches and health care. There are no statistics on the proportion of the disabled in care in these centres, however it should be noted that numbers on the waiting lists for these institutions are reckoned in the hundreds. These centres estimate that there are approximately 4,350 cases under the age of 20 in need of treatment and care in the fields of hearing and speech.
B. Sight disabilities

Table 5 gives 530 pupils in care in the five government, voluntary and private care centres. Care, board and schooling are provided to pupils in these centres. Statistics compiled by the Queen Alia Fund in 1983 showed 6,000 persons of all ages and both sexes with sight disabilities and estimated that there were 1,400 blind persons under the age of 18, shown in table 6 by educational status.

Table 6. Blind persons under 18, according to educational status

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>In public and private primary and preparatory schools for the blind</td>
<td>250</td>
</tr>
<tr>
<td>In schools for the sighted, owing to the difficulty of getting a place in schools for the blind</td>
<td>50</td>
</tr>
<tr>
<td>Receiving no special services, owing to the tendency of their families to conceal their existence, especially in the case of girls</td>
<td>150</td>
</tr>
<tr>
<td>In secondary schools and universities in their local communities</td>
<td>50</td>
</tr>
<tr>
<td>In vocational training or workshops in the voluntary sector</td>
<td>250</td>
</tr>
<tr>
<td>With multiple disabilities</td>
<td>100</td>
</tr>
<tr>
<td>Under the age of six</td>
<td>300</td>
</tr>
<tr>
<td>Other categories (in the country)</td>
<td>250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1400</strong></td>
</tr>
</tbody>
</table>

Figures and registers of the Ministry of Social Development show that the number of blind children of primary school age stabilized in the 1986/1987 school year, when all blind children of both sexes entering the first grade of primary school were catered for. Services provided to this group begin with care, education and rehabilitation and extend to meeting their rehabilitation needs with respect to employment. Many establishments provide boarding facilities to blind pupils.

C. Physical disabilities

There are no exact statistics for this category. There are 11 centres for the physically disabled, including three government centres with 195 pupils and eight voluntary centres with 580 pupils, giving a total of 775.
Waiting lists have a further 4,400 cases under the age of 20 in need of treatment and care. All these centres offer both internal and external services. A number of pupils are boarders in these centres, which provide care, instruction, physical and vocational rehabilitation, medical treatment and health care. The services of some of these centres are considered excellent.

D. Cerebral palsy

Work with victims of cerebral palsy is restricted to the voluntary sector, which now has five centres providing services to 1,200 children who need care and treatment. The services of the pioneering associations in this field are spreading throughout the country. There are moves to set up additional day-care centres in coming years for the training and rehabilitation of children within physiotherapy programmes in order to enable them to perform everyday activities necessary to cope for themselves. They should also be helped in their studies and encouraged to enrol in ordinary schools if they are able to do so. These centres also train families to help their child to live a normal daily life.

The proportion of children suffering from cerebral palsy is 4 per thousand. Thus care services are provided only to limited numbers, which means that there is still a long way to go before resolving this problem, which suffers from a lack of the necessary expertise to meet the needs of these children.

E. Mental disabilities

It is clear that there is greater interest in the problem of mental disability than in other types of disability. There are now 23 centres serving the mentally disabled, including 4 government centres catering to 215 children, 15 centres run by charitable associations serving 1,305 children and 4 private centres providing for 220 children, which have recently begun to take an interest in the mentally disabled, slow learners and the slightly mentally disabled. The efforts made by charitable associations in this field are patent and their co-operation with government institutions has been excellent and is appreciated by all sections of the community. Over the past 10 years there has been growing interest in this area, since the number of centres has risen from eight in 1979, serving less than 500 children, to 23 in 1988, catering for 1,740 children. Most of these are day-care centres and the children in care return to their families in the evening. However, there is a limited number (no more than four, from all sectors) of centres with boarding facilities for disabled children, who go home for the weekends. Care, training, rehabilitation and education are provided individually according to each child's degree of retardation.

These centres have helped to train instructors according to training programmes set up in collaboration with social training institutions. There are also numerous middle-level colleges which award diplomas in care for the
mentally disabled. Foremost among these programmes is that offered by the College of Social Services of the Ministry of Social Development which helps to provide these centres with the teachers and social and educational specialists they need. However, the number of the mentally disabled in care is extremely limited with respect to the proportion of the mentally disabled in the population, which is reckoned at 2-3 per cent. This means that Jordan should have approximately 75,000 mentally disabled persons, whereas services are provided to only 4 per cent of that number. Therefore we feel we have a long road ahead of us and that there is a pressing need to adopt a policy of integrating the mentally disabled, especially slow learners and children with slight or moderate mental disabilities, in normal schools, in order to achieve their full educational potential, bearing in mind that funds available to promote this in the government and voluntary sectors are extremely limited.

F. Multiple disabilities

Interest in and work with this category of the disabled has only begun over the past three years. The voluntary sector has established two centres which care for 75 victims of multiple disabilities. Work is currently under way to establish another centre for 150 such patients, with direct contributions from the General Union of Voluntary Societies. The two existing centres provide patients with shelter, health services, physical and vocational rehabilitation, and recreation. Boarding is limited to periods of between six months and one year, in order to allow greater numbers to benefit from the services provided, which are complicated by the multiplicity of disabilities. There is a need to train staff, who suffer from limited resources and insufficient training, although they have benefited greatly from their experience in dealing with patients. One of the foremost problems with multiple disabilities is the high cost of providing services and the impossibility of covering those costs through contributions from their families and relatives. Consequently, the General Union of Voluntary Societies has undertaken to fully underwrite the expenses of one of these centres. Work is currently under way, in addition to the centre supported by the General Union, to establish another centre under government supervision.

In conclusion, services provided to victims of multiple disabilities are excellent. However, they are limited and unable to expand to serve a wider circle of patients owing to lack of funds and trained staff capable of working with this category. Therefore, resort must be had to mainstreaming patients in educational institutions and the community in order to overcome this problem.

III. ANALYSIS OF DISABILITY TRENDS

In the absence of exact statistics on disability, it is impossible to analyse disability trends. However, in general, one may expect the number of
factors contributing to disability to remain the same. In addition, the high
growth rate of the population and the increase in traffic accidents will both
contribute to a rise in the proportion of disabled persons, if it does not
remain as it is. Intermarriage with relatives, with all its consequences,
failure to subject candidates for marriage to the appropriate blood group
tests, letting anyone get married who takes it into his head to do so if the
religious judge feels this will help to cure him, as laid down by religious
legislation, and the lack of sufficient awareness in some sections of the
population that the birth of a first, second and sometimes even third disabled
child should be taken as a warning to stop having children, are all factors
which, in conjunction with the growth in population, lead one to believe that
the number of the disabled will rise. Indeed, there are many families with
more disabled persons than fingers on one hand. Hereditary disability is one
of the main problems Jordanian society suffers from, in spite of the fact that
Islam encourages marrying outside the family. The Prophet (peace be upon him)
has many sayings which emphasize this aspect: "Take non-relatives for wives";
"Marry out and you will be pure"; "Choose your mates well, for what is bred in
the bone will come out in the flesh".

While the Personal Statute Law stipulated that candidates for marriage
must be of sound mind, of age and consenting, it did not prescribe a medical
examination which would guarantee the physical and mental fitness of both
partners or their ability to produce offspring, especially non-disabled
offspring, for the hereditary consequences for the children. Rather than
anticipating and forestalling this problem, legislators have granted married
couples the right to separation or divorce if any defect should become
apparent on either side. Certainly, setting the matter right from the
beginning would alleviate the problems and complications of a divorce
resulting from the illness of either husband or wife, or incompatibility in
their blood groups which can lead to children being born with deformities,
mental retardation or other defects. Rather, legislators have aggravated the
problem even further, since article 8 states that "the judge should authorize
the marriage of insane or feeble-minded persons if it is established by a
medical report that marriage is in their interest". The wording of this
article is interesting, because it is not reasonable for the judge to have to
make a metaphysical judgement that marriage might be good treatment for a case
of insanity or feeble-mindedness. So it is the community that ends up
suffering the consequences.

The very high rate of traffic accidents in Jordan, which is among the top
five countries for traffic accidents per inhabitant, contributes daily to the
growing number of the physically disabled.

Although medical standards have risen noticeably, there is no indication
that this has had any tangible impact on the rate of disability. Therefore,
in the absence of any major steps to enact legislation or to adopt obligatory
policies to try to influence traditions and customs, the continuing rise in
the numbers of the disabled will not be halted in the near future.
IV. SOCIAL AND ECONOMIC IMPACT OF DISABILITY

It is clear that the problem of disability lies not only with the disabled person, but also includes his family and local community. Studies have shown that the family of a disabled person is also considered disabled in one way or another and that this reduces their productivity and interaction with the community. Disability apparently has many social, economic and psychological consequences, among which the most prominent are the following:

(a) Up to 10 per cent of the community is excluded from the work-force; these people are entirely dependent on the productivity of other groups which do work. If a minute proportion of them do work, their productivity by normal standards is considered extremely low. Qualified disabled persons have great difficulty in obtaining work commensurate with their abilities. Laws currently in force, such as the Civil Service Law and labour legislation do not give the attention it deserves. The relevant authorities have no obligation to employ disabled persons and the 3 per cent of disabled workers in factories and public and private enterprises stipulated by the Labour Law is not observed. Furthermore, disabled and especially blind craftsmen face sharp competition in the marketing of their products.

(b) The community and families bear high costs for the care of the disabled at all levels. This represents one of the main obstacles to care for the disabled and any expansion of services to them. The resources of middle-income or poor families prevent them from giving the disabled the care and treatment they need. Consequently, many families try to get rid of their disabled children in one way or another. Some of them also stop giving them care or treatment. A study of the cost of maintaining children in centres for the disabled shows that it costs 170 Jordanian dinars (JD) per month to keep a child in a centre for multiple disabilities, JD 140 per month in a centre for the mentally disabled and between JD 80 and 100 for day care. This represents a burden on all the institutions working in this field. Consequently the government sector is working actively to withdraw from this costly service, which voluntary associations are attempting to provide. However, limited financial resources have prevented the expansion of services to the category of the disabled which is most in need of basic services. This has meant that policy-makers are unconvinced of the utility of investing in this sector, in view of the limited funds of the public sector.

(c) Families with disabled children suffer from a feeling of frustration and inferiority, although there is no objective justification for this. This feeling stems from unbalanced social attitudes towards the problem of disability. Many families feel a disabled child is a disaster for the family and that it is difficult for them to face society, especially in the case of families with disabled girls, since some people hesitate to marry into or become associated with a family with disabled children. Such unreasonable attitudes are unfortunately all too common. They apparently spring from an idea that disability is hereditary. If this has some basis in fact, the way to overcome it is by encouraging candidates for marriage to have medical
examinations to make sure that their union will not lead to the birth of disabled children. Nevertheless, families with disabled children suffer severe psychological and social stress and some of them resort to concealing these children from the view of their relatives and the local community, which deprives those children of opportunities for training, education and rehabilitation. The frustration and concern of these families can be felt as they seek to place their child in a care centre for disabled children whose capacity is limited. In the end one may say that a family with a disabled child is a disabled family.

(d) Investment in the field of disability, although minimal, represents a major problem for Jordan, which has limited resources and potential. It constitutes a burden which it cannot sustain, and which it would prefer to invest in any other sector that might give a good return, but this wish is difficult to achieve. Therefore the problem of disability will remain with local communities, both small and large. However, the basic aspect is the trend towards curtailing disability and stressing prevention. This makes it incumbent on Jordan to devote great attention in order to avoid assuming heavy expenses in the future, in view of the effective growth we can foresee in the number of disabled persons.

(e) The continued presence of causes of disabilities, such as intermarriage with close relatives, the failure to carry out appropriate medical examinations of candidates for marriage, and traffic accidents will aggravate the problems Jordanian society suffers from and complicate social life for many families, which will doubtless have a negative impact on their network of social relations, their productivity and their capacity to make a positive contribution to the community in which they live.

From the foregoing, we may clearly grasp the economic, social and psychological consequences of disability for the community. We should keep this in mind in dealing with this problem, and stress the need to curtail these consequences in any policy aimed at treating this question.

V. GOVERNMENT POLICIES

There is no doubt that the Government would like to see disability curtailed. It would also like to stop investments in the field of disability and divert those funds and resources to numerous other pressing problems connected with the economic and social development of Jordan. The Ministry of Social Development is currently drafting a law which will define the main problems which must be taken into consideration when dealing with problems of the disabled. However, the way ahead to deal with various aspects of this problem is long and tortuous, since the numbers of the disabled are growing daily. The bill stresses numerous aspects, among which are the following:

(a) The disabled should have the same rights as other citizens. They also have a right to medical treatment, individually adapted physiotherapy, instruction, education, training, rehabilitation, care and guidance to help them to optimize their potential and faculties;
(b) The disabled also have a right to a decent standard of living and the right to engage in productive work, including the following:

(i) The right to education and schooling each according to his abilities and potential;

(ii) The right to care, medical treatment and rehabilitation;

(iii) The right to work and employment commensurate with their qualifications, potential and ability;

(iv) The right to streamlined structures and the removal of physical and moral obstacles which obstruct, limit or impede their rights or their integration in the community;

(v) The right to specific personal equipment and appliances and to special educational tools and materials, according to the nature of the disability, such as may contribute to training, provide encouragement and facilitate everyday life.

While the bill has tended to stress these aspects, it has nevertheless taken as its starting point the care aspect of the problem of disability and tried to emphasize the building of institutions for the disabled, which is impossible to achieve, and to underscore the responsibility of social welfare institutions for this problem, which is not compatible with recent trends in the problem of the disabled towards the integration of the disabled in schools, institutes and everyday life.

The problem of the disabled is not one of social care, but rather of people. Therefore, all the relevant authorities should be invited to share the burden of the disabled. However, the bill has not managed to harmonize with these aspects, since it has considered the problem to be linked to the concept of care, which cannot serve the interests of the disabled in any way, and consequently it has left the question of education and schooling to the care sector.

It should be noted that the bill as it stands abolishes a right gained in 1964, when the Education Law (No. 16) stipulated that the disabled should be integrated in the educational process, by granting them a right to education. This was clearly contained in the Education Law (No. 27) of 1988, of which article 3, paragraph 3 (c) laid down that schooling was a social necessity and education was the right of all, each according to his own abilities and faculties. Article 41 of that same law stated that "the Ministry shall set up special education programmes, within the available means". This concept is still being debated. A child with a physical, sight or hearing disability, for instance, might well excel at an ordinary school, although he is currently at a school for the disabled. The debate is over the need to avoid separating the disabled from their non-disabled peers at school, as long as that is possible, because separation hinders their ability to adjust to the community
in which they are to live and work and interact with other people in a familiar human atmosphere. Therefore, it is important that disabled children should attend normal educational institutions and be a part of the education process.

If the substance of the law is currently being discussed by many of the sides concerned, the government sector is devoting considerable attention to the question of disability prevention. In an attempt to reduce the number of victims of traffic accidents, it has enacted legislation requiring the use of seat belts by car passengers and has worked to impose speed limits and the maintenance and licensing of cars, with a view to curtailing traffic accidents, which boost the number of disabled persons.

The Government has also helped to create care centres for the disabled, as well as to allow charities and the private sector to work in the field of care for the disabled and disability prevention. There is a definite interest in all aspects of health in Jordan, which is reflected in one way or another in the question of the disabled. The category of the disabled enjoy the care of government health institutions, where they are given treatment practically free of charge.

The State endeavours to provide numerous facilities to the disabled. For instance, the disabled are exempted from customs duty on many goods such as specially adapted cars for the disabled. It has also recently allowed the deaf and dumb to obtain driving licences for private cars.

These are some of the official policies for the disabled, although it is clear that the size of the problem and material needs, and the limited funds available to the Government prevents it from adopting clear-cut policies in this respect.

Similarly, numerous cultural and social obstacles have so far hindered the Government from enacting legislation to require candidates for marriage to undergo appropriate medical examinations to ascertain their ability to have non-disabled children, which will help to stop hereditary disabilities from being propagated as at present. There are certainly many matters to which attention should be devoted and policies which should be implemented. These will be dealt with in the recommendations.

**VI. RECOMMENDATIONS**

There is no doubt that there is a need to attend to many questions and to implement many policies and to give this subject the care and attention it deserves. Among the most important of these are the following:

(a) A study and documentation centre for the disabled should be set up, which would provide a nucleus of knowledge in this field. It would start by making a detailed investigation of the numbers and types of disabled persons. This would necessitate taking a special census on this problem, following an
intensive media campaign on the role of families in reporting disabled members, with a view to providing treatment and care. If this should not prove possible at present, it could be done during the next general population census in Jordan, and would be a first step out of the many needed to deal with the problem of the disabled.

(b) Public awareness of this problem should be boosted and the importance of prevention should be stressed, as well as the reasons for disability and methods of dealing with it when it arises.

(c) A policy should be adopted of mainstreaming the disabled in the community in all their activities, including school. It seems clear that the problem of disability should not be seen solely as one of care nor should the only authorities entrusted with this problem be social welfare institutions and charity organizations. Furthermore, it should be stressed that disability should not invalidate any human rights. Disabled persons should have the same rights as other citizens.

(d) Work should be done to create a national centre for the scientific diagnosis of disability, in order to determine the nature of the disability and the possibility of treatment through services available in Jordan. This implies the adoption of progressive policies towards the disabled which are in keeping with recent studies in this field and the rejection of the narrow-minded official views by which the disabled are parked in institutions that are more like prisons. Therefore, the opening of the disabled to the community and the opening of the community to the disabled is the only way to deal with the problem within the framework of modern educational concepts, which advocate the idea of integrated services to the disabled.

(e) Funds allocated to the government sector to deal with the problem of the disabled must be increased. Investment in this field must not be seen as gone for ever, or that there is no return which may be made on such an investment. This will necessitate greater efforts to convince decision-makers and policy-makers of the economic and social benefit of such investments and to stress the returns on that investment in figures whenever possible.

(f) There is an urgent need to draw up appropriate legislation to prevent hereditary disabilities. This means drafting a law to forbid marriage without the necessary medical examinations. It is also imperative to alert public opinion to the dangers of intermarriage with close relatives and the consequent risk of increased disability rates.

There is also a need to revise the bill for the disabled in harmony with the best ways of serving the disabled.

(g) An appropriate education, care and rehabilitation programme should be set up which would achieve optimum utilization of the disabled person's faculties, abilities and potential to integrate in his community as a citizen, worker or student, or in any other role he is capable of playing.
(h) Trained instructors should be provided to work with the disabled in all aspects of education, guidance, vocational, functional and physical rehabilitation. They should also be able to help the families of the disabled to cope with the problems posed by their children's disabilities. This will require the establishment of a multi-disciplinary training centre for the disabled at the pan-Arab level to hold short training courses for all people working directly or indirectly with the disabled. This centre should be consulted by legislators in the field of mental disability, as well as policy-makers, planners, media persons, religious authorities, educationalists, as well as staff working directly with the disabled, such as doctors, psychiatric counsellors, physiotherapists and others.

These suggestions constitute a sound start on dealing with this subject, which has become a major problem for Jordanian society and which we feel has not been given sufficient attention by all sectors, whether governmental or otherwise. We are certain that we must begin by implementing these recommendations as proof of our serious intentions to deal with this matter.
XXV. CAPABILITIES AND NEEDS OF THE DISABLED IN KUWAIT

by

Munira al-Qatami
Kuwait Society for the Welfare of the Handicapped
# CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. STATISTICS ON THE DISABLED OVER THE LAST TEN YEARS</td>
</tr>
<tr>
<td>II. INSTITUTIONS AND SERVICES</td>
</tr>
<tr>
<td>A. Government institutions</td>
</tr>
<tr>
<td>B. Non-governmental institutions</td>
</tr>
<tr>
<td>III. ANALYSIS OF THE ATTITUDES AND INCLINATIONS OF THE DISABLED</td>
</tr>
<tr>
<td>IV. TYPES AND CAUSES OF DISABILITY</td>
</tr>
<tr>
<td>A. Physical disability</td>
</tr>
<tr>
<td>B. Mental disability</td>
</tr>
<tr>
<td>C. Sensory disability</td>
</tr>
<tr>
<td>D. Psychological disability</td>
</tr>
<tr>
<td>V. ECONOMIC AND SOCIAL CONSEQUENCES</td>
</tr>
<tr>
<td>VI. GOVERNMENT POLICY</td>
</tr>
<tr>
<td>VII. RECOMMENDATIONS</td>
</tr>
</tbody>
</table>

---

*Page 400*
Introduction

In view of the interest of ESCWA in the subject of the disabled in the Arab Gulf region and the importance of boosting the efforts of each country as regards the development of the capabilities and potential of the disabled and their social, economic and political needs in order to achieve harmonious integration into the community, this study aims at reviewing the situation of the disabled in Kuwait with respect to the following:

(a) Statistics on the disabled over the last ten years;
(b) Institutions and services;
(c) Analysis of disability trends;
(d) Types of disability;
(e) Economic and social consequences;
(f) Government policy;
(g) Recommendations.

I. STATISTICS ON THE DISABLED OVER THE LAST TEN YEARS

The disabled are reckoned to form 10 per cent of the world's population. The services of various official bodies concerned with the disabled in Kuwait have estimated their number at 5,965, which is the same number as in the 1980 census. This census put the population of Kuwait at around 1.5 million, which means that the disabled represent 4 per cent of the population. On the basis of the average world proportion of disabled persons, there may be another 6 per cent or more still in need of education and rehabilitation services to enable them to develop their abilities to the maximum and become useful members of the community.

II. INSTITUTIONS AND SERVICES

A. Government institutions

1. Ministry of Education, Department of Special Education

The Department of Special Education would like to see education reach world levels and is convinced that education forms the basis for national revival and progress. Accordingly, the Ministry grants all Kuwaitis the opportunity to get an education commensurate with their abilities and potential, and at the same time suited to the requirements for economic and social development in the country.
The concern of the State has not been limited to the able-bodied alone. It has also granted the disabled equal opportunities for education and for preparation for life. It has not allowed sensory, motor or mental disability to deprive people of their human rights. Rather, it has helped them to benefit from special education services that should enable each individual to achieve his maximum potential in natural growth and social adjustment. This is done with special means that are adapted to each particular type of disability in order that the disabled person may be useful to himself, his family and his country.

The Ministry's efforts to provide education to the disabled began in 1955/1956, when the Light and Hope Institute for the Blind was established with an initial 29 pupils, thus forming the corner-stone of special education in Kuwait. The scope of interest in special education expanded with the foundation of the Hope Institute for Boys with Hearing Disabilities in 1959/1960. This was followed by the establishment of the Hope Institute for Girls in 1960/1961. The number of special education schools has grown to the current total of 13, which cater for four main types of disability:

(a) Hearing disabilities (the deaf and hard of hearing);

(b) Visual disabilities (the blind);

(c) Mental disabilities (the mentally retarded);

(d) Motor disabilities (paralysis).

Pupils with visual and motor disabilities follow the normal curriculum. Textbooks and materials are adapted for the blind and printed in Braille. After graduating from the fourth grade of the intermediate cycle, pupils are transferred to regular schools. It is worth noting that a number of disabled pupils have gone on to higher education and graduated from university.

Pupils with hearing and mental disabilities have a special curriculum that starts with a six-year primary cycle, followed by a six-year vocational rehabilitation cycle. Pupils with hearing disabilities who have the ability and desire to do so also have the option of joining the normal educational cycle.

Vocational studies are the main centre of interest in the technical and technological curricula. Workshops are equipped with the latest equipment and machines in order to provide the right scientific training suited to the physical and mental abilities of pupils and to meet the needs of the market for a skilled national work-force. The vocational specializations of students vary according to disability. Students with hearing disabilities specialize in either offset printing or woodworking. Students with mental disabilities specialize in the making of clothes, embroidery or bookbinding. Pupils in special education are provided with medical, psychiatric and social services. The Department has units to test hearing, measure intelligence and treat
communication difficulties; it has equipment for medical, psychiatric and social therapy and physiotherapy; it runs eye, ear, nose and throat, and dental clinics; it has physiotherapy and osteotherapy units and doctors who specialize in the disabled.

The State, through the Ministry of Education, provides students in special education with all their requirements, including teaching staff trained in special education and vocational rehabilitation, teaching workshops, teaching equipment, prosthetic appliances and means of transport, as well as textbooks, writing materials and boarding facilities for students sent with grants from other Arab countries, as well as for some Kuwaiti students under certain conditions. Since each student has his own individual needs, there are no more than 8-10 pupils per class.

The Ministry spares no effort in developing and updating the appropriate curricula to develop the abilities of students in these schools. Since 1980/1981 there has been comprehensive development of special education for the disabled encompassing progressive class structure, school programmes, curricula and teaching methods.

Curriculum development committees have come up with a new system for teaching the mentally retarded called "educational experience", and favourable results have been achieved.

Care for disabled children should begin at pre-school age because of its importance for their education, future and life. Another essential point is that the compulsory education law is also applicable to the disabled; schools are provided by the Department of Special Education for disabled children.

Appropriate names are given to schools for the disabled such as "light" for schools for the blind, "hope" for schools for the deaf, "mental education" for schools for the mentally retarded and "hope" for those suffering from paralysis.

Special education has truly become the pride and joy of the Kuwaiti educational system, by reason of the constant and persistent efforts of the Ministry of Education to develop curricula, programmes and teaching methods and materials to provide special education to the disabled. Ways are always being sought to make progress and improvements in this great humanitarian field.

2. Ministry of Social Affairs and Labour, Handicapped Welfare Department

The Handicapped Welfare Department of the Ministry of Social Affairs and Labour is concerned with care of the disabled and the elderly and the provision of all types of health, social, psychiatric and recreational services, as well as education and training and physiotherapy services. The Department currently serves 975 disabled persons through the following homes and centres:
(a) Vocational Rehabilitation Centre

This centre was founded in 1961, with temporary headquarters in As-Sirr. It provides half-day care to 138 disabled persons and offers the following services during their training:

(i) Assistance to eradicate illiteracy and adult education for those pupils able to follow courses;

(ii) Physiotherapy programmes;

(iii) Appropriate sports and physical education programmes;

(iv) Recreational, cultural and social programmes;

(v) A monthly allowance of 30 Kuwaiti dinars (KD);

(vi) Daily transport to and from the Centre;

(vii) A full breakfast every day;

(viii) All medical treatment and care;

(ix) New summer and winter clothes every year;

(x) A two-month summer holiday, during which the training allowance is suspended; a mid-year holiday in January each year;

(xi) Social aid to some blind persons, in collaboration with the Department of Social Services;

(xii) Help in obtaining prosthetic appliances (artificial limbs) and the equipment needed by some of the trainees;

(xiii) A certificate headed "To whom it may concern" to assist the trainee in obtaining suitable work outside the Centre;

(xiv) Assistance whenever possible to obtain work outside the Centre; if conditions do not make it possible to obtain such work, the trainee is attached to a sheltered workshop within the Centre, one which is appropriate to the trade in which he has been trained.

The Centre contains a number of sheltered workshops and trades suited to every type of disability:

(i) Carpentry workshop;

(ii) Electricity workshop;
(iii) Ironwork and welding workshop;
(iv) Painting and decoration workshop;
(v) Bamboo and reed workshop;
(vi) Bookbinding workshop;
(vii) Leather workshop;
(viii) Sheltered workshop for producing cleaning tools;
(ix) Women's workshop;
(x) Printing and typing workshop.

The Centre admits disabled persons of both sexes (male and female) from the age of 18. Work in the Centre is concentrated on vocational training, as well as rehabilitation services. Training is for a maximum of three to five years.

(b) Home for Mentally Retarded Women and Children

The Home for Mentally Retarded Women and Children was set up in 1965 to care for all degrees of mental retardation. It provides living, social welfare, psychiatric, health, physiotherapy, cultural and educational services to mentally retarded women and children. It has both individual and group programmes according to the mental and physical abilities of the women and children and vocational training programmes according to their capacity for training and learning. The Home provides two types of care: full board or day-care. The Home currently serves 197 women and children. Plans are being made to expand the system to all-day care.

(c) Home for Mentally Retarded Men

The Home for Mentally Retarded Men was established in 1965 to care for men and boys over 13 who suffer from mental retardation. The Home currently serves 207 persons with varying degrees of mental retardation. It provides comprehensive services to men in this category. The Home concentrates on social rehabilitation and vocational training for the slightly and moderately mentally retarded in order to reintegrate them into the community in the light of their abilities and potential, and to prepare them for vocational rehabilitation and subsequently employment. The Home provides half-day care, all-day care and boarding facilities.

The Home encourages persons capable of receiving training and vocational rehabilitation to go from full board to day care. To this end it has established a new section called the Day Care Centre to concentrate on this new trend in care.
(d) **Home for the Handicapped**

The Home for the Handicapped was established in 1974 to care for mentally retarded persons of both sexes over four years of age with physical disabilities and multiple disabilities. The Home provides full boarding facilities and currently provides social and psychiatric services to 270 persons of both sexes, as well as health services, including nursing, medical treatment and physiotherapy, in addition to daily living skills, programmes in mental education, behaviour modification and recreational and artistic programmes.

The Home endeavours to maintain constant contact between the disabled person and his family throughout the school year and during national and school holidays. The Home now has new premises designed for a future intake of 700 persons which is provided with modern scientific equipment and materials for care.

(e) **Home for the Aged**

The Home for the Aged was founded in 1955 to provide comprehensive care and full board to the elderly. It currently serves 162 elderly persons of both sexes, some of whom have physical or mental disabilities. The Home provides intensive programmes for people in this category, including all health, social and psychiatric services. The Home is currently being expanded to provide day-care and home-care services.

3. **Ministry of Health**

The Ministry of Health provides care to the disabled in the form of diagnosis and treatment in its hospitals, laboratories and physiotherapy centres. It undertakes medical supervision of all education and rehabilitation institutions for the disabled through the following:

(a) Physiotherapy departments

(b) A Developmental Medicine Unit, set up in 1979 to detect disabilities in early childhood using the most up-to-date scientific methods;

(c) A Speech and Hearing Therapy Centre, set up in 1975 to treat cases of retarded speech development;

(d) A Psychiatric Hospital, founded in 1958 to treat people suffering from mental disturbances, psychological diseases and nervous and personal disturbances;

(e) A Genetics Centre;

(f) An Early Detection Centre;

(g) An Artificial Limb Department.
B. Non-governmental institutions

1. Kuwait Handicapped Society

The Kuwait Handicapped Society is a legally constituted charity organization founded in May 1971 to help people for whom the conditions of admission to other institutions do not apply. The Society currently has 140 disabled child boarders and 30 more in day care. The Society's building has seven floors, of which three are for children. Each floor has a physiotherapy room, a work therapy room and a classroom, in addition to a children's dining room and 10 dormitories accommodating five or six children in each. The cellar houses maintenance services, while the ground floor is taken up with administration; there are two floors for staff accommodation.

(a) Aims of the Society

The main objective of the Society is to provide as much general care as possible for children and young people, and in particular to cater for the health, psychological and social problems they face using the following methods:

(i) Creating an appropriate health, social and cultural climate in which disabled children and young people should be brought up, providing supervision of leisure and helping them to become useful members of the community;

(ii) Creating specialized centres and clubs to provide care and shelter, sound guidance, vocational training and education to mentally or physically retarded children who have missed the opportunity to receive the necessary care from the community;

(iii) Providing the necessary and possible material support to the families of these children and promoting the awareness and guidance offered by specialists in these fields;

(iv) Co-operating and co-ordinating with government authorities and non-governmental bodies concerned with boosting public awareness of the social problems of the disabled through scientific programmes of prevention and treatment;

(v) Working to provide modern equipment and prosthetic appliances to disabled persons, with a view to integrating them into the community and freeing their energies so that they may adjust and adapt psychologically and socially to everyday life;

(vi) Using advanced scientific expertise and experience in these fields in order to further the aims of the Society in the fullest possible way.
(b) Conditions of admission

(i) Admission is granted to all severely disabled Kuwaitis and non-Kuwaitis, between the ages of 2 and 20 who suffer from two or more disabilities, especially those who cannot gain admission to other institutions;

(ii) Non-Kuwaitis are admitted according to seniority or the social and health status of the child, on condition that the child's guardian is physically present in Kuwait;

(iii) Children under two years of age or over twenty are not admitted.

(c) Services provided by the Society

(i) Medical services

The most important comprehensive services are the medical services provided by the Society. In addition to doctors the Society has a number of specialists in physiotherapy, work therapy and speech therapy. The role of the doctor is as follows:

a. To receive cases from admissions, to examine them and to write a detailed medical report;

b. To open medical files on each child, one in Sabah Hospital and a second in the Society, upon the child's admission to the Society. He also gives directions to the head nurse concerning the case of each child and the appropriate care and treatment;

c. To carry out periodic examinations of patients, give the necessary directions or prescribe a particular medicine;

d. To supervise all activities and services performed by specialists in the Society;

e. To co-operate with the Society's administration and suggest programmes to it in order to ensure good co-ordination and implementation;

It should be noted that Sabah Hospital, representing the Ministry of Public Health, has set up a duty roster of doctors to provide treatment to patients of the Society.

(ii) Social and psychiatric services

a. Making an in-depth study of the family situation of each child in order to ascertain the attitudes and resources of the family, overcome the difficulties that lie in the way of treatment and to help that family;
b. Finding out the needs, abilities and inclinations of the disabled child and drawing up appropriate programmes to ensure the requirements for his growth;

c. Working to ensure that the child remains closely linked to his family and facilitating contact between them, thus helping the child to appear normal upon his return to his family so that the family may not look upon him as abnormal;

d. Bringing about the necessary modification of the family's negative attitudes, especially regarding disability and their child;

e. Linking the disabled to their community in the outside world and acquainting them with it through visits, trips and social functions;

f. Acquainting the outside community with the disabled by inviting the relevant authorities to visit the Society or having certain members of the Society visit those authorities in order to acquaint them with the problems of disability, how it arises, how to curtail it and everything that is needed to do so;

(iii) Recreational activities

Social functions and visits take place both inside and outside the Society. Female members of the Society accompany the children to gardens, sports clubs and sailing clubs in winter. In summer, swimming is a favourite activity with the Society's children. Horse-riding is a year-round activity thanks to an arrangement between the Society and the Hunting and Riding Club.

(iv) Day-Care Centre

The Day-Care Centre consists of two floors. The first floor is allocated to living quarters for the staff and the ground floor contains administrative offices, rooms for medical treatment, occupational therapy, physiotherapy, hydrotherapy and eight classrooms for a current total of 64 children who as far as possible are split into groups of seven to nine, according to their physical and mental age.

The curriculum is based on training in basic living skills, simple individual and group learning experiences specially adapted to each individual's ability. The following steps take place:

a. The child's abilities, skills and educational level are assessed upon admission to the Society in order to concentrate on what the child does not know;
b. The school prepares an individual monthly plan for each child according to the child's needs and the learning experience for that month, concentrating on independent living skills;

c. At the end of each month the school presents an assessment of the monthly plan and an individual report for each child, which is sent to the child's guardian so that he may follow his child's achievements in the following areas:

i. Physical development: body, motor and sensory skills;

ii. Social development: independent living skills, self-care and self-reliance;

iii. Emotional development: manners and behavioural modification;

iv. Linguistic development: non-verbal communication, verbal reasoning, speech and the mother tongue (directed speech and conversation), as well as reading and writing for advanced level children;

v. Cognitive development: the concepts of number and quantity, colours, shapes and sizes.

In addition to this, children are taught safety, creative leisure activities such as art and music, housekeeping skills and handicrafts and they are taken on cultural and recreational field trips. All these skills and concepts are conveyed through a system of initiation with an illustrated coursebook for the three levels and an individual work book for each level. This is to enable the child to achieve sound and integrated physical, psychological, cognitive, social and emotional growth and development; emphasis is placed on behavioural modification and on the integration of the child and his peers into the community.

Finally, the Centre has begun to introduce the Megaton Vocabulary Programme, an English programme based on communication through words, gestures and symbols, designed to help disabled children, especially those with speech disabilities and hearing disabilities.

There are 180 staff, divided between administration and professional services. In addition, there are many volunteer workers who teach the basics of independent living, teach music to children as a therapy and participate in internal and external recreational programmes.

2. Kuwait Society for the Blind

The Kuwait Society for the Blind was founded on 8 October 1972 as a non-governmental association aimed at aiding and caring for the blind and helping them to solve their problems so as to ensure a good-quality and
dignified life for them. At the end of 1988 the Society had 163 members. The Society has the following objectives:

(a) To familiarize people with the blind by all available means, including inviting people to participate in social functions, seminars, etc. and to do everything possible to demonstrate the abilities, potential and talent of blind people;

(b) To consolidate co-operation among the blind;

(c) To disseminate culture among the blind by means of books recorded in cassette form;

(d) To occupy their leisure time and bring them pleasure and joy;

(e) To work to overcome the difficulties and obstacles faced by the blind;

(f) To strengthen relations between members of the Society and other Arab and international societies with similar aims.

The most important activities carried out by the Society are as follows:

(a) Cultural activities

(i) Educational activities

a. Teaching blind adults who have not had the right educational opportunities to read and write using Braille;

b. Teaching blind members of the Society to play musical instruments and to type on normal typewriters.

(ii) Library

The library has two sections: a regular library with books in Braille and books for the sighted on many different subjects, and a cassette library with books recorded on cassette on many different subjects, including religion, culture and science. The library also has various types of recording equipment, two tape copiers and a language laboratory with listening booths. It continues to add all new and interesting material to its collection and it maintains permanent contact with institutions for the blind all over the world in order to benefit from new material.

(b) Social activities

The Society tries to provide as many opportunities as possible for members to meet each other and to create an atmosphere of understanding between all. To that end trips are organized for the blind both in Kuwait -
for instance to Scout camps - or to Arab countries so that they can become acquainted with new developments concerning the blind.

(c) General services

The Society strives to provide members with the necessary services and requirements and everything they may need during the time they spend in the Society. It provides free transport to and from the Society. It also provides games and recreation. The role of the Society is not restricted to serving its members inside the Society, but extends to helping its members to obtain special facilities and services from the Ministry and public institutions. The Society also participates in most religious and national occasions.

(d) Sporting activities

Sporting activities have been upgraded at the request of many members. A special playground for blind persons' ball games has been built and equipped, special balls have been purchased for such games and teams have been formed. A tournament was organized by the Society from 1 to 4 December 1988.

3. Children's Remedial Centre

The Children's Remedial Centre was established by Ministerial Resolution No. 60 of 21 June 1984 and came into operation in February 1985. This Centre provides specialized services in the diagnosis and treatment of learning disabilities. It has devised numerous tests and trained many workers in diagnosis and the treatment of learning disabilities. It has come up with suitable psychological tests to diagnose cases dealt with in the Centre. The Centre is the first of its kind in the region and provides specialized care to a category of the disabled which had not previously received appropriate care.

4. Kuwaiti Club for the Deaf

The Kuwaiti Club for the Deaf was founded in 1975. Deaf members enjoy full rights and pursue all sorts of activities according to individual abilities and inclinations. The Club has 250 registered members, each with a complete personal file. The Club maintains contact with officials concerned with the deaf in Kuwait through the Ministry of Social Affairs and Labour in order to overcome some of the difficulties faced by the deaf in everyday life.

(a) Aims of the Club

The Club aims to provide opportunities for members to pursue various types of useful leisure activities, to strengthen co-operation and good relations between members and to collaborate with all national and international institutions and bodies concerned with the deaf in order to achieve the aims of the Club and to serve its members.
The comprehensive care provided to the deaf by State officials, first and foremost by His Highness the Amir and His Highness the Crown Prince and President of the Council of Ministers, has afforded the deaf equal opportunities with the able-bodied in all fields and has helped them to lead a natural life with members of the community.

The Board of Directors of the Club constantly strives to set up numerous committees to prepare annual programmes of social, cultural, artistic and sporting activities. The Sports Committee helps to provide trainers and supervisors to promote sports teams and to give them sound training. This enables members to compete in sports contests with other similar clubs in Arab and other countries. Annual programmes also contain numerous other activities including the following:

(i) Participation in national celebrations on religious occasions;

(ii) Concern for the problems of members and sharing members' joys and sorrows;

(iii) Training and teaching in all kinds of drawing and painting;

(iv) Training and teaching in photography;

(v) Organizing social events twice a month for recreation purposes and to reaffirm good relations between members;

(vi) Participating in camps and general service activities;

(vii) Showing new educational films for the deaf.

Club officials have worked to ensure that Kuwait is represented in activities at the Arab and international levels. Thanks to the concern and assistance of government officials, these efforts have resulted in the participation of the Kuwaiti Club for the Deaf in the World Federation of the Deaf, the Asian Federation of the Deaf and the Arab Federation of Associations for the Care of the Deaf.

The Club won first place in the football tournament organized in Melbourne, Australia for the countries of Asia and the Pacific in 1988. The Club's team received the cup from the Prime Minister of Australia and had the honour of meeting the Amir of Kuwait, Sheikh Jaber al-Ahmad al-Sabah and the Crown Prince and President of the Council of Ministers Sheikh Sa'd al-Abdullah al-Salem al-Sabah.

The Club represents Kuwait at international events for the deaf, carrying the flag of Kuwait with pride, displaying pride in the advanced level that the Kuwaiti deaf have reached in all sporting activities, competing against countries that have had many more years' experience in this field. This has been thanks to the co-operation between government officials and the Board of Directors of the Club since the Club's foundation.
5. Kuwaiti Club for the Disabled

The Kuwaiti Club for the Disabled was founded in late 1977 on the gracious initiative of His Highness the Amir of Kuwait, Sheikh Jaber al-Ahmad al-Sabah. The Club is attached to the Ministry of Social Affairs and Labour, which gives it material and moral support to provide integrated services to the disabled.

The Club has over 500 members, male and female, of various nationalities. They are divided into regular members who have been certified by medical examination as suffering from disabilities such as paralysis, cerebral palsy, loss of limb, blindness, deafness, etc., and honorary members recognized by the Board of Directors for their moral, physical, sporting, social, etc. services to the Club.

The Club has the aim of reintegrating the disabled into the community by providing religious, social, artistic and sporting activities on a year-round basis. The Club takes an interest in sports for the disabled and has a general policy of promoting them and raising their technical level. It tries to reveal the natural gifts of members, to develop their abilities and promote the emergence of natural leaders in a framework of freedom and equality. The Club's committees have played a constructive and effective role in achieving its lofty aims, enabling members to pursue various activities which spring from these committees.

The Club is a member of the International Sports Organization for the Disabled, the Stoke Mandeville International Sports Federation for the Blind, the International Association for Cerebral Palsy and the International Co-ordinating Committee.

Since 1978 the Club has participated annually in numerous international championships and games for the disabled. Its teams have held high the name and flag of Kuwait in international sporting events among countries which have great capabilities in this field. By the end of 1988 its teams had won a total of 385 gold, silver and bronze medals, and players of the Club have ranked high at the international level in these championships and games.

The Club has taken part in the Olympic Games for the Disabled, in which it won many medals and has been highly ranked. The last such games were in Seoul, where the Club won 17 gold, silver and bronze medals.

Olympic Games for the Disabled in which the Club has participated:

The Sixth Olympic Games for the Disabled, the Netherlands, 1980

The Seventh Olympic Games for the Disabled, United Kingdom, 1984

The Eighth Olympic Games for the Disabled, Seoul, 1988
Major international championships and sporting events in which the Club has participated:

The Welsh Tournament, 1978

The World Championship Games for the Disabled, Stoke Mandeville, United Kingdom, 1978

The Games for Victims of Cerebral Palsy, Edinburgh, United Kingdom (as observers), 1978

The World Championship Games for the Disabled, Stoke Mandeville, United Kingdom, 1979; club players established new records and won 22 medals (gold, silver, bronze)

The Orlando Tournament, United States, October 1979

The Olympic Games for the Disabled, the Netherlands, 1980; Club players won five medals (gold, silver, bronze)

The Tournament for the Disabled, United States, 1980

The World Championship Games for Disabled Children, Newcastle, 1981; Club players won two bronze medals

The World Championship Games for the Disabled, Stoke Mandeville, 1981; the team won four medals (gold, silver and bronze)

The Canada Tournament for the Disabled, 1981

The International Wheelchair Cross-country Race, Japan; fifth and seventh place out of 120 participants from different countries

The World Championship Games for the Disabled, Stoke Mandeville, 1982; ten medals (gold, silver and bronze)

The Norway World Championship games, 1982; 13 medals (gold and bronze)

The Basketball World Championship, Canada, 1983; the team achieved good results

The Third Cross-country Race, Oita, Japan, 1983; the team achieved good results

The World Championship Games for the Disabled, Stoke Mandeville, 1984; the team won 4 medals (gold, silver and bronze)

The Fourth Cross-country Race, Oita, Japan, 1984; the team won first place
The First Arab Championship for the Disabled, March 1985; 8 countries participated. The team won 30 medals (gold, silver and bronze).

The Weight-lifting Championship, Marbella, Spain, May 1985; the Club won the first place.

The World Championship Games for the Disabled, Stoke Mandeville, 1985; the team won 33 medals (gold, silver and bronze).

The World Championship Games for the Blind, Norway, 1985; the Club won 30 medals (gold, silver and bronze).

The Fifth Cross-country Race, Oita, Japan, 1985; the players won first place.

The United States Ping-pong Championship, the team won first, second, third and fourth place.

The Switzerland Disabled Marathon, May 1986; 13 countries participated with a total of 135 competitors; the players came first, third, eighth and fifteenth, and the team won the title of best participating team in the Marathon.

The World Championship Games for the Disabled, Stoke Mandeville, July 1986; 41 countries participated. The players won 54 medals (19 gold, 20 silver and 15 bronze).

The Sixth Cross-country Race, Oita, Japan, November 1986; 19 countries participated; 72 players of both sexes completed the full, while 146 completed the half-marathon. The players came fifth in the full marathon, and won the ninth, tenth, eleventh and twentieth places.

Fencing Championship, France, March 1987; 6 players from the Club participated with competitors from six countries, the players won the gold medal.

III. ANALYSIS OF THE ATTITUDES AND INCLINATIONS OF THE DISABLED

Disabled persons face many difficulties with regard to their attitudes and inclinations which result from the disability from which they suffer. Their physical movements may be impaired or they may have problems stemming from their social adjustment or the adjustment of people around them to their disability and its consequences.

The attitudes of normal people towards the disabled influence the way the disabled see themselves. One attitude that has been prevalent for a long time is that the disabled are somehow different from normal people in their...
personal characteristics, that they are more dependent, withdrawn and subject to frustration and failure and that behavioural and emotional disturbances are common amongst their number. Such a low, blinkered view of the disabled may lead normal people to expect little from them and, consequently, to provide them with fewer opportunities and fail to give them the appropriate experience which could enable them to participate independently and actively in normal everyday activities.

Such are the negative attitudes which normal people develop towards the disabled. Numerous studies have demonstrated the negative impact of such attitudes. When the disabled sense the negative attitudes shown towards them, this necessarily affects their personal and social development and results in a negative regard for themselves and, perhaps, a lowering of their aspirations in general.

Therefore it is imperative to change the attitudes of all sorts of people towards the disabled. However, it is no easy task to do this overnight or with a few short programmes. Since it takes a long time for attitudes to form, changing them will require carefully designed, detailed and comprehensive programmes that run for long periods of time. Programmes which have confirmed their effectiveness in changing people’s attitudes towards the disabled are those that provide sufficient, appropriate and correct information concerning the disabled through lectures, conferences, seminars, debates, public statements and video and television programmes, as well as direct contact and interaction with disabled persons. Emphasis should also be placed on the many positive aspects of the disabled. This may help them to adjust suitably to everyday life and even to excel in one or more areas if they are provided with the appropriate care, education and training and if emphasis is laid on the notable positions they have achieved in society. Taha Hussein, Sheikh Abdallah al-Ghanim, Helen Keller, Franklin Roosevelt and others are examples of famous persons who have managed to surmount their disabilities and to demonstrate the ability of disabled persons to attain suitable levels of personal and social independence. From this it may be deduced that attitudes consist of the reactions of individuals to various factors in the environment, and that consequently attitudes towards the disabled can be changed through suitable programmes and information which shift the emphasis from the negative to the positive by drawing attention to a few individuals who have achieved great success in their lives, in spite of their disabilities.

IV. TYPES AND CAUSES OF DISABILITY

A. Physical disability

Physical disabilities are those that obstruct a person’s movements, activity or vitality as a result of a defect, impairment or disease of the person’s muscles, joints or bones. This hampers their normal functioning and consequently affects the person’s education and ability to support himself.
Physical disabilities have a number of causes which vary in their intensity and symptoms, according to the intensity and type of disease which causes the disability. Statistics published by an American scientific magazine gave the following causes of and percentages for total disabilities: poliomyelitis, 33.4 per cent; tuberculosis of the bone, 12.6 per cent; spasmodic paralysis, 14 per cent; congenital defects, 10 per cent; heart disease, 16 per cent; accidents, 6 per cent; other causes, 6 per cent. The proportion of physically disabled persons varies from one society to another, according to the extent to which individuals are exposed to the main causes of disability. As health and psychiatric care, education and administrative effectiveness increase, the numbers of the disabled fall. Some of the causes of physical of disability are as follows:

1. Diseases such as tuberculosis, poliomyelitis and hemiplegia;
2. Congenital defects such as the lack of part or all of a limb;
3. Complications arising at birth such as cerebral palsy and epileptic fits;
4. Disorders of bodily organs such as cardio-vascular disorders and glandular disorders;
5. Hereditary diseases;
6. Various types of accident such as accidents at home, at work, traffic accidents, falls, sports accidents, etc;
7. Accidents resulting from wars.

B. Mental disability

Mental disability denotes any defect, impairment or handicap in the mental processes that affect perception, speech, coherent thinking, reasoning, etc., which causes mental retardation. A person thus loses the capacity for development, learning or social communication in the environment in which he lives, and his behaviour is seen as abnormal according to accepted social norms.

The causes of mental retardation are numerous, and probably number over 200. They are mostly hereditary or due to factors that affect the foetus during the mother's pregnancy or at birth. There are also various environmental factors to which the child may be exposed.

The following are causes that underlie the majority of cases of mental retardation:

1. Hereditary factors

These are a combination of factors that affect the embryo at the time of fertilization and cause mental retardation for the following reasons:
(a) A dominant hereditary trait passes from one of the parents to the child. According to Mendel's law, this means that the trait of mental retardation appears in succeeding generations at a ratio of 3:1.

(b) If the trait of mental retardation exists in both parents as a recessive trait, it passes to their offspring as a recessive gene.

(c) Chromosomal abnormality, caused by factors which current scientific knowledge is still unable to explain fully; a disturbance may occur during the division of the fertilized ovum or germ-cell.

The most common type of chromosomal abnormality is that known as Down's syndrome. This was previously termed mongolism, as the facial features of individuals who suffer from this condition resemble those of the Mongol race. In this morbid condition there is one extra chromosome number 21 in the cell. It should be noted that the embryo's liability to this condition increases as the age of the pregnant mother exceeds 35 years of age. Research has shown that the prevalence of Down's syndrome is 1:1,000 when the pregnant mother's age is 30, rising to 1:400 at the age of 35, 1:60 at 40, to 1:33 over 40 and 1:10 at the age of 50.

2. Metabolic and other disorders

Metabolic disorders are varied and constitute the main causes of severe retardation as, for example, disturbances in protein synthesis as in the case of phenylketonuria (usually referred to as PKU).

Incompatibility of the rhesus (Rh) factor in the blood of the parents can cause haemolytic disorders.

Pregnant mothers may suffer from accidents or diseases other than those of genetic origin and these can affect the health and growth of the foetus. These include contagious diseases such as rubella, syphilis and yellow fever, malnutrition, exposure to X-rays, etc.

The use of certain drugs, narcotics or alcohol by the pregnant mother can also affect the health and growth of the foetus.

C. Sensory disability

Sensory impairments are classified under physical disability, though sometimes considered as separate types sensory impairment may relate to one or other of the senses of vision, touch, hearing, smell or taste. Man's power of perception is dependent upon the sensations he receives by way of these receptors. Everything that a human being feels or does depends on the nervous system, which receives stimulation from the various senses. A sensory disability may be the result of visible impairment or a failure in the sensory function, or a defect in the nervous system or some disturbance in the internal secretions in the cells of the nervous system.
Visual disability can be caused by: congenital defects; eye disease; premature birth; or malnutrition.

Hearing disability can be caused by: inflammation of the middle ear; the accumulation of a gum-like substance in the ear canal; hereditary or congenital diseases; brain tumours and acute inflammation, particularly meningitis.

In view of the importance of the sense of hearing in associating an individual with his environment, auditory impairment can have various consequences such as:

1. Delay in linguistic development;
2. Delay in mental development and learning ability;
3. Delay in verbal development;
4. Delay in emotional development and disturbance in reaction to events;
5. Disturbance in developing social relations;
6. Behavioural anomalies;
7. Loss of mental adaptability;
8. Disturbance in personality development and adjustment.

There is no doubt that the early detection and treatment of auditory impairments may reduce the seriousness of these problems and their consequences, and that providing education and training for children who are affected to allow their subsequent integration into society will help to solve these problems.

D. Psychological disability

Emotions play an important role in the lives of individuals. They not only impair a child’s daily habits and practices and drive him into certain forms of behaviour and activity; they can also result in disability.

The impact of emotions on a person’s physical health can be serious, particularly when these emotions are strong and frequent. Emotions may be unpleasant, such as sorrow, jealousy or anger, in which case they hinder psychological development. On the other hand, pleasant emotions such as love and affection are necessary in that they assist in the natural psychological development of a person, particularly in childhood.

Various explanations have been advocated regarding the causes of psychological disorders. The main causes are as follows:
(a) Mental factors;

(b) Psycho-sociological factors (environmental);

(c) Physiological factors.

V. ECONOMIC AND SOCIAL CONSEQUENCES

In the process of undergoing economic and social changes, Arab society is bound to encounter certain problems that affect both individuals and social systems. The problem of disabled persons is one of these. Undoubtedly social institutions have extended the necessary care to several sectors of the population, including that of disabled persons, through programmes that aim basically at social development by solving the social problems that face modern society. However, comprehensive development should not only take into account social factors, but economic and political factors as well. On this basis, in 1969 the Economic and Social Council defined development as a complex organic process involving changes in economic and social aspects that are interrelated, and in most cases found to be locally interrelated. This means that development cannot be achieved purely by social measures; it should be combined with political and economic measures.

In view of the social affluence brought about by the increase in national wealth it is now possible to provide education, health services and housing, as well as social services, including care for disabled persons. Since these activities are becoming part of the social and economic development process, social care institutions must be integrated into the development programme so that they can become more effective in assisting disabled persons to overcome their problems through rehabilitation and the learning of new skills that will help them to secure work opportunities and earn a living and thus become useful members of society.

Persons with severe disabilities who cannot benefit from rehabilitation programmes can be provided with some material support through social care institutions.

Social development programmes in the field of rehabilitation for disabled persons therefore have a twofold benefit for the individual and for society alike.

VI. GOVERNMENT POLICY

The Kuwaiti Government's policy with regard to care for disabled persons is inspired by the well-established principles of religion that recognize a man's right to live in dignity and peace. On this basis the objective of government policy is to care for the disabled and to develop their capabilities and interests and provide opportunities for them to be integrated into public life. Plans and programmes to achieve this have also been drawn up.
The Government has also safeguarded the right of the disabled to happiness and protection and to equal opportunities for development, education and to encourage them to accept responsibility and to become useful members of society.

It is the obligation of all Governments in modern times to enhance the situation of disabled persons in the fields of science and culture, and to help them to develop vocationally and socially.

Attention should also be focused on preventive measures to reduce physical and mental disabilities.

VII. RECOMMENDATIONS

1. Attention should be paid to collection and collation of statistics on disabled persons. They should be classified according to careful standards so they can serve as a basis for the planning of appropriate programmes. Detailed information on disability should be included in population censuses. Simple field surveys should be carried out on all groups of disabled persons and on all types of disability.

2. A guide should be prepared of all governmental and non-governmental institutions caring for disabled persons for each Arab country. Occupational bodies, non-governmental societies, popular organizations and communities should be given technical and financial support to encourage them to take an active part in the fields concerned with the provision of services for disabled persons, including the prevention and treatment of disability.

3. Public awareness of the problems and causes of disability should be promoted so as to encourage a scientific attitude to be taken towards them. This will eliminate the traditional negative notions that prevent the problems from being addressed objectively.

4. Research and studies on aspects of disability should be conducted with a view to acquainting the community with the causes of disability and the means of preventing and treating it.

5. Attention should be paid to promoting overall development that involves changes in the economic and social structures. This will contribute substantially to the elimination of the causes of disability in all its forms.

6. High-level support for programmes concerned with caring for the disabled is needed as a part of an overall national effort.
XXVI. DISABLED PERSONS IN LEBANON

by

Hashem al-Husseini

Director,
Centre for Social Training and Development
## CONTENTS

Summary ................................................................................................. 424

Chapter

I. STATISTICS AVAILABLE ON DISABLED PERSONS IN LEBANON .......... 426
   A. Introduction .................................................................................. 426
   B. Enumeration and classification of disabled persons ......................... 426
   C. Estimate of number of disabled persons ....................................... 429

II. INSTITUTIONS FOR DISABLED PERSONS IN LEBANON .................. 430

III. DISABILITY TRENDS ...................................................................... 432

IV. CLASSIFICATION OF TYPES OF DISABILITY .................................. 433

V. SOCIAL AND ECONOMIC CONSEQUENCES .................................... 434

VI. GOVERNMENT POLICIES ................................................................. 436
   A. The Public Directorate of Social Affairs (Department of Social
      Revitalization) .............................................................................. 436
   B. The Public Directorate of Health .................................................. 438
   C. Social Security .............................................................................. 438
   D. The Educational Centre for Research and Development ............... 438
   E. The College of Public Health of the University of Lebanon .......... 439

VII. RECOMMENDATIONS ..................................................................... 439

Sources .................................................................................................... 442
Summary

1. **Statistics available on disabled persons in Lebanon**

Lebanon suffers from a weak statistical base and studies on the disabled are as rare as other field studies and statistical surveys. The most comprehensive study on the subject is probably the "Enumeration and classification of disabled persons in Lebanon" of 1981, which utilized the comprehensive survey method. Previous studies are for the most part sketchy.

This study covered 19,974 disabled persons of various categories from all regions of Lebanon. Using this figure as a basis, the number of disabled persons in 1981 was estimated at approximately 43,896. The current number of disabled persons may be ascertained by adding 5 per cent, which gives approximately 80,000.

2. **Institutions for disabled persons in Lebanon**

In Lebanon there are approximately 50 state-approved institutions concerned with the disabled; they all belong to the private sector and co-operate with the Public Directorate for Social Affairs (the Department of Social Revitalization) and other Government bodies which support these institutions by providing daily expenses for treatment and care, loans and grants for building, equipment and appliances, as well as training and study grants.

The majority of the disabled in Lebanon live with their families; approximately 3,000 disabled persons live in care institutions. There are not enough institutions for the number of disabled persons.

3. **Disability trends**

Disability trends in Lebanon are characterized by an increase in the number of cases of physical disability resulting from random shelling, car bombs and military confrontations. In addition, there are psychological problems resulting from anxiety, fear, disturbance and nervous states, especially in children.

4. **Classification of types of disability**

Disabilities may be classified in two main types: physical disabilities and mental disabilities.

Physical disabilities include the blind, the deaf, the dumb, amputees, paralytics, chronic rheumatics and the deformed. This category also includes cases of multiple disability where persons suffer from more than one disability at the same time.
Mental disabilities are divided into two categories: the mentally retarded and the mentally ill, in addition to the category of socially unadjusted persons who cannot be integrated in schools or public activities.

5. Social and economic consequences

Lebanon is today in dire economic straits. The purchasing power of the Lebanese pound has dropped by 150 times and this crisis has had an impact on the situation of the disabled.

According to the 1981 enumeration, only one quarter of disabled persons received any kind of care; three quarters of the physically disabled have received no treatment at all.

There is a low level of public awareness and willingness to accept the problems of disability.

The system of shelter, care, and rehabilitation provided by the Lebanese State through the Department of Social Revitalization covers only 30 per cent of the costs of the disabled taken into care. In addition, there are problems in rehabilitation and difficulties in getting the disabled accepted by educational and vocational institutions as well as a refusal to employ disabled persons.

6. Government policies

Government services offered to the disabled are practically limited to the efforts of the Department of Social Revitalization, which has concluded agreements with 22 care institutions. The total amount expended by the Department in 1988 was only about $US 150,000. The Lebanese State, for numerous political and economic reasons, is not today in a position to assume its responsibilities regarding social problems in general and with respect to the disabled in particular.

7. Main recommendations

(a) To undertake a new study to enumerate and classify disabled persons, utilizing a comprehensive survey to get a clear scientific picture of the current state of disabled persons in Lebanon;

(b) To train specialized instructors and give support to training centres for workers with the disabled;

(c) To support centres for the care of the disabled that have been damaged by the events in Lebanon in order to rebuild and re-equip them;

(d) To introduce grant-supported workshops to train the disabled and provide work for them after training;

(e) To enact legislation that guarantees everyday facilities for the disabled.
I. STATISTICS AVAILABLE ON DISABLED PERSONS IN LEBANON

A. Introduction

Many third world countries suffer from an insufficiency or complete absence of statistics in various fields which rely on numerical data as a scientific base for the formulation of development plans and policies. Lebanon too faces this problem, indeed it is one of the countries where for many reasons the lack of statistics is greatest. Some of these reasons have to do with the nature of the political régime, which is based on the principle of sectarian equilibrium.

Ever since the beginning of the 1960s, when the Earford mission came to Lebanon, there has been an urgent need to carry out surveys and field studies. The first comprehensive study of the labour force in Lebanon was done in 1970. One might also note a rapid study carried out by a Lebanese association in 1980, which estimated the number of disabled at approximately 103,000. The disabled fared no better than other categories in terms of comprehensive field studies until the gap was filled by a study entitled "Enumeration and classification of disabled persons in Lebanon", carried out in 1981. It is perhaps the only study that has made a complete survey of the various types of disability and may be considered the most important scientific document on disability in Lebanon. Since that time there has been no major statistical work in that field. In spite of the eight years that have elapsed since it was carried out, the data it provided may be still be used to estimate the numbers of disabled. Therefore, we have basically relied on that study and attempted to supplement it through interviews, investigations and consultations with a number of governmental and non-governmental offices concerned with the disabled, so that our report might give as clear a picture as possible of the current situation of disabled persons. If, as already mentioned, there has been no new study available for utilization, we would nevertheless stress the need to prepare such a study today.

B. Enumeration and classification of disabled persons

The study entitled "Enumeration and classification of disabled persons in Lebanon" was prepared in 1981 on the occasion of the International Year of Disabled Persons. It was supervised by a governmental committee headed by the Director-General for Social Affairs, with technical supervision by the Director of the Social Training Centre. The purpose of the study was to become better acquainted with the disabled in Lebanon in order to provide them with training, treatment and rehabilitation services, with the following general objectives:

- To respond to the proclamation by the United Nations of 1981 as the International Year of Disabled Persons;
To ascertain how many disabled persons there are in Lebanon and their distribution among the various groups of the Lebanese people in the different regions of Lebanon;

To ascertain the reasons for and factors leading to physical and mental disabilities;

To obtain comprehensive data on the number of disabled persons and their geographic distribution according to the variables of sex, age groups, religion, social situation and demographic situation;

To determine the potential for developing rehabilitation and expanding the services that ought to be provided.

This field study, as distinct from individual statistical research, adopted the method of a comprehensive survey for which no less than 300 team leaders and field investigators were recruited and registration centres set up in all parts of the country. House visits were made in cases where people had failed to come forward to the registration centres.

Field research was carried out by means of a questionnaire with 93 questions about disabled persons, including age, sex, type of disability, origin of disability, religion, denomination, social situation, marital status and place of residence.

The physically disabled were divided into two groups:

- The blind, the deaf, the dumb and amputees;
- Paralytics, the deformed and rheumatics.

The mentally disabled included:

- People with epilepsy and Down's Syndrome;
- The mentally retarded and those with recognizable mental illnesses.

A total of 19,974 disabled persons were enumerated in the various groups. This figure naturally does not represent the total number of disabled persons in Lebanon in the year the study was carried out. All the disabled persons identified were listed by name according to their actual place of residence as well as the place of residence indicated on their identity cards, with the following results:

- The complete information sought by the questionnaire was obtained for 18,321 disabled persons;

Partial information was obtained for 921 disabled persons;
Names and type of residence only were obtained for 732 disabled persons.

The geographic distribution of disabled persons, totalling 18,321 physically disabled and 5,940 mentally disabled, according to the questionnaires, which were sorted by computer, was as follows:

<table>
<thead>
<tr>
<th>Physically disabled:</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beirut Governorate:</td>
<td>2,055</td>
</tr>
<tr>
<td>Beirut Suburbs:</td>
<td>3,280</td>
</tr>
<tr>
<td>Mount Lebanon Governorate:</td>
<td>2,377</td>
</tr>
<tr>
<td>Northern Governorate:</td>
<td>4,237</td>
</tr>
<tr>
<td>Southern Governorate:</td>
<td>3,505</td>
</tr>
<tr>
<td>Beqa'a Governorate:</td>
<td>2,867</td>
</tr>
</tbody>
</table>

The highest proportion of disabled persons was in the Northern Governorate (23.13 per cent), immediately followed by the Southern Governorate (19.13 per cent). It is worth noting the similar proportions of disabled persons in the Southern Governorate (19.13 per cent), Beirut Suburbs (17.90 per cent) and the Beqa'a Governorate (15.65 per cent). Such similarity was also observed in the proportions of disabled persons in Mount Lebanon Governorate (12.97 per cent) and Beirut Governorate (11.20 per cent).

<table>
<thead>
<tr>
<th>Mentally disabled:</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beirut Governorate:</td>
<td>768</td>
</tr>
<tr>
<td>Beirut Suburbs:</td>
<td>1,097</td>
</tr>
<tr>
<td>Mount Lebanon Governorate:</td>
<td>861</td>
</tr>
<tr>
<td>Northern Governorate:</td>
<td>1,349</td>
</tr>
<tr>
<td>Southern Governorate:</td>
<td>1,080</td>
</tr>
<tr>
<td>Beqa'a Governorate:</td>
<td>785</td>
</tr>
</tbody>
</table>

The highest proportion of disabled persons was in the Northern Governorate (22.71 per cent), immediately followed by Beirut Suburbs (18.47 per cent) and the Southern Governorate (18.18 per cent). It is worth noting the similarity
of the proportions of disabled persons in Mount Lebanon Governorate (14.49 per cent), Beq'a Governorate (13.22 per cent) and Beirut Governorate (12.93 per cent).

C. Estimate of number of disabled persons

The 1981 study entitled "Enumeration and classification of disabled persons in Lebanon" was based on the data of the study entitled "Enumeration of the labour force", undertaken in 1970. The study comprised an estimated 65 per cent of disabled persons between the ages of 3 and 60, whose total numbers according to the data of the enumeration of the labour force and statistical calculations were estimated at 30,784.

The data of the enumeration of the labour force in Lebanon in 1970 gave 21,270 disabled persons between the ages of 3 and 65 out of a total population of 2,126,325, or 1.00 per cent. They gave 30,420 disabled persons of all ages, or 1.43 per cent of the total population.

The conclusions of the field study on the enumeration and classification of disabled persons gave the number of persons disabled as a result of the events in Lebanon as follows:

- Physically disabled of the first group (blind, deaf, dumb, amputees): 590 out of 7,203;
- Physically disabled of the second group (paralysed, deformed, rheumatic, unspecified disabilities): 652 out of 9,559;
- Mentally disabled: 179 out of 5,940,

or a total of 1,421, representing 7.76 per cent.

This made it possible to estimate the proportion of the disabled in Lebanon in 1981 as follows:

- Approximately 1.08 per cent for disabled persons from 0 to 65;
- Approximately 1.54 per cent for disabled persons of all ages (1.43 per cent x 1.070 per cent).

The number of residents in Lebanon in 1981, assuming an annual population increase of 2.7 per cent, was estimated at $2,126,325 \times 1.02711 = 2,850,392$ persons.

The number of disabled Lebanese between the ages of 0 and 65 was thus estimated at $2,850,392 \times 1.08 \text{ per cent} = 30,784$.

The number of disabled persons enumerated in the field study was 19,974 between the ages of 3 and 60 out of an estimated total of 30,784 disabled persons.
These overall data suggest that the field study comprised approximately 65 per cent of the total number of disabled between the ages of 0 and 60.

Thus the number of disabled of all ages in Lebanon in 1981 was estimated at 2,850,392 x 1.54 per cent = 43,896.

Non-statistical estimates suggest that the proportion of disabled in Lebanon today is nearly 5 per cent of the total population, according to some experts; in another estimate, this proportion rises to 10 per cent, taking into account all age groups and including dangerous illnesses such as heart disease, diabetes, cancer, etc. However, such percentages are conjectures which have no statistical basis and may therefore not be relied upon.

II. INSTITUTIONS FOR DISABLED PERSONS IN LEBANON

There are today in Lebanon around 50 state-approved institutions concerned with the disabled, including large centres for the treatment of the physically disabled which have physiotherapy and emergency departments, as well as centres for the fitting of limbs and appliances. During the civil war, institutions have sprung up which deal with the deaf and the dumb, the blind, the mentally retarded and drug addicts.

Before 1956, care was limited to providing services to the blind. However, with the spread of polio, the first hospital providing medical care and re-education for paralytics was established in 'Aley. Subsequently, the Centre for Medical Rehabilitation was established in Alousay in the southern suburbs of Beirut, and the Centre for Vocational Rehabilitation in the Hadeth area of Beirut.

It was during this period that a total of five institutes for the blind, the deaf and dumb and the mentally retarded were established in Beirut, Ba'abda and Broummana. All of these institutions were set up by the first generation of Lebanese social workers.

In 1970 the Centre for Physiotherapy and Rehabilitation was established within the Institution of Social Services in Tripoli, as well as another centre in Zghorta.

Care for the disabled has today reached a technically acceptable level, but the volume of these services remains insufficient to cope with the high level of needs.

The Lebanese State has given support to institutions concerned with the disabled since their inception, by providing either daily allowances for treatment and care or loans and grants for the foundation of institutions, or equipment and appliances and training and study grants. This has been done either directly or through the relevant international and foreign organizations.
Governmental bodies concerned with the disabled are in particular:

- The Public Directorate of Health, for the physically disabled, especially for the fitting of artificial limbs;

- The Public Directorate of Social Affairs, for vocational rehabilitation of the sensorily disabled or the mentally retarded;

- The National Employment Foundation of the Public Directorate of Labour, for special assistance with vocational training; grants and assistance are also provided by the Council for Development and Reconstruction;

Here it should also be mentioned that the disabled have begun to organize themselves in special associations and federations.

The Public Directorate of Health has agreements with over 30 institutions to pay hospitalization expenses for long-term treatment of reversible impairments; it also has agreements with specific institutions for non-reversible impairments. The Public Directorate provides nearly 300,000 Lebanese pounds (LL) a month for the purchase of artificial limbs and appliances for paralytics.

The Department of Social Revitalization of the Public Directorate of Social Affairs is the head institution for services to the disabled in Lebanon. Since its foundation in 1959, it has cared for the physically and sensorily disabled through the provision of training, rehabilitation and shelter to the deaf and dumb and the blind. In 1962 the Department concluded its first agreement with a care institution for the provision of shelter, care and rehabilitation to 25 mentally retarded children. In 1978 the number of institutions rose to four, providing rehabilitation to 260 children. In 1977 the Department set up a special section devoted to the affairs of the disabled. Since 1978, a total of 22 institutions have concluded agreements with the Department, which currently cares for 2,259 disabled persons, of whom 539 are receiving vocational training.

Returning to the enumeration and classification of the disabled, it appears that the vast majority of the disabled of various types do not reside in special institutions, as is borne out by the following figures:

Statistical tables show that the proportion of the physically disabled of the first group who reside in special institutions does not exceed 8.64 per cent, as against 89.60 per cent who live with their families.

Of the physically disabled of the second group, 5.16 per cent reside in an institution, as against 93.14 per cent who reside with their families.

The distribution of the mentally handicapped, according to age groups, is as follows:
3-5: 2.26 per cent in an institution; 94.57 per cent with their families;

6-10: 8.92 per cent in an institution; 89.26 per cent with their families;

11-60: 13.48 per cent in an institution; 85.14 per cent with their families.

The majority of the disabled in Lebanon thus reside with their families. There is evidently a great lack of care institutions in relation to the number of disabled persons.

III. DISABILITY TRENDS

The analysis of disability trends in the statistical sense implies the comparison of numerical data derived from field studies undertaken on a periodical basis to keep a watch on disability in a given country.

As has been noted, such studies are not available for Lebanon. It is therefore difficult to make a scientific, statistical analysis of disability trends, although it is easy to conclude from conditions prevailing in Lebanon, which for fourteen years has been the scene of a merciless civil war, that disability trends are characterized by an increase in the number of physical impairments of various types, especially those resulting from random shelling, car bombs and armed confrontation.

Hardly a week goes by in which we do not read in the newspapers or hear on radio and television of people being taken to hospital for treatment and who are left with some sort of impairment.

This is not to speak of the psychological disturbance, the anxiety and fear suffered by the Lebanese and the consequent negative impact on their nervous state, especially in the case of children, who have experienced life in the bomb shelters. A quick glance at the study “Enumeration and classification of disabled persons in Lebanon” may enable us to imagine what the situation has become today, eight years after the study was carried out:

- Mentally disabled (3-5 years):
  Events in Lebanon = 1  8.14 per cent
  Other causes = 11  78.57 per cent

- Mentally disabled (6-10 years):
  Events in Lebanon = 15  18.07 per cent
  Other causes = 50  60.24 per cent
IV. CLASSIFICATION OF TYPES OF DISABILITY

In order to deal with the various types of disability, one must begin by classifying disabilities on the basis of field experience and not just theory.

In the study on enumeration and classification of disabled persons mentioned above, reference was made to Lebanese law and definitions of the World Health Organization (WHO) in particular.

In Lebanese law:

"a disabled person is a person whose ability to obtain and maintain work is in fact impaired by reason of a physical or mental deficiency or incapacity. The physically disabled include the blind, the deaf and dumb, amputees and paralytics. The mentally disabled or the mentally retarded include those persons who suffer from a weakness of the nervous centres which leads to a disturbance in mental growth and thus impedes social conformity."

The definition given by WHO in 1976 was as follows:

"Disability implies difficulty in performing work considered basic for the individual's daily activities such as taking care of oneself or performing socio-economic activities consistent with the individual's age, sex and natural role in society. Disability may be temporary or permanent."

On the basis of these two definitions and with the exception of the age groups below 3 and over 60, it is possible to enumerate the different types of disability in Lebanon in the following manner: disabilities are divided into two main types, physical and mental. The overlapping of disabilities has been taken into account, because disabilities are most often compound.

Physical disabilities are divided into two groups, the first group comprising the blind, the deaf and dumb and amputees. The second group includes paralytics, chronic rheumatism and the deformed.

Multiple categories of the first group are as follows: blind; deaf; blind and deaf; dumb; blind and dumb; deaf and dumb; blind, deaf and dumb; amputee; blind and amputee; deaf and amputee; blind, deaf and amputee; dumb and amputee; blind, dumb and amputee; deaf and dumb and amputee; blind, deaf and dumb and amputee.

Multiple categories of the second group are as follows: paralytic; rheumatic; paralytic and rheumatic; deformed; paralytic and deformed; rheumatic and deformed; paralytic, rheumatic and deformed.

Mental disabilities also include two groups: the mentally retarded and the mentally ill; the socially unadjusted and persons incapable of integration in schools or public life.
In general, the categorization of types of mental retardation does not go beyond a theoretical framework. Therefore, such categories should be treated with the greatest of caution, as they are incapable of yielding a consistent meaning.

V. SOCIAL AND ECONOMIC CONSEQUENCES

Any attempt to deal with social problems in Lebanon must begin by mentioning the economic factor inherent in the collapse of the national currency. The United States dollar, which up to 1982 was worth approximately three Lebanese pounds, is now worth more than LL 540; in other words the exchange rate of the Lebanese pound has dropped by a factor of about 150. At the same time, the minimum wage, in spite of all the increases, does not exceed $US 40 per month.

The Lebanese pound lost most of its purchasing power as a result of high prices, and in Lebanon today, dire economic straits have imposed a burden on various aspects of daily life. There is no doubt that this crisis has aggravated the problem of the disabled, especially as their numbers have been growing constantly throughout the long years of the war.

The head of the household in Lebanon is no longer in a position to bear the costs of housing or food. In addition, the situation with respect to health and education has deteriorated in the country. Under these conditions, disabled persons have become a heavy burden on their families in their attempt to obtain relief aid from local and foreign organizations and bodies. The value of the portion of government budgets allocated to the disabled has dwindled under the pressure of inflation.

Yet the needs of the disabled are many and diverse, involving health, society, education and jobs. Comprehensive care for the disabled requires great efforts and high technology; they and their families are unable to bear the expenses of such care, especially as the majority of the disabled are either poor or from low-income groups. Funds provided by the Government do not suffice to provide for their basic needs.

Furthermore, the geographical distribution of services over the various regions in Lebanon is unbalanced. Some areas are well-provided with rehabilitation centres, whereas others have none.

The study "Enumeration and classification of disabled persons in Lebanon" showed that approximately one quarter of the disabled receive some sort of care or service, and that the remaining three quarters of the physically disabled get no treatment either from the State or otherwise.

The situation is made more critical by the absence of any one agency responsible for the disabled. If a disabled person turns to the Public Directorate of Health, for instance, he is referred to one of the private
institutions, and if he goes to a private institution he is sent back to the Public Directorate of Health or the Department of Social Revitalization. In many cases, the disabled person may have numerous consultations without getting any result. Thus he often becomes a victim of the disagreement between the Public Directorate of Health and private hospitals.

Hospitals do not observe the prices laid down by the Public Directorate of Health for medical equipment and artificial limbs, and the disabled person is forced to pay the difference for equipment he cannot do without. The Public Directorate defrays 10 per cent of the cost of any equipment, provided that the disabled person himself pays for the rest of the medical equipment, apparatus, wheelchairs or crutches.

The majority of institutions for the disabled were started in the 1960s and the quality of service provided varies; in general, there are no standard criteria for the quality of services. In some of these institutions, inmates are employed in tasks which have no rehabilitational or educational value. Sometimes, centres for the disabled dispense no health care and inmates suffer from sores due to bad hygiene or immobility. Disabled persons who receive no support from their families may be victims of undernourishment.

In some institutions, physically disabled children are accommodated together with mentally disabled persons and other social cases.

There is also a grave deficiency in social awareness and the degree to which members of the community are convinced of the need to address the problem of disabled children, who more than anyone require understanding and acceptance from their social environment.

The system whereby the State, through the Department of Social Revitalization, sends the disabled person to a private social institution for accommodation, care and rehabilitation, can solve only part of the problem. The expenses allowed for each disabled person, as calculated by the Department of Social Revitalization, have gradually been raised, but even today, as a result of inflation, do not exceed 30 per cent of the true cost.

Rehabilitation of the disabled is a major problem. There is difficulty in getting the disabled accepted by educational and vocational institutions, especially since these institutions are not equipped to admit this category of people: even if they are prepared administratively to accept them, the disabled either have to climb the stairs, for instance, or they find that the lift is too small.

Vocational training centres are not able to accept disabled persons or to give them any productive vocational training.

Regarding employment, the situation of the disabled resembles that of the blacks in America at the height of racial discrimination, according to one disabled person, who noted that employers do not consider the productive potential of the disabled and consistently prefer to take on able-bodied staff.
VI. GOVERNMENT POLICIES

A. The Public Directorate of Social Affairs
(Department of Social Revitalization)

The first major turning-point in Government interest in the problem of the disabled came in 1977, when a special Department of the Disabled was set up within the Department of Social Revitalization; it was entrusted with the following tasks:

1. To care for persons suffering from a physical or organic deficiency, a low mental level or a defect in the nervous system and to contribute to giving them a productive, active life, which should ensure their psychological and material independence, through care, rehabilitation and the provision of the necessary facilities for their employment.

This provides evidence of the legislators' interest in all aspects of disability, from everyday life and psychology to facilitating living conditions, rehabilitation and training.

2. To draw up a comprehensive programme for the various stages of care and rehabilitation of the disabled and to exercise control over its applications.

3. To organize training courses in the care of the disabled, with a view to producing specialists to work in this field and to establish specialized training centres.

The Department set up a pilot centre to serve the disabled, supported by an official committee concerned with children who suffer from psychological and mental disturbances.

4. To work to define the technical specifications and conditions that should be available in the institutions for the care of the disabled.

Those specifications have in fact been drawn up and agreements with institutions are concluded on the basis of them.

5. To ensure co-ordination between the specialized organs of the State and all the institutions concerned with the disabled.

The Department endeavours to create the appropriate bases for co-operation between the government sector and the non-governmental sector regarding care of the disabled.

6. To suggest legislation to assist the disabled in improving their living conditions, rehabilitation and vocational prospects.
In general, the services performed hitherto by the Department have been restricted to providing care, accommodation and rehabilitation for the disabled, through agreements with non-governmental institutions. To date, agreements have been concluded with 22 institutions in various regions. The total value of agreements concluded concerning the disabled reached 80 million Lebanese pounds in 1988.

In the light of the conclusions of the study undertaken by the Department of Social Revitalization, the following priorities with respect to the disabled have been adopted:

(a) To adopt a policy of prevention to contain causative factors and promote early detection; to encourage guidance and promote public awareness in the pre-school period and to urge all those working with the disabled to participate in and contribute to these guidance efforts;

(b) To encourage specialization of those working in care, rehabilitation and employment of the disabled, since their numbers are highly insufficient; to work to set up a training institute, as well as to encourage training missions abroad.

The Social Training Centre of the Department, in co-operation with the United Nations Children's Fund (UNICEF), has already held a number of on-the-job training courses for workers with the disabled. Training is now the subject of particular interest on the part of the Public Directorate of Health and the University of Lebanon, which has set up a Division for Social Health Supervision, as well as the Public Directorate of National Education and the National Employment Foundation.

(a) To encourage the establishment of an experimental workshop, to be maintained by the State in its initial stages until it becomes self-supporting;

(b) To classify the services of the institutions with which the Department has agreements as regards the quality of the services provided;

(c) To establish pilot State institutions to study disabilities, treatment and rehabilitation and to supervise research and academic and vocational studies.

The National Board for the Care of the Disabled has been set up within the Public Directorate of Labour, which according to its statutes is concerned with the following matters:

(a) To undertake studies to identify the needs of the disabled;

(b) To make suggestions and put forward views in the form of draft proposals concerning the disabled, including rehabilitation, training and employment in both the public and the private sectors, protection, working conditions and co-ordination between various public and private institutions.
B. The Public Directorate of Health

The Public Directorate of Health is the first government department a disabled person comes into contact with when he presents himself as such. It compiles and maintains his health file. The Public Directorate of Health also makes agreements with curing institutions, within certain technical and financial conditions, on care for the disabled. The Public Directorate of Health also plays a role in the field of prevention and has also been entrusted with the care, treatment and protection of the mentally ill. The Public Directorate is empowered to act as a civilian public prosecutor. The Public Directorate of Health hopes to establish the appropriate units within its administration to lay the foundations for supervision, boosting public awareness and prevention in the field of disability.

C. Social security

The concern of social security for the disabled is evidenced by the section dealing with insurance against accidents at work and occupational diseases. If an employee is disabled as a result of an accident at work, social security provides him with:

1. Full coverage for medical treatment and hospitalization costs;

2. If permanent partial incapacity results, the degree of the incapacity is assessed, and on that basis the disabled person is granted a disability pension for life;

3. The social security office in some cases provides appliances or artificial limbs to the disabled person;

4. The social security office undertakes the rehabilitation of the employee, with the aim of returning him, if possible, to normal life.

Insurance against accidents at work has not yet been implemented. The social security administration hopes to eliminate this shortcoming by: drawing up a plan for disability insurance, promoting financial contributions to projects for the disabled, encouraging institutions and employers to take on disabled persons and finally by encouraging protection and the demand in the labour market.

D. The Educational Centre for Research and Development

The Educational Centre for Research and Development of the Ministry of Labour, National Education and Fine Arts devotes special attention to schooling and training the disabled. The Centre indirectly raised the problem of the disabled in two studies on specialized schools and education. The Centre has concentrated on ways of integrating disabled children in ordinary schools by formulating a clear policy defining the rights of Lebanese children, ensuring the commitment of the education system to the social
integration of the disabled, training teachers to assist their integration, equipping school buildings with special education facilities, preparing special educational curricula for the disabled and organizing an integrated educational structure.

However, this educational project requires practical application in the public and private schools and institutions of Lebanon.

E. The College of Public Health of the University of Lebanon

The College of Public Health of the University of Lebanon has three departments that deal directly or indirectly with the disabled: Physiotherapy, Rehabilitation of the Disabled and Social Health Guidance. Physiotherapy methods have been made ready to give students training in them, in co-operation with private training centres. The College of Public Health is also preparing a project to set up special experimental elementary schools attached to the Department of Rehabilitation of the Disabled. The Department of Social Health Guidance will produce graduates from the end of the academic year 1989-1990.

Finally, it may be noted that there is an awareness of the problem of the disabled at the level of government policies in Lebanon, but this awareness is not given sufficient expression. With the exception of the important role played by the Department of Social Revitalization, there is still much that should be done in this field. It is also worth noting that the proliferation of official agencies concerned with the disabled tends to give rise to duplication and a squandering of efforts.

VII. RECOMMENDATIONS

Taking into account field studies and in particular the contents of the study "Enumeration and classification of disabled persons in Lebanon" concerning needs, decisions taken by conferences on the disabled, meetings with government officials and representatives of the private sector and taking note of plans to deal with the problems of the disabled, one may proceed from the self-evident truth that, as a result of the continuing war, the erosion of governmental and non-governmental institutions and the deterioration of the socio-economic situation, there is an urgent need to give support to the worsening problem of the disabled at all levels, and especially to increase the funds allocated to shelter, care and rehabilitation, to re-equip institutions for the disabled and to increase the number of workers with the disabled.

Below follows a summary of the main recommendations that should be heeded by governmental, non-governmental and international bodies that deal with the disabled in Lebanon:
1. To begin preparation of a new enumeration of disabled persons in Lebanon, utilizing a comprehensive survey that will give a clear scientific picture of the situation of the disabled in Lebanon in 1989, eight years after the first study, with the object of identifying the type and volume of their needs with a view to satisfying the most urgent ones;

2. To take into account the current state of war and to adopt the various rapid measures needed in the field of the disabled;

3. To urge the State, society and humanitarian institutions that want to help Lebanon to give priority to assisting institutions for the disabled which have been damaged by the events in Lebanon to rebuild and re-equip;

4. To urge institutions specialized in the care of the disabled to introduce sheltered workshops for the disabled to ensure training and work once they leave the institutions;

5. To give instructors for the disabled rapid training courses in order to meet the most urgent needs as soon as possible;

6. To recruit instructors for the disabled in coming years in order to cover the urgent needs of institutions for the disabled;

7. To give support to State institutions which provide aid in kind to the disabled, consisting of equipment, appliances and personal necessities;

8. To launch a publicity campaign on radio and television and in the newspapers to explain to the public the need to facilitate everyday life for the disabled;

9. To promote through educational programmes public awareness and understanding of the problems of the disabled and to avoid hindering their daily movements;

10. To guarantee barrier-free architectural design for the disabled to allow access to public places of entertainment, such as cinemas, restaurants, swimming pools, etc.;

11. To urge the State to institute projects for the adaptation of roads and public buildings and to set aside special facilities to allow access to the disabled;

12. To urge the State to adopt the necessary legislation making it obligatory to set aside facilities for the disabled allowing access to all public and private buildings;

13. To urge the State to amend the law on public transport to ensure that access to wheelchairs is provided on buses;
14. To urge the State to enact legislation requiring State institutions to employ a certain proportion of disabled persons, especially in the Ministry of Posts, Telecommunications, Health and Social Affairs, and others;

15. To take international texts on the rights of the disabled as a model for Lebanese legislation.
Sources


5. Files and statistics of the Department of the Disabled, the Public Directorate for Social Affairs.

6. Interviews with public and private officials concerned with the disabled.

7. Field investigations by the author of the report.
XXVII. REPORT ON PROGRAMMES AND METHODS OF CARE FOR DISABLED PERSONS IN OMAN

by

Fathi Abd al-Rahim
Arabian Gulf University
Bahrain
Summary

Oman's interest in the care and education of disabled persons goes back to 1974, when a class was established for deaf students. Two schools were subsequently founded: one for the deaf and the other for intellectual development. The Centre for the Care and Rehabilitation of Disabled Persons was founded in 1987 to provide vocational training services for those with hearing and motor disabilities.

The efforts of the Ministry of Education are concentrated on Al-Amal School for the Deaf, located in Muscat. The school, which is mixed (catering for boys and girls), was founded in 1980/1981 in the form of units attached to ordinary classes. Vocational activities at the school account for about 40 per cent of the general instruction plan.

The vocational section at Al-Amal School for the Deaf includes Arabic typing, carpentry and family education units. A vocational training unit for agricultural activities has been added in the course of the current year.

Officials devote much attention to the question of placement, considering it to be the yardstick by which the success of the vocational training process for the deaf may be judged.

Apart from services for deaf pupils, the Ministry of Education is also interested in the education of the blind. Rather than establish special schools or classes for persons in this category, it sends them to Al-Nur Institute for the Blind, which is run by the Middle East Commission for the Affairs of the Blind.

The Ministry of Education is also interested in the education of those afflicted with paralysis of the limbs (motor disabilities). It does not provide them with any direct services, sending them instead for education at specialized institutions in Kuwait.

Education services for the mentally retarded were initiated in 1980/1981, when pupils were sent to specialized institutions in Egypt and Kuwait. An intellectual development school was subsequently established in Oman, catering for a number of mentally retarded children.

The Centre for the Care and Rehabilitation of Disabled Persons was set up, under the control of the Ministry of Social Affairs and Labour, in 1987, for the purpose of providing vocational training services to two categories of disabled persons: those with hearing and motor disabilities. Services offered by the Centre include aptitude testing, vocational counselling and training, placement and follow-up services.

The limited capacity of existing institutions means that services are restricted to only small numbers of cases.
There is a shortage of manpower for special education and rehabilitation programmes, in terms both of the managers required for planning, supervision and follow-up operations and of executive staff such as teachers and counsellors.
I. INTRODUCTION: GENERAL FACTS

Oman devotes particular attention to special education through multiple efforts in this field. It does so with a view to improving the situation of disabled persons and establishing an environment which enables them to make the necessary personal and social adjustment to their community.

Oman's interest in the care and rehabilitation of disabled persons belongs within the context of its overall modernization process and endeavor to keep pace with international developments in the field. Evidence of its interest may be seen in the establishment of schools and centres for the disabled, the creation of opportunities for some disabled Omanis to obtain necessary services at specialized institutions and the provision of help and assistance to them as individuals who have the same right to life as other members of society.

The country's interest in this type of education goes back to 1974, when a class for deaf students was inaugurated at a school in the Muscat area. Two schools were subsequently founded: one for the deaf and the other for intellectual development (catering for the mentally retarded). A centre for the care and rehabilitation of disabled persons was also set up in 1987 to provide vocational training services to persons with hearing and motor disabilities.

Oman endeavours to make use of the special education programmes and institutions, as well as the rehabilitation programmes available in certain Arab countries, such as Egypt and the Gulf States (e.g. Kuwait), by sending disabled persons to the specialized institutions of those countries.

II. EFFORTS UNDERTAKEN BY THE MINISTRY OF EDUCATION

The efforts of the Ministry of Education are concentrated on Al-Amal School for the Deaf, located in the city of Muscat. This is a mixed school (for boys and girls) which was founded at the beginning of the academic year 1980/1981 in the form of units attached to conventional classes. Vocational activities at the school account for 39 per cent of the general instruction plan.

The vocational section of Al-Amal School for the Deaf comprises Arabic typing, carpentry and family education units. The current academic year (1988/1989) has seen the addition of a vocational training unit for agricultural activities (agricultural education), which is intended to train students in certain skills relating to agriculture and food industries.

The vocational units at Al-Amal School for the Deaf train students (boys and girls) under the general instruction plan from primary school age up to the end of the vocational preparation level, when they are approximately 18 years old.
The School puts on exhibitions to display the results of students' work, including woodwork, crafts, sewing, needlework and other artistic products.

Ever since the vocational units were established at Al-Amal School for the Deaf, all students have been included in all the units, without any determination of their vocational inclinations. The present system does not help the student to select a specific vocation, to specialize in it and to work within it after graduation.

The current rehabilitation system aims to put the student in a position which is as far as possible analogous to normal employment conditions, with the aim of producing an assistant instructor or worker of average skills who can earn his living and join in serving the community.

Officials are very interested in the question of placement and consider it to be the yardstick by which the success of the vocational training process for the deaf may be judged. The academic year 1985/86 saw the graduation from the school of one male and six female students, all of whom were awarded the certificate of completion of vocational preparation studies for the deaf. All were successfully placed, as follows: four as assistant instructors at Al-Amal School for the Deaf; one as a typist at the Intellectual Development School; and two at Government offices.

Table 1 shows the increase in numbers of pupils at Al-Amal School for the Deaf since it was founded.

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>9</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>1981/82</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>1982/83</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>1983/84</td>
<td>51</td>
<td>31</td>
<td>82</td>
</tr>
<tr>
<td>1984/85</td>
<td>63</td>
<td>36</td>
<td>99</td>
</tr>
<tr>
<td>1985/86</td>
<td>79</td>
<td>32</td>
<td>111</td>
</tr>
<tr>
<td>1986/87</td>
<td>91</td>
<td>39</td>
<td>130</td>
</tr>
<tr>
<td>1987/88</td>
<td>101</td>
<td>47</td>
<td>148</td>
</tr>
<tr>
<td>1988/89</td>
<td>136</td>
<td>57</td>
<td>193</td>
</tr>
</tbody>
</table>

The figures in the above table indicate the following:

(a) The numbers of pupils increased approximately 10-fold in less than 10 years;
(b) The number of male pupils increased more than twice as much as the number of girls.

In addition to providing education and rehabilitation services to deaf pupils, the Ministry of Education strives to make use, wherever possible, of institutions specializing in the care and rehabilitation of the deaf in certain Gulf Co-operation Council countries, particularly Saudi Arabia, Kuwait and the United Arab Emirates.

Table 2 shows the numbers of deaf students sent by the Ministry of Education to specialized institutions outside Oman.

Table 2. Deaf students sent to specialized institutions outside Oman

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Saudi Arabia</th>
<th>Kuwait</th>
<th>Sharjah</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>30</td>
<td>1</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>1981/82</td>
<td>30</td>
<td>3</td>
<td>-</td>
<td>33</td>
</tr>
<tr>
<td>1982/83</td>
<td>27</td>
<td>4</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>1983/84</td>
<td>25</td>
<td>5</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>1984/85</td>
<td>18</td>
<td>5</td>
<td>15</td>
<td>38</td>
</tr>
<tr>
<td>1985/86</td>
<td>18</td>
<td>5</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td>1986/87</td>
<td>8</td>
<td>5</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>1987/88</td>
<td>7</td>
<td>7</td>
<td>17</td>
<td>31</td>
</tr>
<tr>
<td>1988/89</td>
<td>3</td>
<td>10</td>
<td>Transferred to Al-Amal School in Oman</td>
<td></td>
</tr>
</tbody>
</table>

The figures in the above table indicate the following:

(a) Beginning in the academic year 1986/87, the numbers of deaf students sent by the Ministry of Education to institutions outside Oman began gradually to decline;

(b) Some of these students have begun to be transferred from institutions outside Oman in order to continue their studies locally at Al-Amal School for the Deaf in Muscat.

Apart from services for deaf pupils, the Ministry of Education is also interested in the education of the blind. Rather than establish special schools or classes for persons in this category, it has sent them to Al-Nur Institute for the Blind, which is run by the Middle East Commission for the Affairs of the Blind, in Bahrain.
Table 3 shows the numbers of blind Omani pupils studying at Al-Nur Institute in Bahrain over the past 10 years.

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>64</td>
</tr>
<tr>
<td>1981/82</td>
<td>50</td>
</tr>
<tr>
<td>1982/83</td>
<td>42</td>
</tr>
<tr>
<td>1983/84</td>
<td>50</td>
</tr>
<tr>
<td>1984/85</td>
<td>46</td>
</tr>
<tr>
<td>1985/86</td>
<td>53</td>
</tr>
<tr>
<td>1986/87</td>
<td>48</td>
</tr>
<tr>
<td>1987/88</td>
<td>44</td>
</tr>
<tr>
<td>1988/89</td>
<td>39</td>
</tr>
</tbody>
</table>

The Ministry of Education also devotes attention to the education of those afflicted with paralysis of the limbs (motor disabilities). However, once again, rather than provide direct services, it sends them for education in Kuwait. Table 4 shows the numbers of students with motor disabilities enrolled at specialized institutions in Kuwait over the past 10 years.

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>3</td>
</tr>
<tr>
<td>1981/82</td>
<td>6</td>
</tr>
<tr>
<td>1982/83</td>
<td>6</td>
</tr>
<tr>
<td>1983/84</td>
<td>6</td>
</tr>
<tr>
<td>1984/85</td>
<td>6</td>
</tr>
<tr>
<td>1985/86</td>
<td>7</td>
</tr>
<tr>
<td>1986/87</td>
<td>6</td>
</tr>
<tr>
<td>1987/88</td>
<td>7</td>
</tr>
<tr>
<td>1988/89</td>
<td>7</td>
</tr>
</tbody>
</table>

Educational services for the mentally retarded were initiated in the academic year 1980/81, with pupils being sent to specialized institutions in
Egypt and Kuwait. The Intellectual Development School was subsequently established in Oman, catering for a number of mentally retarded children: it now helps to educate mentally retarded Omani children.

Table 5 shows the numbers of mentally retarded pupils both inside and outside Oman since the academic year 1980/81.

Table 5. Mentally retarded pupils inside and outside Oman

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Boys</th>
<th>Girls</th>
<th>Egypt</th>
<th>Kuwait</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>1981/82</td>
<td>-</td>
<td>-</td>
<td>24</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>1982/83</td>
<td>-</td>
<td>-</td>
<td>37</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td>1983/84</td>
<td>-</td>
<td>-</td>
<td>23</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>1984/85</td>
<td>13</td>
<td>7</td>
<td>16</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>1985/86</td>
<td>11</td>
<td>9</td>
<td>11</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>1986/87</td>
<td>-</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>1987/88</td>
<td>58</td>
<td>23</td>
<td>5</td>
<td>9</td>
<td>95</td>
</tr>
</tbody>
</table>

The figures in the above table show that few mentally retarded cases are benefiting from education and rehabilitation services. This is probably due both to the limited capacity of the Intellectual Development School and to the fact that few are sent to institutions outside the country.

III. EFFORTS UNDERTAKEN BY THE MINISTRY OF SOCIAL AFFAIRS AND LABOUR

The Centre for the Care and Rehabilitation of Disabled Persons was set up in 1987, under the control of the Ministry of Social Affairs and Labour, for the purpose of providing vocational training services to two categories of disabled persons: those with hearing and motor disabilities.

Services offered by the Centre include aptitude testing, vocational counselling and training, placement and follow-up services.

A number of objectives were established for the Centre, foremost among which were the following:

(a) The provision of vocational training services for the disabled;
(b) The training of persons with hearing and motor disabilities in certain vocations such as carpentry, typing and sewing, with the intention of diversifying training in the future and extending services to other categories of disabled persons;

(c) Assistance in the process of placing graduates and surveying the local labour market, together with an endeavour to change the negative attitudes of employers towards disabled persons.

The Centre currently provides services to 57 trainees with hearing or motor disabilities, of both sexes, from all parts of the country.

The Centre provides vocational training and other support services, including the following:

(a) Guidance, counselling and career aptitude testing;

(b) Vocational training;

(c) Placement of disabled persons;

(d) Follow-up of graduates;

(e) Educational services, literacy training, social studies, accommodation, food and transport, health care, sports activities, clothing and financial remuneration.

Trainees are admitted to the Centre for the Care and Rehabilitation of Disabled Persons on the basis of social surveys, tests and medical, psychological and social examinations. The trainees are then, following evaluation of their aptitude for specific careers, assigned to the vocation which is appropriate for each one of them.

Training is provided through a specially prepared two-year programme. Indications are that the rehabilitation process works well for adults with hearing disabilities and that they take the vocational training seriously, applying themselves to the programme and, subsequently, to their work.

The Ministry of Social Affairs and Labour has proposed — with a view to ensuring the success of the vocational training programme — that a programme of preparation and vocational counselling for disabled persons should be introduced at special education schools, beginning at the age of ten. Officials hope that this programme will help to direct such persons towards the vocations which are appropriate for them, to establish their inclinations at an early stage and thus to improve the process of career aptitude testing.

Officials responsible for vocational training also believe that emphasis should be given to aptitude testing and vocational counselling as a fundamental initial element of the rehabilitation process, for the purpose of determining
a disabled person's abilities, talents and inclinations, his suitability for a particular vocation, and the chances of his success in the work he hopes to do in the future.

Officials are also of the opinion that vocational training guidance for those with hearing disabilities should be provided on an individual basis, by drawing up an individual rehabilitation plan for each trainee, with the plan to be implemented in co-ordination with the authorities concerned.

IV. GOVERNMENT POLICIES AND RECOMMENDATIONS

Perhaps one of the most important shortcomings in services for disabled persons in Oman is the manifest lack of information and basic data on disabilities, degrees and categories of disability, age levels and other relevant factors.

There is a need for co-ordination between the services provided by the Ministry of Education and those of the Ministry of Social Affairs and Labour: such co-ordination could be achieved through an integrated national plan for the care of disabled persons.

The limited capacity of existing institutions means that services are restricted to only small numbers of cases, while many others remain deprived of any form of service.

There is a shortage of manpower for special education and rehabilitation programmes, in terms both of the managers required for planning, supervision and follow-up operations and of executive staff, such as teachers, counsellors, experts in psychology and social work, etc.

The unavailability of special education services for pre-school-age children is obviously instrumental in limiting the effectiveness of existing programmes.

There is a need to evaluate and develop the education and training curricula currently on offer to the various categories receiving special education services.

There is an intense need for attention to the numbers of special education staff (such as teachers and other experts). Sultan Qaboos University could make a contribution in this regard, and use could also be made of the programmes and specialized training courses offered by the Arabian Gulf University.
Sources

Reports and publications of the Special Education Unit (Ministry of Education and Youth Affairs).

Reports and publications of the Centre for the Care and Rehabilitation of Disabled Persons (Ministry of Social Affairs and Labour).
XXVIII. DISABLED PERSONS IN THE WEST BANK AND GAZA STRIP

by

Nour al-Dajani

Department of Occupied Territories Affairs
Amman
CONTENTS

Chapter                                                                 Page

1. AVAILABLE STATISTICS ON DISABLED PERSONS UNDER ISRAELI OCCUPATION............. 457
   A. Introduction ........................................................................... 457
   B. Statistics and classification of disabled persons ..................... 457

II. INSTITUTIONS FOR DISABLED PERSONS AND SERVICES PROVIDED TO THEM....... 469

III. DISABILITY TRENDS AND THEIR CLASSIFICATION .............................. 478

IV. SOCIAL AND ECONOMIC CONSEQUENCES ....................................... 479

V. GOVERNMENTAL POLICIES TOWARDS DISABLED PERSONS .................... 480

VI. RECOMMENDATIONS .................................................................. 480

LIST OF TABLES

1. Analysis of responses to the questionnaires to compile a directory of institutions for the disabled in the West Bank and Gaza Strip (May–June 1989) ......................................................... 460

2. The wounded and injured classified by causes and area, up to 16 September 1988 ............................................................... 463

3. The wounded and injured classified by cause and area, up to 27 November 1988 .................................................................. 464

4. The injured classified by cause from 1 December 1988 to 31 March 1989 ................................................................. 465

5. Classification of 935 wounded persons by part of body injured ............ 465

6. Classification of wounded persons by age groups ............................. 466

7. Number of injured persons classified by month and cause .................. 467

8. Classification of those wounded by bullets and plastic bullets by part of body injured ......................................................... 468

9. Classification by age group of those wounded by bullets and plastic bullets ................................................................. 469
10. Societies for disabled persons .......................................... 471

11. Analysis of responses to the questionnaires to compile a directory of experts/resource persons for the disabled in the West Bank and Gaza Strip ................................................................. 476

References ................................................................. 481
I. AVAILABLE STATISTICS ON DISABLED PERSONS UNDER ISRAELI OCCUPATION

A. Introduction

Social work in its early stages preceded the emergence of the governmental institutions in the world that were later commissioned to guide and co-ordinate support for personal and voluntary collective efforts to cope with the continuous development of society. The burden on Palestinian citizens has increased as the occupation conditions have forced national institutions to take the initiative and attempt to identify the problems faced by society and the best means to solve them.

The occupation authorities have striven to prevent these institutions from making use of statistics which depend on digital data as a sound base for knowledge. Therefore, it should be pointed out in the beginning that the existing statistical data are generally insufficient and are mainly related to the services provided by voluntary charitable associations and exclude institutions linked to the occupation authorities.

Interest in disabled persons started in 1979 when the issues of physical and mental disability were discussed at the final session of the First Palestinian Social Conference for Disabled Persons. In 1981 the Second Palestinian Social Conference was convened following the United Nations resolution to declare 1981 as the International Year of Disabled Persons. This was the first time serious studies were conducted in this field. The studies submitted to the First Conference are the most important scientific evidence of disability in the West Bank and Gaza Strip.

B. Statistics and classification of disabled persons

It is necessary here to distinguish between disabled persons before and after the intifada. The study starts by giving a picture of the conditions of disabled persons from the beginning of the Israeli occupation. Then it deals with the types of disability as a result of the intifada.

1. Disability before the intifada

The field study prepared by Thiab Ali Ayoush, head of the Social Sciences Department at Bethlehem University in 1981 for submission to the Second Palestinian Social Conference for Disabled Persons is regarded as the first scientific document on this subject.

Ayoush stated that one of the main objectives of his study was to identify the institutions for the care of disabled persons and compare their past with their present, to forecast future prospects and assess their vocational rehabilitation services in particular and other services in general as well as measuring the extent of care in comparison with the estimated volume of the problem by world standards. The study tried to answer some questions related to disabled persons, particularly the following:
- Rate of disabled persons for whom rehabilitation institutions or services were provided;

- Extent of effectiveness of rehabilitation services provided to them compared with those provided abroad in solving physical, psychological, economic and social problems;

- Extent of the success of these institutions in achieving the objectives of social care for disabled persons in accordance with modern trends in social care.

The study excluded the city of Al-Quds (Jerusalem) as well as governmental institutions for disabled persons owing to difficulty in obtaining official data without official permission of the Israeli occupation authorities.

The research plan involved making several visits to the institutions which care for disabled persons in the West Bank and Gaza Strip to examine their experiences closely and listen to the views of officials, workers and beneficiaries of the programmes. The interview method was adopted as a means to gather information; two types of research forms were used, one for institutions and the second for the beneficiaries themselves.

Following is a summary of the findings of the study on the disabled persons themselves in 1981.

As regards the distribution of services there were 13 centres for the mentally retarded and those with mental and psychological disorders and epilepsy in all provinces. These centres served 17,000 clients of whom only 220, mainly from Bethlehem and Jericho, were accommodated as in-patients.

There were nine centres for the blind in five provinces, with about 321 beneficiaries. Their capacity was slightly greater than the number of beneficiaries and these centres had more than 80 male and female employees.

There were four centres for the deaf and dumb in four provinces with about 150 cases, 93 of which were accommodated as in-patients. About 30 male and female employees served at these centres and the capacity was about 180 cases.

The study pointed out that the distribution of the disabled at the provincial centres by type of disability showed the share of Jenin was about 24 per 10,000, Tulkarm was 34 per 10,000, Nablus was about 20 per 10,000 and Ramallah was 58 per 10,000. The highest rate was that of Bethlehem (about 97 per cent). Hebron's share was 23 per 10,000 and the rate in the Gaza Strip centres was 1.12 per cent.

The study gave the percentage of those who were in rehabilitation centres by each category of disability, in comparison with their estimated number in
the West Bank and Gaza Strip: the estimated number of disabled persons by world standards was 2,500 blind persons if the population of the West Bank and Gaza Strip was considered to be 1,125,000. The rate of persons enrolled in disability centres did not exceed 13 per cent while only 152 cases of deaf and mute persons out of the estimated 500 cases were in rehabilitation centres, i.e. 30 per cent, which is higher than the percentage of those in centres for the physically disabled and paralysed (not exceeding 23 per cent). Their estimated number was 3,375 cases, of which only 751 were in rehabilitation centres.

Out of the estimated 22,500 persons with mental and psychological impairments, 15,886 persons were in rehabilitation centres; this figure represented 71 per cent, the highest for those joining rehabilitation institutions for all categories. Only 10 per cent were in centres for the epileptic, or 552 out of the estimated 5,625 cases.

The figures obtained from the questionnaire for the Directory of Institutions and Societies for Disabled Persons in the West Bank and Gaza Strip (table 1) show that the total number of disabled persons receiving assistance in the West Bank for the last year on which data were available was 3,364, classified as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blind persons</td>
<td>617</td>
</tr>
<tr>
<td>Deaf and mute persons</td>
<td>88</td>
</tr>
<tr>
<td>Physically disabled persons</td>
<td>2,423</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>121</td>
</tr>
</tbody>
</table>

These figures indicate the number of beneficiaries in only 20 out of the 40 institutions in the West Bank which care for disabled persons, i.e., 50 per cent. They do not indicate the total number of disabled persons and thus it is difficult to make a comparison with the previous numbers unless the number 3,364 represents 50 per cent of the number of beneficiaries. The total number of beneficiaries would be 6,728; the number of beneficiaries at institutions was rising, except for the mentally retarded.

The distribution of using services for various age-groups for both males and females covering 22 categories of disability was as follows:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>1,204</td>
</tr>
<tr>
<td>Girls</td>
<td>967</td>
</tr>
<tr>
<td>Male adults</td>
<td>703</td>
</tr>
<tr>
<td>Female adults</td>
<td>490</td>
</tr>
</tbody>
</table>

The above figures show that families still hide the disability of their daughters out of concern for the family name.
<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Year</th>
<th>Affiliation</th>
<th>Address/City</th>
<th>Telephone/</th>
<th>Director's Name</th>
<th>Field</th>
<th>Beneficiaries</th>
<th>Employees available</th>
<th>Programme area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welfare Society for the Blind</td>
<td>1963</td>
<td>Nabl St., Nabl</td>
<td>725441</td>
<td></td>
<td></td>
<td>Blind</td>
<td>75</td>
<td>4</td>
<td>Vocational training center.</td>
</tr>
<tr>
<td>Friends of the Blind Society</td>
<td>1977</td>
<td>P.O. Box 3615</td>
<td>Al-Barr, Ramallah</td>
<td>961130</td>
<td>Abdullah Hammad</td>
<td>Blind</td>
<td>75</td>
<td>8</td>
<td>Elementary school for blind girls.</td>
</tr>
<tr>
<td>Basia Namer Charity Society</td>
<td>1974</td>
<td>P.O. Box 325</td>
<td>Al-Khadi</td>
<td>96245</td>
<td>Ali Yaarab</td>
<td>Deaf</td>
<td>21</td>
<td>10</td>
<td>Regular elementary education.</td>
</tr>
<tr>
<td>Al-Azali Society</td>
<td>1997</td>
<td>Mas. Soc. Dev. - Jordan</td>
<td>P.O. Box 325 Al-Khadi</td>
<td>96245</td>
<td>Ali Yaarab</td>
<td>Deaf</td>
<td>21</td>
<td>10</td>
<td>Regular elementary education.</td>
</tr>
<tr>
<td>Arab Society for the physically Handicapped</td>
<td>1982</td>
<td>P.O. Box 21713 Jerusalem</td>
<td>953176</td>
<td></td>
<td>Saber Al-Jundi</td>
<td>Physical disability</td>
<td>120</td>
<td>6</td>
<td>Rehabilitation, Training, Vocational programmes.</td>
</tr>
<tr>
<td>Organization</td>
<td>Year</td>
<td>Contact Address</td>
<td>Contact Person</td>
<td>Type of Disability</td>
<td>Services/Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>--------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab society for the Physically Handicapped</td>
<td>1961</td>
<td>P.O. Box 21450 Jerusalem</td>
<td>284284</td>
<td>Akram Olshar</td>
<td>Physical disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bethlehem Arab Society for Physically Handicapped (8 Centres)</td>
<td>1960</td>
<td>P.O. Box 100 Boulev 6 st. Jerusalem</td>
<td>742617</td>
<td>Edmund Shehadeh</td>
<td>Physical disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Crescent Society, Children's Physiotherapy Centre</td>
<td>1981</td>
<td>Nablus</td>
<td>71866</td>
<td>Ayesha Zaki</td>
<td>Physical therapy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palestinian Society for Disabled Children</td>
<td>1966</td>
<td>P.O. Box 19764 Jerusalem 91197</td>
<td>23038</td>
<td>Beiy Moujaleh</td>
<td>Physical disability &amp; disfigurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Society of Girl Rehabilitation Workshops</td>
<td>1979</td>
<td>P.O. Box 727 Bethlehem</td>
<td>742606</td>
<td>Elias Al Rhaba</td>
<td>Physical disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Crescent Society - Al-Raja' Centre for Special Education</td>
<td>1965</td>
<td>P.O. Box 421 Al-Khalil</td>
<td>962908</td>
<td>Jhada Al-Hamavi</td>
<td>Blind &amp; mental retardation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bani Al-Raja' Society</td>
<td>1971</td>
<td>P.O. Box 271 Bethlehem</td>
<td>742660</td>
<td>Omar Porsaid</td>
<td>Blind &amp; mental retardation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Islamic Charity Society</td>
<td>1978</td>
<td>P.O. Box 727 Bethlehem</td>
<td>951040</td>
<td>Abdul-Mahadeh Abdul Rahman</td>
<td>Blind &amp; deaf</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab Women's Federation</td>
<td>1956</td>
<td>Al-Musannah St. Tubanra</td>
<td>671271</td>
<td>Najda Al-Jada</td>
<td>All kinds of disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab Women's Federation</td>
<td>1976</td>
<td>P.O. Box 19 Bethlehem</td>
<td>742606</td>
<td>Vassma Kasrawi</td>
<td>Mental, deaf &amp; physical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Crescent Society</td>
<td>1966</td>
<td>Babirieth East area Jena</td>
<td>961040</td>
<td>Sooud Al-Thaha</td>
<td>All kinds of disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic Services for Individual Relief</td>
<td>1960</td>
<td>P.O. Box 28447 Jerusalem</td>
<td>838419-838417</td>
<td>Footer Lema Donagi</td>
<td>All kinds of disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al-Haim Charity Society</td>
<td>1982</td>
<td>P.O. Box 306 Al-Khalil</td>
<td>962908</td>
<td>Abdul-Mahad Al-Gawarzaw</td>
<td>Multiple disabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Welfare Charity Society</td>
<td>1981</td>
<td>P.O. Box 212 Nablus</td>
<td>71866</td>
<td>Yusef Salma</td>
<td>Deaf, physical &amp; mental retardation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Services/Programs mentioned include: Regular education, Vocational school, Physiotherapy, Physiotherapy, Regular & special education, Social rehabilitation, Vocational centres, Physiotherapy centre, Industry of artificial parts, Projects, Education, Vocational and social rehabilitation, Boarding school for the blind, Centres for mental retardation, Vocational training, Teacher training, Eradication of illiteracy, Nursery and KG Handicrafts, Special education, Financial assistance, Vocational centre, Food industry, Health education, Kindergarten, Eradication of illiteracy, Home visit, Food industry & agriculture training, Health care and social services, Welfare services for physically disabled children, House for the elderly, Provision of equipment, Special education.
2. Disability as a result of the intifada

All published figures indicate a constant increase in the number of disabilities caused by the intifada. According to a table compiled by the Society of Rehabilitation Centres for Girls, the growth rates in the number of disability cases during the intifada were as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Beatings and fractures</td>
</tr>
<tr>
<td>2. Paralysis</td>
</tr>
<tr>
<td>3. Artificial limbs</td>
</tr>
<tr>
<td>4. Psychological cases</td>
</tr>
<tr>
<td>5. Physiotherapy</td>
</tr>
</tbody>
</table>

Other statistics show that in 1988 alone there were 5,000 cases, ranging from slight lameness to total paralysis.

A report compiled by Amnesty International on the use of live ammunition by the Israeli army in the occupied territories published in the Al-Bayadir Al-Siyasi review said:

"Israeli troops use fast bullets which penetrate the body but do not leave it. They splinter when they hit the body and can smash the bones and cause serious damage to muscles, internal tissues and organs of the body and when these bullets hit the upper half of the body they usually cause death. If they hit the remaining parts of the body the injury can be very serious and chronic."

Mr. Rashad Al-Madani of Bir Zeit University has said that 16 persons lost an eye as a result of the practices of the occupation authorities from the start of the intifada to 20 October 1988. Fifteen others suffered from considerable deterioration in their sight during the same period. The majority of cases were the result of plastic bullets fired at close range by occupation troops against Palestinians.

Quoting the United Nations Relief and Works Agency for Palestinian Refugees in the Near East (UNRWA) in the Gaza Strip, Al-Madani stated that 8,544 persons were wounded or reported injured there from the start of the intifada to 16 September 1988 in addition to about 477 other cases with unidentified causes. The same sources added that the real number was considerably higher.
Table 2 shows the distribution of the injured by cause and location.

<table>
<thead>
<tr>
<th>Area</th>
<th>Live bullets</th>
<th>Plastic bullets</th>
<th>Gas</th>
<th>Beating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jabalia</td>
<td>144</td>
<td>275</td>
<td>881</td>
<td>1,654</td>
<td>2,954</td>
</tr>
<tr>
<td>Al-Shati Refugee Camp</td>
<td>81</td>
<td>99</td>
<td>1,141</td>
<td>647</td>
<td>1,968</td>
</tr>
<tr>
<td>Gaza</td>
<td>32</td>
<td>54</td>
<td>90</td>
<td>477</td>
<td>653</td>
</tr>
<tr>
<td>Sheikh Radwan</td>
<td>26</td>
<td>11</td>
<td>88</td>
<td>155</td>
<td>280</td>
</tr>
<tr>
<td>Al-Shuja'iya</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>40</td>
<td>55</td>
</tr>
<tr>
<td>Beit Hanoun</td>
<td>7</td>
<td>5</td>
<td>17</td>
<td>151</td>
<td>180</td>
</tr>
<tr>
<td>Al-Bureij</td>
<td>37</td>
<td>43</td>
<td>60</td>
<td>450</td>
<td>590</td>
</tr>
<tr>
<td>Al-Nuseirat</td>
<td>99</td>
<td>17</td>
<td>74</td>
<td>213</td>
<td>403</td>
</tr>
<tr>
<td>Deir el-Balah</td>
<td>20</td>
<td>16</td>
<td>38</td>
<td>144</td>
<td>218</td>
</tr>
<tr>
<td>Al-Maghazi</td>
<td>29</td>
<td>20</td>
<td>46</td>
<td>94</td>
<td>179</td>
</tr>
<tr>
<td>Khan Younis</td>
<td>112</td>
<td>32</td>
<td>119</td>
<td>470</td>
<td>733</td>
</tr>
<tr>
<td>Rafah</td>
<td>44</td>
<td>57</td>
<td>60</td>
<td>160</td>
<td>321</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>634</strong></td>
<td><strong>636</strong></td>
<td><strong>2,619</strong></td>
<td><strong>4,655</strong></td>
<td><strong>8,544</strong></td>
</tr>
</tbody>
</table>

Sources:
1. UNRWA, Gaza.
2. Bar Association in Gaza Strip.
4. Al-Quds newspaper (in Arabic) (several issues).
5. Al-Bayadir Al-Siyasi review in Arabic (several issues).
6. Several field tours.
Al-Itihad newspaper reported on 15 December 1988 that the number of Palestinians wounded and injured in Gaza from the beginning of the intifada to 27 November 1988 was 11,515 in addition to 461 cases whose causes were not identified. The total number was 11,976 cases, classified in table 3.

<table>
<thead>
<tr>
<th>Area</th>
<th>Live ammunition</th>
<th>Beating</th>
<th>Plastic bullets</th>
<th>Gas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jabalia</td>
<td>211</td>
<td>2,186</td>
<td>313</td>
<td>111</td>
<td>2,721</td>
</tr>
<tr>
<td>Al-Shati</td>
<td>205</td>
<td>821</td>
<td>112</td>
<td>1,275</td>
<td>2412</td>
</tr>
<tr>
<td>Gaza</td>
<td>145</td>
<td>153</td>
<td>79</td>
<td>117</td>
<td>1,214</td>
</tr>
<tr>
<td>Sheikh Radwan</td>
<td>40</td>
<td>225</td>
<td>11</td>
<td>12</td>
<td>318</td>
</tr>
<tr>
<td>Beit Hanoun</td>
<td>26</td>
<td>213</td>
<td>8</td>
<td>21</td>
<td>268</td>
</tr>
<tr>
<td>Al-Bureij</td>
<td>45</td>
<td>511</td>
<td>62</td>
<td>126</td>
<td>744</td>
</tr>
<tr>
<td>Al-Nuseirat</td>
<td>144</td>
<td>216</td>
<td>28</td>
<td>83</td>
<td>516</td>
</tr>
<tr>
<td>Deir el-Balah</td>
<td>56</td>
<td>168</td>
<td>24</td>
<td>73</td>
<td>221</td>
</tr>
<tr>
<td>Al-Ghazi</td>
<td>39</td>
<td>116</td>
<td>25</td>
<td>66</td>
<td>246</td>
</tr>
<tr>
<td>Khan Younis</td>
<td>111</td>
<td>721</td>
<td>51</td>
<td>173</td>
<td>1,136</td>
</tr>
<tr>
<td>Rafah</td>
<td>115</td>
<td>212</td>
<td>77</td>
<td>71</td>
<td>475</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,217</strong></td>
<td><strong>6,387</strong></td>
<td><strong>820</strong></td>
<td><strong>3,091</strong></td>
<td><strong>11,515</strong></td>
</tr>
</tbody>
</table>

Comparing tables 2 and 3, a considerable rise can be noted in the number of casualties (2,971 in two months).

Figures published in Al-Itihad newspaper on 21 April 1989 show that the number of the wounded and injured among the population of the Gaza Strip between 1 December 1988 and 31 March 1989 was 5,824, classified in table 4.
Table 4. The injured classified by cause from 1 December 1988 to 31 March 1989

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullets</td>
<td>212</td>
<td>287</td>
<td>168</td>
<td>274</td>
<td>935</td>
</tr>
<tr>
<td>Plastic bullets</td>
<td>22</td>
<td>151</td>
<td>163</td>
<td>107</td>
<td>443</td>
</tr>
<tr>
<td>Beating</td>
<td>864</td>
<td>598</td>
<td>803</td>
<td>1,257</td>
<td>3,522</td>
</tr>
<tr>
<td>Gas</td>
<td>154</td>
<td>224</td>
<td>131</td>
<td>212</td>
<td>721</td>
</tr>
<tr>
<td>Total</td>
<td>1,379</td>
<td>1,274</td>
<td>1,305</td>
<td>1,864</td>
<td>5,824</td>
</tr>
</tbody>
</table>

Conclusions

- The daily average number of those wounded by bullets and plastic bullets in the Gaza Strip was 10-12 persons.

- The daily average number of those beaten by the occupation troops was 29-30 persons.

- The same newspaper also published a table showing the distribution of those injured by bullets, classified by the location of the injury in the body.

Table 5. Classification of 935 wounded persons by part of body injured

<table>
<thead>
<tr>
<th>Injury</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>92</td>
</tr>
<tr>
<td>Neck</td>
<td>7</td>
</tr>
<tr>
<td>Shoulder and back</td>
<td>34</td>
</tr>
<tr>
<td>Abdomen</td>
<td>59</td>
</tr>
<tr>
<td>Pelvis</td>
<td>12</td>
</tr>
<tr>
<td>Arms and legs</td>
<td>76</td>
</tr>
<tr>
<td>Buttocks</td>
<td>6</td>
</tr>
<tr>
<td>Nose and face</td>
<td>31</td>
</tr>
<tr>
<td>Genitals</td>
<td>5</td>
</tr>
<tr>
<td>Multiple parts</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>935</td>
</tr>
</tbody>
</table>
Conclusions

- The majority of injuries were to arms and legs, especially the knee, thigh, foot, forearm and heel (about 72 per cent of total injuries).

- The number of those injured by bullets in the head between 1 December 1988 and 31 March 1989 was 92 or about 9.8 per cent of the total number of those injured by bullets.

- Injuries in the head, neck, back, abdomen, pelvis or genitals are serious and may cause paralysis, death or permanent disability. A review of the distribution of the wounded by bullets (935 persons) by age group (table 6) shows the following:

  - The number of wounded persons aged 15-20 was more than half the total number of the wounded (935), which means that the majority of the wounded were students.

  - The number of wounded children (less than 15 years) (169 wounded children) constituted about 18 per cent of the total number of injured persons (935), which means that the wounded who were less than 21 years old constituted about 72.6 per cent of the total number of the wounded.

  - The overwhelming majority of the wounded were pupils and workers, which would have a strong effect on production.

Table 6. Classification of wounded persons by age groups

<table>
<thead>
<tr>
<th>Age group</th>
<th>Number of wounded</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-14</td>
<td>169</td>
<td>18</td>
</tr>
<tr>
<td>15-20</td>
<td>510</td>
<td>54.6</td>
</tr>
<tr>
<td>21-25</td>
<td>115</td>
<td>12.3</td>
</tr>
<tr>
<td>26-30</td>
<td>62</td>
<td>6.6</td>
</tr>
<tr>
<td>31</td>
<td>79</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>935</td>
<td>100</td>
</tr>
</tbody>
</table>

In a statistical survey of those wounded during the intifada, published in Al-Dustour magazine, Majid Mithim stated that 30,000-40,000 persons were wounded and injured in the first year of the intifada. The total number in the first five months of 1989 was about 10,000 cases.
The above figure may not provide an accurate picture of the number of those wounded or injured since the existing lists cover only 60 per cent of the wounded and the names of numerous other persons were withheld for fear of arrest.

Table 7. **Number of injured persons classified by month and cause**

<table>
<thead>
<tr>
<th>Causes</th>
<th>December</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullets</td>
<td>469</td>
<td>318</td>
<td>721</td>
<td>827</td>
<td>1,098</td>
<td>3,433</td>
</tr>
<tr>
<td>Plastic bullets</td>
<td>50</td>
<td>55</td>
<td>-</td>
<td>21</td>
<td>36</td>
<td>162</td>
</tr>
<tr>
<td>Beating</td>
<td>537</td>
<td>575</td>
<td>990</td>
<td>1,120</td>
<td>1,338</td>
<td>4,560</td>
</tr>
<tr>
<td>Rubber bullets</td>
<td>129</td>
<td>138</td>
<td>120</td>
<td>346</td>
<td>219</td>
<td>952</td>
</tr>
<tr>
<td>Gas</td>
<td>104</td>
<td>84</td>
<td>113</td>
<td>159</td>
<td>175</td>
<td>635</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,289</td>
<td>1,170</td>
<td>1,933</td>
<td>2,473</td>
<td>2,866</td>
<td>9,742</td>
</tr>
</tbody>
</table>

**Conclusions**

- The number of wounded and injured persons increased from month to month. The growth rate in May was more than 120 per cent compared with that in December. The number of those shot by bullets rose by more than 130 per cent during the same period.

- The average number of wounded and injured persons was more than 60 a day.
- The average number of persons wounded by bullets and plastic bullets was about two a day.

- The average number of persons beaten up by troops was about 30 a day.
- The average number of persons injured by the effect of tear gas was four a day.

Comparing the 1988 figures with the 1989 figures and reviewing tables 2, 3 and 7 the following conclusions can be made:

- Injuries from the start of the intifada to September 1988 were 8,544.
Injuries from the start of the intifada to November 1988 were 11,515.

Injuries from 1 January 1988 to 30 May 1989 were 9,742.

The above figures confirm the increase of injuries, most of which lead to permanent disabilities and impairments, according to table 5. Table 8 shows the classification of those wounded by bullets and plastic bullets according to the body part injured in the first five months of 1989.

Table 8. Classification of those wounded by bullets and plastic bullets by part of body injured

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>24</td>
<td>33</td>
<td>37</td>
<td>85</td>
<td>111</td>
<td>290</td>
</tr>
<tr>
<td>Neck</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>Chest and back</td>
<td>75</td>
<td>34</td>
<td>111</td>
<td>150</td>
<td>198</td>
<td>568</td>
</tr>
<tr>
<td>Abdomen</td>
<td>33</td>
<td>35</td>
<td>67</td>
<td>52</td>
<td>111</td>
<td>298</td>
</tr>
<tr>
<td>Pelvis</td>
<td>12</td>
<td>10</td>
<td>34</td>
<td>25</td>
<td>36</td>
<td>117</td>
</tr>
<tr>
<td>Arms and legs</td>
<td>241</td>
<td>157</td>
<td>297</td>
<td>299</td>
<td>377</td>
<td>1,371</td>
</tr>
<tr>
<td>Eye</td>
<td>99</td>
<td>77</td>
<td>102</td>
<td>159</td>
<td>175</td>
<td>612</td>
</tr>
<tr>
<td>Nose and face</td>
<td>22</td>
<td>16</td>
<td>24</td>
<td>33</td>
<td>65</td>
<td>160</td>
</tr>
<tr>
<td>Genitals</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Multiple parts</td>
<td>11</td>
<td>8</td>
<td>38</td>
<td>35</td>
<td>41</td>
<td>133</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>519</strong></td>
<td><strong>373</strong></td>
<td><strong>721</strong></td>
<td><strong>848</strong></td>
<td><strong>1,134</strong></td>
<td><strong>3,595</strong></td>
</tr>
</tbody>
</table>

Conclusions

- The rising number of head injuries in particular and upper body injuries in general is noted. The number of such injuries rose from 24 in January 1989 to 111 in May 1989, a growth rate of 362.5 per cent in comparison with the number in January 1989. Head injuries rose from 4.6 per cent of the total in January 1989 to 10 per cent in May 1989. In general head injuries constituted 8.1 per cent of the total injuries in the first five months in 1989.
Injuries to the head, neck, back, pelvis or genitals are serious and may cause paralysis or permanent disability. The rate of injuries to these parts of the body rose from 26 per cent in January 1989 to 47.7 per cent in May 1989. In general these injuries constituted 41 per cent of the total injuries.

Table 9 shows the distribution of those wounded by bullets and plastic bullets during the same period:

Table 9. Classification by age group of those wounded by bullets and plastic bullets

<table>
<thead>
<tr>
<th>Age group</th>
<th>Number of wounded</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-14</td>
<td>783</td>
<td>21.8</td>
</tr>
<tr>
<td>15-20</td>
<td>1,882</td>
<td>52.3</td>
</tr>
<tr>
<td>21-25</td>
<td>534</td>
<td>14.9</td>
</tr>
<tr>
<td>26-30</td>
<td>175</td>
<td>4.9</td>
</tr>
<tr>
<td>31-59</td>
<td>178</td>
<td>4.9</td>
</tr>
<tr>
<td>60</td>
<td>43</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,595</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The above table indicates that the under-21 wounded persons were about 74.1 per cent of the total number of the wounded and they were mainly students and workers, which would certainly affect future production. This is similar to the rate in table 6 for the injuries in previous months which was 72.6 per cent for the same age group.

II. INSTITUTIONS FOR DISABLED PERSONS AND SERVICES PROVIDED TO THEM

Tracing the history of care for disabled persons in the West Bank and Gaza Strip, it can be seen that before 1950 there were only three institutions: two caring for the blind and one for mentally disabled persons. Awareness of the need to care for the disabled started in the 1960s, when more associations were established; their number was 28 in 1981.
Care for disabled persons began when a British lady, aided by a Lebanese teacher, developed an Arabic Braille system to teach the blind in Palestine in 1880. The first home for blind persons was established in Quds in 1890; this was followed by the establishment of another home for male blind persons sponsored by a German commission in 1902.

The field study made by Mr. Ayoush on institutions for disabled persons in several provinces in 1981: Jenin, Tulkarm, Nablus, Ramallah, Bethlehem, Jericho, Hebron, and Gaza showed the total number was 28, two in Jenin, Tulkarm, and Nablus, and three in Ramallah, Hebron and Gaza while Bethlehem had 13 centres.

As regards the distribution of various types of services, the study showed that there were 13 centres for the mentally retarded and for persons with mental and psychological disorders and epilepsy throughout the provinces, serving more than 17,000 patients of whom only 220 were accommodated as in-patients.

The study also showed there were nine centres for the blind in five provinces serving 321 patients and supervised by more than 80 employees.

There were also four centres for the deaf and dumb serving about 150 beneficiaries, including 93 in-patients, and supervised by about 30 male and female employees.

Ayoush's study also stated that there were 202 males and 223 females taking care of about 18,000 disabled persons of both sexes. Mr. Ayoush pointed out that there was a big difference between the number of male and female mentally retarded persons and those with mental disorders. He attributes this to the prevailing social attitudes as many families still conceal female disabled persons for reasons relating to their future and to the family name.

The ratio of employees to disabled persons was 1 employee to 41 cases.

Eight years later the number rose from 28 in 1981 to 40 in 1989 grouped as follows:

- 19 societies caring for mentally retarded persons
- 5 societies caring for physically disabled persons
- 4 societies caring for deaf and dumb persons
- 12 societies caring for blind persons

Age groups ranged from 2 to 80. Services were provided mainly within the societies, apart from five societies which provide day-time services only and three societies which provide internal and external services.

Table 10 shows the names of societies, their location, year of establishment, nature of disability cared for and ages of beneficiaries.
<table>
<thead>
<tr>
<th>Name</th>
<th>Headquarters</th>
<th>Established</th>
<th>Type of disability</th>
<th>Internal/external</th>
<th>Ages</th>
<th>Telephone</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Al-Raja' Centre</td>
<td>Hebron</td>
<td>1967</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>7-15</td>
<td>962720</td>
<td>Affiliated to Red Crescent, cares for minor retardation in teachable persons</td>
</tr>
<tr>
<td>(2) Al-Anal School</td>
<td>Janin</td>
<td>1974</td>
<td>Mental retardation</td>
<td></td>
<td>6-14</td>
<td>05-623845</td>
<td></td>
</tr>
<tr>
<td>(3) Jeel Al-Anal</td>
<td>Azarijah</td>
<td>1975</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>6-16</td>
<td>271735</td>
<td></td>
</tr>
<tr>
<td>(4) Arab Women's Union</td>
<td>Jericho</td>
<td>1978</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>6-14</td>
<td>922615</td>
<td></td>
</tr>
<tr>
<td>(5) Women's Revival Society</td>
<td>Ramallah</td>
<td>1972</td>
<td>Mental retardation</td>
<td>Internal and external</td>
<td>4-25</td>
<td>953176</td>
<td>Minor mental retardation</td>
</tr>
<tr>
<td>(6) Arab Women Revival</td>
<td>Bethlehem</td>
<td>1983</td>
<td>Mental retardation</td>
<td>External</td>
<td>6-16</td>
<td>742589</td>
<td>Minor mental retardation</td>
</tr>
<tr>
<td>(7) A.A. Women Revival</td>
<td>Tulkarm</td>
<td>1972</td>
<td>Mental retardation</td>
<td></td>
<td>6-12</td>
<td>053-98378</td>
<td></td>
</tr>
<tr>
<td>(8) Orthodox Charitable Home</td>
<td>Azarijah</td>
<td>1983</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>4-14</td>
<td>272800</td>
<td>All ages, mental retardation and several physical retardation provided the patient is immobile</td>
</tr>
<tr>
<td>(9) Swedish Institution</td>
<td>Al-Quds</td>
<td>1939</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>3-23</td>
<td>828078</td>
<td>Severe physical and mental retardation and epilepsy</td>
</tr>
<tr>
<td>(10) Salfect Centre for the Mentally Retarded</td>
<td>Tulkarm</td>
<td>1982</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>6-15</td>
<td>6707</td>
<td>Admission through Ministry of Social Development. All degrees of disability without physical disability</td>
</tr>
<tr>
<td>(11) Moravian Church for Rehabilitation of Disabled Persons</td>
<td>Ramallah</td>
<td>1981</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>14-20</td>
<td>952151</td>
<td>Girls only, minor retardation</td>
</tr>
<tr>
<td>(12) Al-Moor School</td>
<td>Al-Quds</td>
<td>1977</td>
<td>Mental retardation</td>
<td></td>
<td>5-14</td>
<td>288265</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Headquarters</td>
<td>Established</td>
<td>Type of disability</td>
<td>Internal/external</td>
<td>Ages</td>
<td>Telephone</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-------</td>
<td>-----------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>(13) Al-Shams Centre</td>
<td>Gaza</td>
<td>1977</td>
<td>Mental retardation</td>
<td>External</td>
<td>6-20</td>
<td>051-885799</td>
<td>Working in disabled persons' homes</td>
</tr>
<tr>
<td>(14) Mother Teresa Nuns</td>
<td>Gaza</td>
<td>1984</td>
<td>Mental retardation</td>
<td></td>
<td>3-12</td>
<td>051-885829</td>
<td></td>
</tr>
<tr>
<td>(15) Yalma</td>
<td>Bethlehem</td>
<td>1986</td>
<td>Mental retardation</td>
<td>Internal and external</td>
<td>3-14</td>
<td></td>
<td>Severe mental retardation without physical disability</td>
</tr>
<tr>
<td>(16) Al-Ihsan Home</td>
<td>Hebron</td>
<td>1986</td>
<td>Mental retardation</td>
<td>Internal</td>
<td>2-40</td>
<td></td>
<td>Severe mental retardation without physical disability</td>
</tr>
<tr>
<td>(17) Red Crescent</td>
<td>Nablus</td>
<td>1975</td>
<td>Mental retardation</td>
<td>External</td>
<td>6-12</td>
<td>053-72153</td>
<td>Minor mental retardation for teachable persons</td>
</tr>
<tr>
<td>(18) Al-Khider Centre</td>
<td>Bethlehem</td>
<td>1986</td>
<td>Mental retardation</td>
<td>External</td>
<td>3-10</td>
<td>742617</td>
<td>Minor retardation without physical disability</td>
</tr>
<tr>
<td>(19) Sierra</td>
<td>Beit Jala</td>
<td></td>
<td>Epilepsy</td>
<td>Internal and external</td>
<td></td>
<td>142597</td>
<td></td>
</tr>
<tr>
<td>(20) Bethlehem Arab Association</td>
<td>Bethlehem</td>
<td>1960</td>
<td>Physical disability</td>
<td>Internal</td>
<td>3-14</td>
<td>742617</td>
<td>Physical disability, minor mental retardation</td>
</tr>
<tr>
<td>(21) Vocational Training Centre/ Arab Society</td>
<td>Bethlehem</td>
<td>1980</td>
<td>Physical disability</td>
<td>Internal</td>
<td>5-50</td>
<td>742617</td>
<td>748111</td>
</tr>
<tr>
<td>(22) Princess Basma Institution</td>
<td>Al-Quds</td>
<td>1965</td>
<td>Physical disability</td>
<td>Internal</td>
<td>2-15</td>
<td>280058</td>
<td>Physical disability without mental retardation</td>
</tr>
<tr>
<td>(23) Artificial Limbs Centre</td>
<td>Bethlehem</td>
<td>1982</td>
<td>Physical disability</td>
<td>External</td>
<td></td>
<td>742976</td>
<td></td>
</tr>
<tr>
<td>(24) Quds Centre for Al-Quds Physical Disabled Persons</td>
<td>Bethlehem</td>
<td>1983</td>
<td>Physical disability</td>
<td></td>
<td>380611</td>
<td>284204</td>
<td></td>
</tr>
<tr>
<td>(25) Afla Institution</td>
<td>Bethlehem</td>
<td>1971</td>
<td>For deaf and dumb persons</td>
<td>Internal</td>
<td>2-16</td>
<td>742568</td>
<td>It is important to admit 2-3 year old children</td>
</tr>
<tr>
<td>(26) Hanan School/ Jenin Society</td>
<td>Jenin</td>
<td>1915</td>
<td>For deaf and mute persons</td>
<td></td>
<td>4-15</td>
<td>06-523854</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Headquarters</td>
<td>Established</td>
<td>Type of disability</td>
<td>Internal/external</td>
<td>Ages</td>
<td>Telephone</td>
<td>Notes</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>--------</td>
<td>-----------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>(21) Amal Society for Women</td>
<td>Hebron</td>
<td>1978</td>
<td>For deaf and mute persons</td>
<td></td>
<td>4-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(28) Al-Murabitat Society/Qabiliya</td>
<td>Jenin</td>
<td>1960</td>
<td>For deaf and mute persons</td>
<td></td>
<td>6-14</td>
<td>052-398318</td>
<td></td>
</tr>
<tr>
<td>(29) Salwa Institution Beit Jala for the Blind</td>
<td></td>
<td>1979</td>
<td>For blind person</td>
<td></td>
<td>17-55</td>
<td>741373</td>
<td>742016</td>
</tr>
<tr>
<td>(30) Rehabilitation Centre of Disabled Persons</td>
<td>Hebron</td>
<td>1975</td>
<td>For blind person</td>
<td>Internal</td>
<td>5-18</td>
<td>976214</td>
<td></td>
</tr>
<tr>
<td>(31) Al-Shuroq School Al-Quds for Blind Girls</td>
<td></td>
<td></td>
<td>For blind person</td>
<td>Internal</td>
<td>3-17</td>
<td>854841</td>
<td></td>
</tr>
<tr>
<td>(32) Al-Mo'or Centre/ Women Union</td>
<td>Nablus</td>
<td>1962</td>
<td>For blind person</td>
<td></td>
<td>6-26</td>
<td>053-71804</td>
<td></td>
</tr>
<tr>
<td>(33) Al-Mo'or Centre for Blind</td>
<td>Beit Jala</td>
<td>1974</td>
<td>For blind person</td>
<td></td>
<td>20-40</td>
<td>743564</td>
<td></td>
</tr>
<tr>
<td>(34) Blind Persons' Friends Society</td>
<td>Hebron</td>
<td>1975</td>
<td>For blind person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(35) Al-Salam Centre for Blind Women</td>
<td>Al-Quds</td>
<td>1983</td>
<td>For blind person</td>
<td></td>
<td>15-40</td>
<td>850214</td>
<td></td>
</tr>
<tr>
<td>(36) National School Al-Bearah</td>
<td>Hebron</td>
<td>1976</td>
<td>For blind person</td>
<td></td>
<td>3-17</td>
<td>953301</td>
<td></td>
</tr>
<tr>
<td>(37) Beit Al-Raja' for Blind Persons</td>
<td>Bethlehem</td>
<td>1963</td>
<td>For blind person</td>
<td></td>
<td>3-90</td>
<td>742325</td>
<td>Minor retardation cases and teachable persons admitted</td>
</tr>
<tr>
<td>(38) Workshop for Blind Persons</td>
<td>Guds</td>
<td>1968</td>
<td>For blind person</td>
<td></td>
<td>18-60</td>
<td>814907</td>
<td></td>
</tr>
<tr>
<td>(39) Al-Al'ilya School</td>
<td>Bethlehem</td>
<td>1938</td>
<td>For blind person</td>
<td></td>
<td>6-21</td>
<td>742421</td>
<td></td>
</tr>
<tr>
<td>(40) Marshat Bani Tamam for the Blind</td>
<td>Hebron</td>
<td>1938</td>
<td>For blind person</td>
<td></td>
<td>18-50</td>
<td>961140</td>
<td></td>
</tr>
</tbody>
</table>
The Gaza Strip, which has a population of 1 million, suffers considerably from the lack of services for disabled persons. Up to 1975 there was no school for the deaf in the Gaza Strip and no care for mentally retarded persons was provided. In 1975 the Society for the Care of Disabled Children was established and it began by serving 14 boys and girls. Now it serves about 1,500 persons. The society supervises the implementation of several programmes for home care. A special programme is worked out for each disabled person after his conditions are examined. The teacher pays a weekly visit to his home and spends some time with the mother and trains her to care for her disabled child, following up with her the programme to supervise the child. Thirty-three female teachers are involved in these activities supervising 700 families. In addition, there are 140 disabled persons at Al-Shams Centre and 45 disabled persons at Al-Shati Centre.

Finally a co-ordination committee for disability centres in the West Bank and Gaza Strip was formed in 1979 through the Federation of Charitable Societies.

On vocational rehabilitation in the West Bank and Gaza Strip, Ayoun's study points out that only half the centres started rehabilitation schemes, which took the form of remedial employment in most cases. The majority of the existing institutions place vocational rehabilitation at the top of their future objectives. Lack of significant progress in this field was due to a shortage of financial resources, inadequate premises and shortage of technical personnel. All this means that vocational rehabilitation in general is still in its infancy and needs a lot of resources to develop.

The first action in this field was by the Bethlehem Arab Society for Rehabilitation in 1960. The Society started by providing its services to five disabled women (accommodation and food). These services did not expand until 1968, when medical treatment was introduced with some surgical operations and physiotherapy including training and massage. In 1981 the first physiotherapy centre in the West Bank was opened.

An example of inadequate premises is the condition of the National School for the Blind in Al-Beerah where some classes are held in the school corridors because of the shortage of classrooms and where double the capacity of students is accommodated.

To obtain qualified technical personnel, some societies began sending workers in this field to train them in modern methods. One of these societies is the Society for the Care of Disabled Persons in Gaza which sent some students to England to study for a B.A. degree in the teaching of the mentally retarded. The first group returned in 1985 and started to work for the Society.

The Society also co-operated with the University of Calgary in Canada to train professionals specialized in the care of disabled persons. Two groups have graduated and have been awarded a diploma and next year a B.A. course will start in co-operation with the University of Victoria.
In 1981 the Women's Revival Society in the West Bank started in co-operation with the Swedish Institution, to implement a three-year rehabilitation scheme during which several courses were organized for workers in disability centres.

From the replies to the Questionnaire for the Directory of Experts/Resource Persons working in the field of Disability (table II) it can be concluded that the majority of supervisors of disability centres were diploma-holders in disability, had attended special courses or had studied sociology or psychology at university.

Some institutions in the West Bank and Gaza Strip have made considerable progress in rehabilitation and have helped to solve numerous individuals' problems, but they have not been able to overcome obstacles at the level of society. The situation has worsened.
<table>
<thead>
<tr>
<th>Name of expert</th>
<th>Sex</th>
<th>Specialization/Title</th>
<th>Programme Area</th>
<th>Place of work</th>
<th>Address</th>
<th>Telephone</th>
<th>Educational background</th>
<th>Previous experience / Consultancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helena Shbadeh</td>
<td>F</td>
<td>Blind. School Director</td>
<td></td>
<td>Al-Asayyel Society for the blind</td>
<td>P.O. Box 1924 Jerusalem 58489</td>
<td>Education for the blind, 1966, England</td>
<td>English teacher</td>
<td></td>
</tr>
<tr>
<td>Hasan Zakamen</td>
<td>F</td>
<td>Deaf. Teacher</td>
<td>Special education</td>
<td>Al-Asayyel Society</td>
<td>P.O. Box 335 Al-Khalil</td>
<td>Sociology, Beirut University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sumayah Abu Dypah</td>
<td>F</td>
<td>Deaf. Teacher</td>
<td>Special education. Vocational training</td>
<td>Halhoul Women Society</td>
<td></td>
<td>962863</td>
<td>Training courses, Baghdad, Ramallah, Bethlehem</td>
<td>Establishment of Centre for Deaf</td>
</tr>
<tr>
<td>Akram Alkheir</td>
<td>M</td>
<td>Physical. Director of the Society</td>
<td>Elimination of environmental barriers. Technical aids and equipment.</td>
<td>Arab Society for the Physically Handicapped</td>
<td>P.O. Box 51409 Rm Barzoun St. Jerusalem 28120</td>
<td>B.A. Business Administration</td>
<td></td>
<td>Board member of the Society</td>
</tr>
<tr>
<td>Christina Ronso</td>
<td>F</td>
<td>Physical. Physiotherapist</td>
<td>Physiotherapy treatment for children</td>
<td>Red Cross Society</td>
<td>P.O. Box 375 Nablus</td>
<td>71846</td>
<td>Diploma in Physiotherapy, 1962, Germany</td>
<td>Physiotherapy Hospital for Rheumatism &amp; Cardiology</td>
</tr>
<tr>
<td>Mohammad Tayseer Al-Saied</td>
<td>M</td>
<td>Mental retardation. Psychologist &amp; Director of Centre</td>
<td>Education. Rehabilitation. Services for independent living</td>
<td>Red Cross Society, Al-Raja Centre</td>
<td>P.O. Box 421 Al-Khalil</td>
<td>962796</td>
<td>B.A. Psychology and Sociology, 1982 Jordan</td>
<td>Access to the Village Programme. Jerusalem</td>
</tr>
<tr>
<td>Name</td>
<td>Gender</td>
<td>Disability</td>
<td>Education, Rehabilitation, Technical aids and equipment, Employment.</td>
<td>Organization</td>
<td>Address</td>
<td>Degree Qualifications</td>
<td>Profession</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>--------</td>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------</td>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Nayfa Rabah</td>
<td>F</td>
<td>Mental retardation Executive secretary</td>
<td>Al-Nahda Women Society</td>
<td>P.O. Box 1108 Ramallah</td>
<td>B.A. sociology and Social Work, 1977, Berzeit University</td>
<td>Social guidance worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hassen Maraga</td>
<td>M</td>
<td>Physical and mental retardation Pediatrician</td>
<td>Al-Hana Charity Society</td>
<td>Al-Khalil</td>
<td>M.D. Pedriatrics, 1985 Romania</td>
<td>Doctor, Red Crescent Society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kis Sa’ed</td>
<td>M</td>
<td>Blind &amp; mental retardation Social worker</td>
<td>Best Al-Raja Society</td>
<td>P.O. Box 27 Bethlehem 74225</td>
<td>B.A. Psychology and Sociology, 1982 Berzeit</td>
<td>Psychology teacher, Berzeit University, Psychologist, Child Dev. Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael Saeer</td>
<td>M</td>
<td>Physical, psychological &amp; mental retardation Psychologist, Head of Public Health</td>
<td>Arab Society for Rehabilitation of the Disabled: Catholic Services for Individual Relief</td>
<td>Sheikh Jarrah P.O. Box 159 Jerusalem 629175</td>
<td>Ph.D. Clinical Psychology, 1987 England</td>
<td>Psychology teacher, Berzeit University, Psychologist, Child Dev. Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nada Al-Dabbas</td>
<td>F</td>
<td>Deaf, physical &amp; mental retardation Supervisor, Vocational Training Centre</td>
<td>Bethlehem Arab Society for the Physically Handicapped</td>
<td>P.O. Box 100 Balata 6 st. Bethlehem 74181</td>
<td>B.A. Psychology and Sociology, 1982, Bethlehem. Diploma in Rehabilitation, 1987, U.S.A.</td>
<td>Psychology teacher, Berzeit University, Psychologist, Child Dev. Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victoria Kamweli</td>
<td>F</td>
<td>Speech, physical &amp; mental retardation Secretary of the society</td>
<td>Arab Women Federation</td>
<td>P.O. Box 19 Bethlehem 74258</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. DISABILITY TRENDS AND THEIR CLASSIFICATION

Analysis of disability trends means comparing changes in the types of disability in accordance with statistics based on field studies. It has already been pointed out that this type of study is lacking for the occupied territories. However, through the recently published statistics on injuries incurred during the intifada leading to permanent disabilities as well as psychological disorders, anxiety and fear and their effects on the nervous system, a new factor has started to affect the nature of disability. Hardly a day passes without news in the newspapers and radio and TV news bulletins about injuries leading to permanent disabilities. The classification which was common before the intifada was the following:

- Blind persons;
- Deaf and dumb persons;
- Mentally retarded persons;
- Physically disabled persons.

The classification of injuries during the intifada shows that the majority have been cases of physical disability apart from 18 cases of loss of sight. It has been reported that during the first year of the intifada physical disability cases numbered 5,000 ranging between minor lameness and total paralysis. According to a study by the Workshops for Girls Rehabilitation in the West Bank and Gaza Strip the growth rates of disability cases were as follows:

- Beating and breaking bones
  (new in phenomenon because of the intifada): 17 per cent;
- Paralysis: a 24 per cent rise over the average rate;
- Artificial limbs: a 76 per cent rise over the average rate;
- Psychological cases: a 75 per cent rise over the average rate;
- Physiotherapy: a 64 per cent rise over the average rate.

The Disabled Child Care Society in Gaza has found a growing need for programmes for the care of children up to the age of four to avoid delay in development because of psychological disturbances resulting from the difficult conditions to which these children are subjected.
IV. SOCIAL AND ECONOMIC CONSEQUENCES

The needs of disabled persons are numerous and varied. They include health, social, educational and professional needs. Comprehensive care for disability cases requires great efforts, high technology and considerable expense. What is more important is that this care requires governmental efforts as well as governmental institutions responsible for all different aspects of care. The situation in the West Bank and Gaza Strip is completely different from that in any other country. The Government is an occupation authority and care for disabled persons does not fall within its responsibilities.

Under this situation voluntary charitable societies have found themselves fully in charge of the disabled. They realize that a disabled person needs long-term efforts and training. In many cases there is a need for continuous special care. There are severe cases in which it is no use to train the disabled person and this leads to a permanent commitment from society to provide financial aid.

Charitable societies are also aware of the need to create the appropriate atmosphere in society to accept with open minds the presence of disabled co-workers in the work-force. Indeed, it is necessary to utilize all means in modern life to serve disabled citizens and help them to carry out their full role in society.

Meanwhile societies realize the urgent need for the presence of qualified workers in various fields of specialization for the service of the disabled. However, in the light of such awareness a big question arises as to the ability of charitable societies to shoulder these responsibilities. The Government has been replaced by charitable societies and volunteers, who face tasks too big to be carried out by them. All efforts and individual attempts to help the disabled will remain limited. The major burden is on the family and the disabled person himself. Even a qualified disabled person does not easily find a job because institutions always prefer healthy persons. Thus the situation worsens and the number of disabled persons lacking a responsible authority to solve their problems continues to rise.

Among the social consequences of disability problems are the attitudes towards the disabled. In a study of this issue by Mr. Na'im Abu Al-Homus of Al-Najah University in Nablus, seven negative attitudes towards the disabled person were identified. These are reflected in the following statements:

1. Parents should be less strict with their disabled children than with their other children.

2. Those with a high degree of disability find it difficult to be in harmony with those with a lower degree of disability.

3. Caution should be taken when talking with a disabled person.
4. The majority of disabled persons feel depressed because of their situation.

5. Disabled persons prefer loneliness and introversion.

6. Disabled persons complain more than others.

7. The majority of disabled persons feel they are less efficient than others.

V. GOVERNMENT POLICIES TOWARDS DISABLED PERSONS

Given the absence of authority and the national government, there is a lack of governmental policies drawn up to provide care for the disabled. It is clear that the efforts made are carried out by charitable societies individually. Despite the formation of a central committee for the disabled, resources are still scattered and in need of organization and unification.

VI. RECOMMENDATIONS

The situation has not changed much for the disabled since the above-mentioned Conference held in 1981. On the contrary, the situation has worsened. Therefore, it is useful to cite the recommendations of the Conference, most of which still need to be implemented:

1. A comprehensive survey of all disability cases should be carried out.

2. Programmes should be drawn up to orient citizens, especially in villages, through all available means, including educational and informational institutions and early care should be provided.

3. The establishment of social institutes and special education centres to qualify personnel capable of undertaking the rehabilitation of disabled persons should be encouraged.

4. Students should be sent abroad to specialize in the rehabilitation of disabled persons and get acquainted with experience in other countries taking into account the indigenous conditions and available resources.

5. Conditions of those working for social care institutions should be improved and means provided for their advancement in their fields of work.

6. Training courses should be organized for workers in the field of disability as a first step to establishing a specialized institute for the training of the personnel needed as well as co-operation with the existing expertise.

7. Care should be provided for aged persons and special centres established to accommodate them.
8. Appeals should be made to national institutions to support social schemes by all means available to them.

9. National institutions should be urged to recruit qualified disabled persons for jobs compatible with their vocational and professional specializations and to treat them on an equal footing with healthy employees as regards rights and duties.

10. Disabled persons' issues should be included in educational curricula to promote early awareness of all citizens.

11. Workshops of the disabled should be improved and supermarkets providing all facilities to guarantee marketing the products of disabled workers should be set up and national institutions called on to promote such products.

12. The establishment of psychiatric clinics should be supported and emphasis put on early prevention.

13. National institutions should be called on to provide the necessary means to facilitate the movement of disabled persons in public places and the fees and rates charged for public and private services should be reduced for disabled persons.

14. Arab countries and international organizations concerned should be called on to participate in the implementation of carefully studied plans in all fields of rehabilitation and prevention of disability and there should be direct co-ordination with national institutions.

References

(in Arabic)


5. Various press cuttings.

6. Interviews with some officers of the societies for disabled persons.
REPORT ON PROGRAMMES AND METHODS OF CARE FOR DISABLED PERSONS IN THE STATE OF QATAR

by

Fathi Abd al-Rahim
Arabian Gulf University
Bahrain
Summary

Services and programmes for the disabled in Qatar are modern in character, as most currently existing services were initiated in 1981.

A number of agencies are involved in the provision of services and programmes to groups of disabled persons in the country, the main agencies concerned being the Ministry of Education, the Ministry of Public Health and the Qatar Red Crescent Society.

Blind nationals of Qatar are currently educated at the Regional Centre for the Education of the Blind in Bahrain, run by the Middle East Commission for the Affairs of the Blind, of which Qatar is a member and to whose budget it is a contributor.

The Ministry of Education has, since 1981/82, opened two schools, one for boys and the other for girls, both of which cater to the mentally retarded and those with hearing disabilities.

The Ministry of Education has set up a Special Education Unit, under the administrative control of the Social Education Department, to be responsible for the supervision and monitoring of special education schools.

The Ministry of Public Health and the Hamad Medical Corporation have established a Children’s Rehabilitation Unit at Al-Rumailah Hospital.

The teaching programme for multi-handicapped children is in two parts: the first (preparatory) level is for children between two and five years of age, and the second (instruction) level is for those aged five to fifteen.

The Qatar Red Crescent Society helps to provide services to various categories of disabled persons through the activities of the Qatar Crescent Club.

The Qatar Crescent Club began to offer activities to its disabled members on a year-round basis in February 1984. The girls' club has continued to offer only summer activities.

Club activities include some professional programmes, cultural, sports, health, social and recreational activities.

In the legislative field, a recently adopted Ministerial Decision established implementing regulations for special education.

Special education programmes in Qatar are currently, for the most part, taught at special day schools. Advantage has not been taken of alternatives such as classes attached to ordinary schools, teaching in ordinary classes with the provision of a resource room, etc.
The country relies, to a great extent, on secondment from other Arab countries for its supply of special education teachers. However, the need to expand in the future will require more comprehensive planning of the numbers of experts required for special education.
I. INTRODUCTION: GENERAL FACTS

Programmes and arrangements for special education and care of the disabled in any society cannot be drawn up in isolation. Any effective programme is in fact a natural extension of the society's cultural framework and educational system. The facilities and services accorded to disabled persons - whether young or old - must therefore be in keeping with the social and cultural frameworks of human societies.

The general principles and policy of education in Qatar are set forth in two documents. One is the "Report on the development of education", submitted to the 38th session of the International Education Conference at Geneva in November 1981, and the other is "The Educational Policy of the State of Qatar", as drawn up by the Ministry of Education. Careful reading of these two documents clearly shows that education in Qatar is following contemporary lines, particularly with respect to the principles of education for all, continuing education, educator for the future, education for human improvement and education for development.

Education in Qatar is provided free of charge at all levels. In addition to free teaching, a number of other services are offered at no cost, such as books, transport, study tours and other activities. Monthly stipends are paid to some students, with a view to encouraging them to enrol for specific types of education, and social assistance is provided to students in need.

Services and programmes for the care of disabled persons in Qatar are a recent development, since most of the services currently offered were initiated in 1981, to coincide with the world-wide commemoration of the International Year of Disabled Persons.

At present, a number of agencies are involved in the provision of various services and programmes to certain categories of disabled persons in Qatar. Among the foremost of the agencies concerned are the Ministry of Education, the Ministry of Public Health and the Qatar Red Crescent Society.

II. CONTRIBUTIONS BY THE MINISTRY OF EDUCATION TO SPECIAL EDUCATION PROGRAMMES

A. Teaching of the visually disabled

At the beginning of the academic year 1969/70, Qatar concluded an agreement with Egypt whereby blind nationals of Qatar would be taught at specialized institutes in Egypt. The Model Centre for the Care of Disabled Persons at Cairo continued to cater for Qatar nationals until 1974.
The beginning of the academic year 1974/75 saw the inauguration in Bahrain of the Regional Centre for the Education of the Blind, which is run by the Middle East Commission for the Affairs of the Blind. Qatar became a member of the Centre, contributed to its budget and was represented on its governing board. Subsequently, blind nationals of Qatar were sent to the Centre every year, and the Ministry of Education saw no need to establish an institute of its own for the education of the blind, particularly since the numbers were low.

B. Teaching of those with hearing-related and mental disabilities

At the beginning of the academic year 1975/76, the Ministry of Education started a class (attached to Tariq bin Ziad Primary School) to teach the mentally retarded. Instruction was provided by a teacher on secondment.

During the academic year 1976/77, the Ministry of Education set up a hearing-test clinic, for the purpose of determining the extent to which pupils suffered from hearing disabilities.

In the academic year 1981/82, the Ministry of Education established two institutes, one for boys and the other for girls, to deal with both mentally retarded cases and children suffering from hearing disabilities. The two institutes were placed under the control of the Social Education Department, and a number of specialists in the education of mentally retarded and deaf children were seconded from Arab countries.

During the academic year 1986/87, deaf boys were separated from their mentally retarded counterparts, and the two groups were accommodated in two separate buildings under a single administration, known as Al-Amal Boys' School. Mentally retarded girls were also separated from girls with hearing disabilities, and the two groups were placed in entirely separate buildings: Al-Amal Girls' School catered for hearing disabilities, while the Intellectual Development School for Girls dealt with mentally retarded cases.

In the academic year 1980/81, the Ministry of Education established a Special Education Unit within the Social Education Department, whose task it was to assume responsibility for supervising and monitoring the country's special education institutes.
The table below gives details of special education schools and numbers of pupils, teachers, classes and administrative staff, on the basis of figures for the current academic year (1988/89).

<table>
<thead>
<tr>
<th></th>
<th>Pupils</th>
<th>Classes</th>
<th>Teachers</th>
<th>Administrative staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Al-Amal Boys' School:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Deaf</td>
<td>47</td>
<td>9</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>(b) Mentally retarded</td>
<td>106</td>
<td>12</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td><strong>Al-Amal Girls' School</strong></td>
<td>49</td>
<td>8</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td><strong>Intellectual Development School for Girls</strong></td>
<td>84</td>
<td>10</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>266</td>
<td>39</td>
<td>71</td>
<td>22</td>
</tr>
</tbody>
</table>

An examination of the figures in the above table shows that the teacher-pupil ratio is 1 to 4, which is an excellent rate by world standards. There are on average seven pupils in each class, which is also a good ratio.

A study of the historical development of special education schools since their establishment in 1981/82, with respect to numbers both of schools and of students and teachers, indicates that the numbers have on average increased threefold. This is evident from the figures in the following table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1981/82</td>
<td>1</td>
<td>1</td>
<td>52</td>
<td>16</td>
<td>24</td>
<td>15</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>1982/83</td>
<td>1</td>
<td>1</td>
<td>58</td>
<td>19</td>
<td>37</td>
<td>19</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>1983/84</td>
<td>2</td>
<td>2</td>
<td>67</td>
<td>25</td>
<td>56</td>
<td>26</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>1984/85</td>
<td>2</td>
<td>2</td>
<td>73</td>
<td>29</td>
<td>59</td>
<td>29</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>1985/86</td>
<td>2</td>
<td>2</td>
<td>80</td>
<td>35</td>
<td>63</td>
<td>33</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>1986/87</td>
<td>2</td>
<td>2</td>
<td>98</td>
<td>36</td>
<td>72</td>
<td>40</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>1987/88</td>
<td>2</td>
<td>2</td>
<td>102</td>
<td>45</td>
<td>79</td>
<td>44</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>1988/89</td>
<td>2</td>
<td>2</td>
<td>106</td>
<td>47</td>
<td>84</td>
<td>49</td>
<td>26</td>
<td>13</td>
</tr>
</tbody>
</table>
Decision No. 37 of the Minister of Education, dated 5 March 1989, established the internal regulations of special education schools. The most important points included in the Decision were as follows:

(a) Definitions of disabilities;

(b) Conditions and procedures for acceptance at special education schools;

(c) Conditions for acceptance at schools and classes for those with hearing disabilities;

(d) Study materials and teaching plans for Al-Amal schools (for those with hearing disabilities);

(e) A study plan and system for the assessment of students at intellectual development schools (for the mentally retarded);

(f) Tasks and responsibilities of the school governing board;

(g) Incentives and penalties for students;

(h) School activity and school councils;

(i) Tasks and duties of Special Education Unit staff.

The levels of instruction at special education schools - as set forth in the above-mentioned Ministerial Decision - are as follows:

<table>
<thead>
<tr>
<th>Kindergarten (pre-school) level</th>
<th>2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary level</td>
<td>6 years</td>
</tr>
<tr>
<td>Vocational preparation level</td>
<td>2 years</td>
</tr>
<tr>
<td>Vocational training level</td>
<td>4 years</td>
</tr>
</tbody>
</table>

Instruction is given at all levels during the day. The Ministry of Education provides collective transport to bring pupils from their houses in the morning and to return them when classes are over.

Instruction for pre-school-age children is extremely limited. There is one class for the mentally retarded (comprising 11 pupils) and there are two for those with hearing disabilities (13 pupils), as shown by the following table:
<table>
<thead>
<tr>
<th>Level of education</th>
<th>Category of disability</th>
<th>Number of classes</th>
<th>Number of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten (2 years)</td>
<td>Mental</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Hearing</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Primary (6 years)</td>
<td>Mental</td>
<td>14</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>Hearing</td>
<td>10</td>
<td>61</td>
</tr>
<tr>
<td>Vocational preparation (2 years)</td>
<td>Mental</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Hearing</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Vocational training (4 years)</td>
<td>Not yet offered</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The information in the above table demonstrates two essential facts:

(a) The need to expand instruction at the kindergarten level, with a view to promoting early detection of disability cases, the provision of services and intervention at the first possible opportunity following detection;

(b) The urgent and pressing need to establish appropriate programmes and curricula for the vocational training level, in accordance with the circumstances of individuals in each category of disability (hearing, mental), and to seek expert assistance from the pertinent specialized agencies.

III. CONTRIBUTIONS BY THE MINISTRY OF PUBLIC HEALTH TO PROGRAMMES FOR THE CARE OF DISABLED PERSONS

The Ministry of Public Health and the Hamad Medical Corporation have established a unit for multi-handicapped children those whose intelligence quotient (IQ) is below 50 - at Al-Rumailah Hospital.

The unit is staffed by doctors who oversee the health and medical condition of the children, specialists in physiotherapy, a social affairs expert and a special education expert. The unit has examined and evaluated 800 cases since it was established in 1988.

Children with the ability to learn are transferred to the special classes run by the unit. These classes are available only to those who are multi-handicapped and do not meet the conditions for enrolment in the special education schools run by the Ministry of Education.
The Ministry of Education contributes to the running of this programme by providing the unit with four teachers, as well as a bus and a driver to transport the children from their homes to the hospital in the morning and to take them back when classes are over.

The instruction programme is in two parts:

(a) The preparatory level, for children between two and five years of age, which is designed to stimulate the desire to learn at an early stage and to develop linguistic and social skills;

(b) The instruction level, for multi-handicapped children aged from five to fifteen (25 students), comprising four classes for the mentally retarded and one for the deaf.

The objectives of the instruction programme are as follows:

(a) To develop sensory responses and motor skills (of gross-motor and fine motor muscles);

(b) To develop perception skills and basic concepts;

(c) To develop social skills and proper adaptation;

(d) To improve everyday living skills and self-care;

(e) To develop language and speech;

(f) To co-ordinate with other services at the hospital, such as physiotherapy, occupational therapy and medical treatment;

(g) To educate staff and families by inviting the latter to see the unit's rehabilitation process, with a view to ensuring that activities are followed up in the family.

The vast majority of cases serviced by this unit generally involve paralysis together with mental disability: the cases include 52 males and 34 females.

The distribution of cases by number of disabilities is as follows:

<table>
<thead>
<tr>
<th>Disabilities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 disability</td>
<td>39.4 per cent</td>
</tr>
<tr>
<td>2 disabilities</td>
<td>20.5 per cent</td>
</tr>
<tr>
<td>3 disabilities</td>
<td>19.7 per cent</td>
</tr>
<tr>
<td>4 disabilities</td>
<td>15.7 per cent</td>
</tr>
<tr>
<td>5 disabilities</td>
<td>4.7 per cent</td>
</tr>
</tbody>
</table>
The annex contains charts showing additional data on children in the unit at Al-Rumailah Hospital.

IV. CONTRIBUTIONS BY THE QATAR RED CRESCENT SOCIETY TO PROGRAMMES FOR THE CARE OF DISABLED PERSONS

The Qatar Red Crescent Society helps to provide certain services to various categories of disabled persons through the activities of the Qatar Crescent Club.

The idea of setting up a club was first broached at the beginning of the International Year of Disabled Persons (1981), when the Qatar Red Crescent Society decided to organize a summer club for the disabled (i.e. operating only during the summer holidays).

In view of the club's success in 1981, and in accordance with the wishes of those concerned, the Qatar Red Crescent Society decided to repeat the experiment in 1982, using the same programmes as those which it had conducted the previous year.

That same year saw the opening of a similar club for disabled girls at the women's branch of the Qatar Red Crescent Society. Activities at the branch included drawing, handicrafts and cultural studies, as well as cooking, typing, sewing, first aid and some sports programmes.

In the light of the success of the Club's summer programme, and in accordance with the wishes of those concerned, the governing board of the Qatar Red Crescent Society decided to secure official State registration for the Club in late 1983.

In order to deal with the growing number of members and to facilitate the introduction of new activities for the training and rehabilitation of disabled persons, the Qatar Red Crescent Society decided to allocate a temporary building for the Club.

The Club began to open its doors to disabled members on a year-round basis with effect from February 1984; meanwhile, the girls' club continued to offer summer activities through the women's branch (during the summer period only).

A number of objectives were established for the Qatar Crescent Club, the foremost being as follows:

(a) To help to increase community awareness of the rights of disabled persons and to improve the public's understanding of disabled persons' problems, while endeavouring to change people's attitudes towards them;

(b) To strive to integrate disabled persons into the community, by means of social work, and to strengthen ties between them through travel and cultural exchanges, both locally and abroad;
(c) To endeavour to develop friendly, cultural and social relations between the Club and similar clubs, centres and foundations dealing with the affairs of disabled persons;

(d) To give disabled persons the opportunity to perform their functions in life in the same way as other people and to participate in youth programmes on an equal footing, by removing the psychological and social obstacles to their integration;

(e) To help facilitate mobility and access for disabled persons and to increase their self-confidence.

The services and activities offered within the framework of the Club at present indicate that the numbers of individuals suffering from various categories of disability are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally retarded (various levels)</td>
<td>113</td>
</tr>
<tr>
<td>Loss of sight (blindness)</td>
<td>15</td>
</tr>
<tr>
<td>Motor disability (paralysis)</td>
<td>35</td>
</tr>
<tr>
<td>Loss of hearing (deafness)</td>
<td>42</td>
</tr>
<tr>
<td>Psychological disorders</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>207</strong></td>
</tr>
</tbody>
</table>

The services and activities offered by the Club may be summed up as follows:

(a) Special activities for disabled members, including rehabilitation programmes and activities intended to develop individual and team skills. These include the following rehabilitation programmes:

(i) **Carpentry.** Members are taught basic information and essential principles about woodwork; they also make certain wooden objects and do exercises which can be carried out in the Club’s workshop;

(ii) **Electricity.** Members are taught information and basic principles about electricity; they carry out various field exercises, make connections and devise some electrical circuits;

(iii) **Typing.** A group of members is trained and taught to type on an Arabic keyboard;

(iv) **Agriculture.** Training is provided in agricultural skills and the basic measures needed to create an irrigated area for farming;

(b) Cultural activities, which embrace the cultural library, the audio-library for the blind and the video hall, where cultural films are shown. Computer activities have recently been introduced for some members of the Club, under the heading of cultural activity;
(c) Sports activities, with the objective of forming a sports team for various games and developing disabled persons' sports skills;

(d) Health activities, which are designed to teach some members of the Club a series of basic health and first aid principles and to ensure general monitoring of the health of all members;

(e) Social and recreational activities, including the organization of field visits to certain public Government offices, institutions and facilities, with a view to familiarizing members of the Club with those bodies' responsibilities and duties. Recreational parties are also arranged;

(f) Artistic activities (studio), which are intended to develop the artistic faculties and talents of disabled persons. The activities are for the most part centred on handicrafts, such as woodwork and ornamental designs inspired by themes indigenous to Qatar.

The second element of the services and programmes offered by the Club relates to the community. The object is to organize activities which give disabled persons an opportunity to mix and mingle with other members of the community, by means of programmes and activities organized jointly with individuals of the community. The Club also offers - on a year-round basis - certain programmes and activities which are intended to familiarize the community with disabled persons' rights and causes by publishing information pamphlets in support of the familiarization process.

Club activities are organized on a group basis, with members being divided into groups to carry out various activities. These groups follow a certain programme for three months, and the groups are then changed so that members may participate in different programmes and obtain the most comprehensive possible picture of the activities on offer.

V. GOVERNMENT POLICIES AND RECOMMENDATIONS

Qatar's Ministry of Education bears the basic responsibility for educational programmes offered to certain categories of the disabled, and a Special Education Unit has been established within the Ministry. This is a positive trend, which both conforms with the general principles of special education and is in keeping with the urging of international organizations - including the United Nations Educational, Scientific and Cultural Organization (UNESCO) - that education ministries should assume the basic responsibility for special education. In order for the Special Education Unit to be able to perform the tasks entrusted to it, it requires support, particularly with respect to the provision of qualified and specialized manpower, so that it may become a special education department which can cope with the necessary expansion of its services.
With regard to legislation, a recently adopted Ministerial Decision (referred to earlier) incorporates implementing regulations for special education and establishes conditions for acceptance, teaching plans and systems of assessment at special education schools. However, the Decision focuses on only two categories of disability (the mentally retarded and those with hearing disabilities) and does not address other categories or children with special needs, including learning disabilities, emotional disturbances, etc.

Special education programmes are taught, at present, by special day schools, without making use of alternatives such as classes attached to ordinary schools, teaching in ordinary classes with the provision of a resource room and other ways of offering special education programmes. These alternatives could be particularly suitable for minor cases which might make use of such programmes within the public education system.

To a large extent, the country relies on secondment from certain other Arab countries for its supply of special education teachers. However, the need to expand and diversify special education programmes in the future requires more comprehensive planning with respect to the number of specialized teachers and other experts (including psychologists and speech therapists by making optimum use of training programmes both in Qatar (e.g. the University of Qatar) and elsewhere (e.g. the training programme at the Arabian Gulf University).

Qatar endeavours to draw on the special education programmes and curricula followed in certain neighbouring countries, and particularly those of the Gulf Co-operation Council, including Kuwait. This is evident from the fact that the country's special education schools use the educational expertise programme developed at special education schools in Kuwait and currently followed at schools for the mentally retarded.

The country is planning to construct new buildings for the special education schools in the next few years and has already taken positive steps in this direction. Before embarking on the implementation of this project, it may be worth while to draw on international and regional expertise with respect to the design of buildings, equipment, necessary materials, etc.

The country is witnessing the beginnings of pre-school (kindergarten) education for disabled children, but this sort of education is limited and its expansion requires encouragement. Meanwhile, though, post-school education for disabled persons also merits attention.

Major efforts are currently under way to improve procedures for the early detection, identification and evaluation of disability cases. The school health service plays a fundamental role in this connection. Further efforts are required in the areas of detection, identification and evaluation; such efforts and the means by which they are carried out must be diversified, and use must be made of the corresponding endeavours of neighbouring countries.
It may be worth while - at this stage of Qatar's endeavours to care for the disabled - to consider drawing up, at the least, a medium-term national plan. The plan would be based on an objective study of the present situation, an assessment of the most significant existing lacunae (with a view to expanding current services), the planning of special education programmes for categories not now receiving services, the training of planning, managerial and executive staff, an endeavour to establish a solid foundation of information, data and statistics on disabled persons and an effort to ensure that those entitled - whether old or young - are not excluded from special services.

VI. GENERAL RECOMMENDATIONS

Apart from the specific proposals and recommendations contained in the main body of the report, the following general recommendations may be made:

Given the number of - both government and non-governmental - agencies responsible for providing services to disabled persons, a greater degree of co-ordination is required in the context of comprehensive planning for the care of the disabled.

In view of the many alternative types and levels of special education, a policy should be observed, when selecting from these alternatives, whereby disabled pupils are integrated into educational systems and social contexts whenever this is possible and worthwhile.

Use must be made of the expertise and facilities offered by regional and international organizations and agencies when formulating or implementing a national plan for the care of disabled persons, for the purposes, primarily, of technical consultancy.

An endeavour should be made to build and develop a positive attitude towards disability and disabled persons on the part of school pupils. Useful results may be achieved in this connection if revised educational materials are incorporated into curricula and teaching activities.

Strong links should be encouraged - by all possible means - between institutions for the care of disabled persons and their families, with a view to ensuring their positive and effective participation in the planning of instruction and rehabilitation programmes for their children, follow-up of programme implementation and the contribution of views on the development and modernization of such programmes.

Since disabled persons constitute a productive and inventive source of manpower, a specific procedure should be established for the placement of qualified disabled persons in posts which suit their abilities and qualifications, and for follow-up of the employment and placement process.
In view of the major and significant part which could be played by the competent units of the Ministry of Social Affairs and Labour in various aspects of care for the disabled, particularly with respect to employment and placement, the Ministry should be encouraged to assume a more positive role in the care of disabled persons.

Sources

1. Information and data was assembled from personal interviews with officials of institutions for the care of disabled persons in Qatar during a visit from 25 to 26 March 1989. These included the Director of the Social Education Department, the Head of the Special Education Unit and technical supervisors of the Unit, principals and teachers of special education schools and other teachers. Interviews were also conducted with officials of the Children's Rehabilitation Unit at Al-Rumailah Hospital and with the manager and staff of the Qatar Crescent Club.

2. Annual reports published by the Social Education Department of the Ministry of Education, which incorporates the Special Education Unit.

3. Decision No. 37 of the Minister of Education, dated 5 March 1989, concerning the internal regulations of special education schools.

4. Report by Fahmi Muhammad Abdullah, Head of the Children's Rehabilitation Unit at Al-Rumailah Hospital, on the Unit's activities and services.


6. Reports and publications of the Qatar Crescent Society.
Annex

Chart I. Percentage distribution of handicapped children by number of disabilities

(New out-patients at the Children's Rehabilitation Unit, 1988)

SOURCE: Dr. Hanan Refaat, Children's Rehabilitation Unit.
NOTE: Total number of new outpatients: 127.
Chart II. Developmental disability patients by nationality and sex, 1988

Source: Children’s Rehabilitation Unit.
Chart III. Percentage distribution of handicapped children by etiology

(New out-patients at the Children's Rehabilitation Unit, 1988)

- Unknown etiology 22%
- Brain degeneration disease 5.5%
- Congenital abnormality 7.9%
- Intra-uterine infection 1.6%
- Chromosomal aberration 15%
- Head trauma 1.6%
- Post-fever 11.8%
- Hereditary 3.2%
- H.I.E. prematurity 31.5%

Source: Dr. Hanan Refaat, Children's Rehabilitation Unit.

Note: Total number of new out-patients: 127.
Chart IV. Percentage distribution of handicapped children by diagnosis

(New out-patients at the Children's Rehabilitation Unit, 1988)

Source: Dr. Hanan Refaat, Children's Rehabilitation Unit.

Notes: Total number of new out-patients: 127. 'Rare' includes: brain trauma, Verdring Hofmann, poliomyelitis and/or 18p syndrome.
Chart V: Statistical summary of out-patients at the Children's Rehabilitation Unit, 1987-1988

Source: Dr. Hanan Refaat, Children's Rehabilitation Unit.

Note: Total number of new out-patients: 739 (1987); 1,344 (1988).
XXX. STATUS OF DISABLED PERSONS AND PROGRAMMES OF AVAILABLE SERVICES IN SAUDI ARABIA

by

Jamil Sofi
Introduction

This study is an attempt to describe and analyse the programmes and regulations covering services for the disabled in Saudi Arabia. The study provides information on the various services, regulations, legislation and grants for the disabled in general, in addition to analysing them and making a number of recommendations and observations aimed at developing and increasing the effectiveness of such services.

The writer has made serious efforts to include in his study detailed statistics on the disabled in Saudi Arabia in order to present an accurate account of the various categories, distribution, age groups and social groups of each type of disability. Such data are not available at the institutions providing such services, because the necessary field studies have not been conducted by the institutions concerned. However, the writer has been able to find some statistics in dispersed reports compiled by institutions providing services for the disabled. He has used them to identify certain indicators serving the purposes of the study in order to provide the reader with a picture of the status of the services provided to disabled persons in Saudi Arabia.

The study covers various aspects of the issue, including a historical summary of the status of the disabled in Saudi Arabia and their development to their present level, an account and analysis of the various types of current services, programmes and legislation in this field as well as the institutions concerned with the provision of such services, especially governmental institutions. The study also attempts to define the size and causes of the problem of disability in Saudi Arabia, as well as identifying positive aspects and defects in the services and programmes now available to the disabled; the study makes some recommendations to increase the effectiveness of the activities of the programmes and services for the disabled in Saudi Arabia.

Historical summary

Until recently in the history of Saudi Arabia, there have not been any important services or programmes for disabled persons, who used to be looked upon as persons unable to do anything, even to take care of themselves. Mentally retarded and paralysed persons, in particular, were regarded as the products of evil, a belief still prevalent in rural areas but one that is gradually disappearing. Some of the blind, especially males, in some Saudi Arabian towns used to learn the Koran by heart in the traditional method, i.e. at mosques for the purpose of reciting it to earn their living. As for the remaining groups of disabled persons, especially those with mental retardation, treatment or improvement of their conditions was hopeless.

In the early 1950s, the use of modern methods in the training and rehabilitation of disabled persons was introduced through private efforts. A blind man who learnt Braille in an Arab country undertook to teach Braille to
three other blind persons in Saudi Arabia. A year later, a number of blind persons began to learn and teach Braille at classes at the College of Arabic in Riyadh. In 1956 these people were given approval by the Ministry of Education to teach Braille in evening classes at a primary school. In 1958 a separate building was allocated to these activities.

As a result of the concern shown by the Saudi Arabian Government for the development of human resources as well as provision of welfare and care for all citizens, care for the disabled began to follow a more organized form. In 1960 the Saudi Arabian Ministry of Education agreed to turn the above classes into the first public institute for blind men in Saudi Arabia. Other institutes gradually increased in number, especially in larger towns. In 1985 there were 10 such institutes. In addition, in 1964 the education of blind girls started when the first institute for blind girls in Saudi Arabia was set up in Riyadh. Education at such institutes gradually developed to cover primary, intermediate and secondary stages as well as vocational education. For more than 20 years the vocational rehabilitation of the blind was the responsibility of the Ministry of Education. In 1980 the Council of Ministers issued resolution No. 34 transferring the supervision of vocational departments at the institutes for the blind from the Ministry of Education to the Ministry of Labour and Social Affairs.

It is worth noting that the above individual efforts were not only the nucleus of regular public vocational education and rehabilitation for the blind but for private education of various types. In 1962 the first administration of private education was set up at the Ministry of Education to undertake the responsibility of planning, supervising and following up private education programmes. In conformity with the developmental changes in Saudi Arabia in the past few years the responsibilities and powers of the above administration grew and the administration was turned into a directorate general of private education in 1972 with the task of organizing rehabilitation and educational programmes for the blind and teachable mentally retarded persons, both male and female, as well as those with multiple impairments, in addition to programmes for teachable mentally retarded children who can be provided with training and rehabilitation programmes at specialized centres in the neighbouring Arab countries. In 1981 the Ministry of Education introduced classes for teachable mentally retarded children in a number of primary schools.

In the latter half of the 1970s, the Ministry of Labour and Social Affairs began to take on a considerable share of the responsibilities of services and programmes for the disabled. In 1976 a centre for social rehabilitation of the disabled was set up as the first institute affiliated to the Ministry of Labour and Social Affairs in this field. In 1979 regulations governing care for paralysed children were issued. A year later the Ministry of Labour and Social Affairs was given the responsibility of providing vocational rehabilitation for various categories of disabled persons, male and female, including the blind, the deaf and mute, the mentally retarded and paralytics. The Ministry also undertook to pay grants to all categories of disabled persons.
Institutions providing services and care for the disabled

1. Private participation

In general, all programmes and services for the care and rehabilitation of the disabled are provided by the Government. In addition, there are some limited contributions by the private sector in this field supervised by governmental departments, especially the Ministry of Labour and Social Affairs.

Private contributions are through charitable societies whose statutes are approved by the Ministry of Labour and Social Affairs, which also supervises their activities and provides them with financial and material assistance.

Generally, although all charitable societies, except the Society for the Care of Blind Children, are not specialized in the field of disability, they provide some indirect services as well as financial and material assistance to some groups of disabled persons within the framework of services provided. Although there are approximately 100 charitable societies there is only one specialized society in the field of disability, namely the Charitable Society for the Care of Disabled Children in Riyadh, which is one of the major charities in Saudi Arabia, especially in terms of modern equipment and methods employed in the provision of services to disabled children and their families. This society provides care for only physically disabled children and provides them with the following services:

(a) Intensive physiotherapy given by a team of Saudi Arabian, Arab and European specialists;

(b) Educational programmes;

(c) Psychological services such as intelligence tests;

(d) Social services such as investigating the cases of the families of the disabled.

This society admits Saudi Arabian children only and provides accommodation except Thursday, Friday and school holidays when the families of the disabled children accommodate them and take them back to the society on Saturday morning or after the school holiday. The Board of Administration is composed of highly qualified Saudi Arabian specialists.

2. Governmental institutions

(a) Ministry of Health

The medical institutions of the Ministry of Health provide medical services to persons disabled by various disabilities. Hospitals and various health centres and units provide medical services, including diagnosis, medical treatment and physical rehabilitation, depending on the conditions and needs of each case.
Figure 1. A diagram showing the number of blind pupils, males and females, in 25 years (1960-1985) at Al-Mour Institutes
(b) **Ministry of Education**

As has already been pointed out, it was the Ministry of Education which laid the foundation for the education and rehabilitation of various groups of disabled persons. The administration of special education developed and in 1974 became the Directorate-General of Special Education, consisting of a number of administrations, mainly the Administration of the Deaf and Mute, the Administration of the Blind, and the Administration of Mental Education, with each administration providing various programmes and services within their field of specialization which we will briefly outline below.

**Educational programmes for the blind**

These educational programmes serve both the blind and persons with weak sight, each according to his disability and capabilities. Various educational services are provided through specialized institutes called Al-Nour Institutes, of which there are 11, eight for males and three for females.

It is worth nothing that the decline in the number of blind pupils, as is clearly indicated in figure 1, is due to two major reasons: first, the health changes that have taken place in Saudi Arabia, including the eradication of diseases such as smallpox, as well as control of disease-carrying insects such as flies. Secondly, with the provision of educational and rehabilitational opportunities, regulations were drawn up for the admission of blind pupils to the primary education stage, these regulations also enabled those who had been deprived of primary education to join vocational rehabilitation centres. In the past, as a result of the lack of educational opportunities blind persons of various age groups had been enrolled in classes, irrespective of their school age, which meant crowded primary classes.

All Al-Nour Institutes, in general, have classes for the three educational stages: primary, intermediate and secondary, both for boys and girls, as shown in table 1. Special curricula have been prepared for the three stages, adapted to the conditions, capabilities and needs of the blind, both male and female. In addition to the educational and rehabilitational classes provided by these Institutes, student hostels are provided for those who cannot live with their families during the school year. Opportunities to obtain higher education are available to those who want to continue their university education at any Saudi Arabian university as well as abroad.

**Table 1. Numbers of pupils in the three educational stages in all Saudi Institutes for the Blind according to the latest statistics**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Primary</th>
<th>Intermediate</th>
<th>Secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>212</td>
<td>83</td>
<td>60</td>
<td>356</td>
</tr>
<tr>
<td>Females</td>
<td>106</td>
<td>36</td>
<td>16</td>
<td>158</td>
</tr>
<tr>
<td>Males and females</td>
<td>319</td>
<td>119</td>
<td>76</td>
<td>514</td>
</tr>
</tbody>
</table>
Programmes for the deaf and hard of hearing

The system for teaching the deaf and hard of hearing started in 1964 when two institutes were set up in Riyadh, one for boys and the other for girls. Regulations were issued to organize educational programmes for these groups of disabled persons. These educational programmes are provided separately for boys and girls by specialized institutes called Al-Amal Institutes.

There are three stages of study at these institutes:

1. The preparatory stage is for children aged 4 to 6. During this stage children receive basic education and are helped to acquire skills which complement the primary education stage.

2. The primary stage lasts six years and is divided into a primary stage for those children who finish the preparatory stage, and a primary vocational stage for deaf adults who have not attended the preparatory stage and whose age is over 12.

3. The intermediate vocational stage is for those who complete the primary stage and lasts three years for those aged 12-20. There are 10 such institutes in the major cities of Saudi Arabia, four for girls and six for boys.

Table 2 shows the numbers of male and female pupils at these institutes by various educational stages. In addition to the educational and vocational programmes provided by these institutes, there are hostels to accommodate some of the pupils.

Table 2. Numbers of male and female pupils at Al-Amal Institutes in Saudi Arabia

(Latest statistics)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Preparatory</th>
<th>Primary</th>
<th>Vocational intermediate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>248</td>
<td>822</td>
<td>289</td>
<td>1359</td>
</tr>
<tr>
<td>Girls</td>
<td>150</td>
<td>515</td>
<td>109</td>
<td>770</td>
</tr>
<tr>
<td>Boys and girls</td>
<td>398</td>
<td>1337</td>
<td>398</td>
<td>2129</td>
</tr>
</tbody>
</table>

Programmes and education for the mentally retarded

The introduction of programmes and education for the mentally retarded began with the establishment of the first two institutes for this group of
disabled persons in Riyadh, one for boys and the other for girls in 1972. At the same time the statutes governing these types of educational and teaching programmes were issued.

Educational and teaching programmes for the mentally retarded are provided by specialized institutes called Mental Educational Institutes. Conditions of joining these Institutes include that the child should be educable, with an IQ of 50-75, as well as being stable and without other impairments which would impede his benefiting from the educational programmes at the Institute. The child should be between 6 and 14 years of age.

Mental Education Institutes organize three educational and rehabilitational stages:

1. The preparatory stage, which lasts two years, to prepare the pupil for schooling. This stage can be lengthened, reduced or bypassed as required in each case.

2. The second stage lasts six years, during which time the pupil is taught under special curricula which suit his mental ability and comprehension. The aim is to achieve the pupil's psychological, social, health and vocational adjustment to the environment in which he lives as far as his abilities allow. Those who finish this stage are awarded a certificate confirming attendance at the Mental Education Institute.

3. The vocational stage is for pupils who finish the second stage of schooling at the Mental Education Institute. The third stage lasts four years, but there is flexibility as regards the duration according to the conditions and abilities of each pupil. During this stage the pupil is trained in the skills of a vocation which suits his abilities as shown by the results of aptitude tests as well as follow-up of his progress. At the end of this stage the pupil is awarded a certificate to confirm his completion of the stage.

Mentally retarded pupils sent by regular schools may be admitted to this stage if necessary and if they meet the admission criteria. Furthermore, special education sections can be set up in the vocational stage for mentally retarded pupils from outside the Mental Education Institutes who are above the admission age, after it is established that they are suitable for training within the available resources in the framework of a programme specially designed for them. It is worth noting that some institutes continue to provide training programmes, although the responsibility for vocational rehabilitation was transferred to the Ministry of Labour and Social Affairs, because the statutes of these institutes have not been amended. There are nine such institutes, for boys and girls, in the major Saudi Arabian cities. The total number of pupils in these institutes is 1,428 boys and girls. Figure 2 shows the steady growth in the number of pupils in the preparatory and primary stages at these institutes in the past 15 years.
Figure 2. Total number of pupils at mental education institutes in the past 20 years in preparatory and primary stages.
In general, besides the educational and teaching programmes provided by the Ministry of Education through its institutions caring for the blind, deaf and mute and mentally retarded, all pupils at these special education institutes are provided with programmes for social, psychological and health care in addition to accommodation services at hostels, and monthly financial grants. The total number of pupils who benefit from the educational and teaching programmes of the Ministry of Education at all special education institutions affiliated to it is 4,071 (see table 2).

Table 3. Number of institutes and pupils for each type of special education provided by the Ministry of Education

<table>
<thead>
<tr>
<th>Type of education</th>
<th>No. of institutes</th>
<th>No. of sections</th>
<th>No. of classes</th>
<th>No. of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blind</td>
<td>10</td>
<td>28</td>
<td>109</td>
<td>514</td>
</tr>
<tr>
<td>Deaf and mute</td>
<td>14</td>
<td>33</td>
<td>220</td>
<td>2,129</td>
</tr>
<tr>
<td>Mental education</td>
<td>9</td>
<td>21</td>
<td>154</td>
<td>1,428</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>82</td>
<td>483</td>
<td>4,071</td>
</tr>
</tbody>
</table>

(c) Ministry of Labour and Social Affairs

As noted above, in the middle 1970s the Ministry of Labour and Social Affairs started to provide services to care for the disabled through the General Administration of Rehabilitation, which undertook the responsibility of vocational and social rehabilitation as well as care for severely disabled and paralysed persons and payment of financial aid to the disabled, especially those who live with their families.

Vocational Rehabilitation

Vocational rehabilitation programmes for disabled persons started in 1976 with the establishment of the first vocational rehabilitation centre for the disabled in Riyadh. In 1980 the Ministry of Labour and Social Affairs took over the responsibility of vocational rehabilitation of the disabled. Regulations were issued to govern the vocational education programmes in this field.

Vocational rehabilitation programmes aim at the physical, sensory and mental rehabilitation of disabled persons as well as developing their physical and mental abilities and providing them with opportunities for a better social and working life. Therefore, the Ministry has set up five vocational rehabilitation centres for the disabled in the major Saudi Arabian cities. These centres undertake the responsibility of providing vocational care and rehabilitation programmes for all types of disabled persons who can be trained
and rehabilitated by developing their special abilities and training them in suitable vocations for the purpose of psychological, social and vocational readjustment.

Groups of disabled persons who benefit from these centres include the following:

(a) Physically disabled persons such as those with amputated limbs, paralysed persons and heart patients;
(b) Deaf and mute and hard of hearing persons;
(c) Blind and weak-sighted persons;
(d) Mentally retarded persons such as morons and improving mental patients.

Vocational rehabilitation of the disabled is carried out through training courses not exceeding 20 months, which can be extended with the approval of the General Administration of Rehabilitation when necessary. As for the blind their training lasts three years which can be extended if necessary. Disabled persons can be trained outside the centres, i.e., at private institutions, workshops and other governmental institutions through contracts concluded between employers and centres and the General Administration for Rehabilitation.

In addition to vocational training these centres provide social, health, psychological and recreational care as well as training, accommodation and boarding (for those at hostels). All those who enrol in these centres are paid a monthly grant of 800 Saudi Arabian riyals (SRs) while those who are admitted to hostels are paid SRs 400.

Statistics of the Undersecretariat for Social Welfare of the Ministry of Labour and Social Affairs show that the number of those enrolled in these centres throughout Saudi Arabia is 652 males and females. Observation of these centres shows that the number is growing every year. For instance, at the rehabilitation centre in Riyadh, which is the largest specialized centre in this field, the number has grown about eight times in the past 10 years and the centre has exceeded its capacity by more than 70 male and female disabled persons.

Social rehabilitation

Social rehabilitation programmes for the disabled aim to accommodate severely disabled persons who cannot be rehabilitated owing to the severity of their disability or to their multiple disabilities. These programmes reduce the strains on the families of the disabled and provide health and psychological care for them as well as rehabilitating those who can be socially rehabilitated and helped to care for themselves and enjoy their free
time. To achieve these objectives, social rehabilitation programmes include full accommodation, including board and clothing expenses as well as health and medical care, provision of drugs and special needs of certain disability cases, psychological care, recreation, enjoyment of leisure, and social rehabilitation such as treatment through work and training in taking care of own needs.

Social rehabilitation programmes also include financial aid for the parents of those severely disabled persons who cannot be admitted to social rehabilitation centres owing to lack of resources for providing care for them at the centre or for those parents who wish to provide care for their disabled children and whose conditions are suitable for providing such care. The amount of financial aid is determined by the Minister of Labour and Social Affairs but does not exceed SRs 10,000 per year.

Social rehabilitation programmes are provided through social rehabilitation centres for severely disabled persons. There are three such centres in Riyadh, Medina and Alinta'. The total number of those enrolled in these centres is more than 16,000 according to the statistics of the Undersecretariat for Social Welfare of the Ministry of Labour and Social Affairs.

Following are the categories which benefit from social rehabilitation programmes:

(a) Severe physical disability such as dual amputation, quadruple or brain paralysis and atrophy of the limbs;

(b) Dual disability such as blindness and deafness, blindness and mental retardation, mental retardation, deafness and muteness, blindness and severe paralysis;

(c) Improving cases of mentally retarded persons including the severely and profoundly retarded with an IQ lower than 50, provided that mental retardation is not accompanied by psychological and mental disorders.

Accommodation at social rehabilitation centres can be terminated if the parent wishes and if proper conditions for providing care for the disabled person are available within the family or if his condition improves and he is admitted to a vocational rehabilitation centre.

Since these centres mainly care for cases of severe disability and since part of these services is accommodation services, the centres are under considerable pressure because of the growing demand for enrolment which exceeds the capacity of these centres.

Comprehensive rehabilitation centres

Comprehensive rehabilitation centres provide two types of rehabilitation programmes for disabled persons: vocational training programmes and social
rehabilitation programmes for the severely disabled. The purpose of setting up such centres was to provide social and vocational rehabilitation services in those towns and areas of Saudi Arabia where there are not sufficient numbers of male and female disabled persons for each separate type of vocational and social rehabilitation programme.

These centres provide, through the two sections of vocational rehabilitation and social rehabilitation for the severely disabled, the same programmes provided by the vocational rehabilitation centres as well as programmes of social rehabilitation. There are, at present, five comprehensive rehabilitation centres in Saudi Arabia with more than 900 males and females, according to the statistics available from the Undersecretariat for Social Welfare.

Training and Applied Research Centre

The concerns and interests of the Training and Applied Research Centre in Dar'ia (Riyadh) are the design and implementation of training programmes for all male and female workers in the field of social development for the purpose of qualifying national cadres as well as conducting applied research to develop social services in Saudi Arabia. This Centre is still one of the United Nations sponsored projects in Saudi Arabia.

In the past three years the Centre mainly concentrated on providing social welfare services, especially services and programmes for the disabled. Programmes for a number of various training courses for workers in the field of care for the disabled were designed, including general (rehabilitational) training programmes and training programmes in diagnosis and treatment of disability cases, in addition to various workshops which constitute training programmes and several types of services and activities provided to the Social Rehabilitation Centre in Riyadh, the Programme of Reclassification and Updating of Cases at the Centre, and other curative programmes. Currently an assessment is being made of the institutions attached to the Undersecretariat for Social Welfare, including the institutions and service programmes for the disabled.

(d) King Saud University

King Saud University in Riyadh trains academically qualified cadres for work in the field of care for the disabled. In 1984 the University set up the Special Education Department at the College of Education. This department will certainly make a considerable contribution to improving the standard of services provided by institutions for the care of the disabled in addition to carrying out studies in this field.

(e) Co-ordination Committee

To co-ordinate the powers and services of the Ministry of Labour and Social Affairs, Ministry of Education and Ministry of Health the statutes
concerned with the programmes of care for the disabled provided for the formation of a committee composed of the following:

(a) Two representatives of the Ministry of Labour and Social Affairs including the Rapporteur of the Committee;

(b) Representative of the Ministry of Health;

(c) Representative of the Ministry of Education.

The Co-ordination Committee may include in its membership, if necessary, a fifth person who is a specialist and with experience in the field of vocational and social rehabilitation of the disabled. The terms of reference of the Committee are the following:

(a) To co-ordinate the provision of services between those institutions concerned with the care and rehabilitation of the disabled as well as avoiding overlapping in the provision of services;

(b) To submit recommendations relating to the medical, educational, vocational and social aspects of care for the disabled;

(c) To facilitate access to the necessary statistical data on the disabled;

(d) To initiate research and studies conducted on care for the disabled.

The Committee meets as necessary and at least twice a year.

Job opportunities and employment of the disabled

To provide job opportunities for certain groups of disabled persons who are vocationally or academically rehabilitated, regulations facilitating the achievement of this objective were issued in 1980. These regulations ensure that disabled persons have job opportunities suitable for them whenever possible so they can work in fields which suit their physical and mental abilities. For instance, the fields wherein blind persons can be employed are the following: (1) the judiciary; (2) Islamic legal advice; (3) Law; (4) teaching; (5) translation; (6) imamate (leadership) of mosques; (7) preparation of radio and TV programmes; (8) typing and (9) other miscellaneous jobs.

The Ministry of Labour and Social Affairs co-ordinates with the Board of Civil Service (civil employment department) in the allocation of categories and amounts of grants paid to disabled persons and the fields of their employment according to their abilities following rehabilitation and education.

The Saudi Arabian authorities encourage the employment of disabled persons in governmental institutions or companies and institutions of the
private sector. Individual enterprises set up by some disabled persons after their rehabilitation are also supported. The State has allocated SRIs 50,000 to any disabled person who wish to set up a commercial enterprise or a simple workshop.

Financial assistance

The financial assistance provided by the State for disabled persons and their families can be summed up as follows:

(1) Every blind student who joins a Saudi Arabian university is paid a monthly allowance equivalent to the salary of a government official of the fifth grade, i.e. more than SRIs 3,000 in addition to the monthly allowance paid to the normal university student.

(2) A monthly allowance of SRIs 800 is paid to every disabled person who joins a training programme. This allowance is reduced to SRIs 400 if he is admitted to a hostel, and the same allowance is paid to disabled students attending secondary school.

(3) An allowance of SRIs 500 is paid to disabled pupils attending intermediate school and SRIs 250 to those at hostels.

(4) An allowance of SRIs 300 is paid to disabled primary school pupils and half this amount to those at hostels.

(5) Financial assistance not exceeding SRIs 10,000 a year is paid to the family of the disabled child (the amount being determined according to the type of disability and family status), if the child does not enrol in an institution for the care of the disabled and if his family is willing to provide care for him provided that appropriate conditions for such care exist.

(6) In addition, many disabled persons can also receive allowances from the social security authorities, this to be determined after the case is examined by the social security authorities.

General status of the disabled in Saudi Arabia

It is worth noting that the Saudi Arabian Government in the past sent some disabled children to other Arab counties for suitable care and rehabilitation. Indeed, there are now more than 300 such children in these countries. The Ministry of Labour and Social Affairs is considering bringing them home to enable them to benefit from the programmes and services provided in Saudi Arabia.

As shown in table 3 the total number of children who benefit from the special education programmes provided by the Ministry of Education is 4,071. These cases include blind and deaf and mute children as well as educable mentally retarded children.
Table 4 shows that 18,639 cases benefit from the programmes of vocational and social rehabilitation, financial assistance and social care provided by the Ministry of Labour and Social Affairs.

The total number of cases registered with the Ministry of Labour and Social Affairs up to the early months of 1989 was more than 28,000 cases, apart from those cases registered with the Ministry of Education. The number of those on the waiting list for institutions for the care and rehabilitation of the disabled is more than 2,000 according to the statistics of the Undersecretariat for Social Welfare of the Ministry of Labour and Social Affairs (see table 5).

Table 4. Number of cases benefiting from social care programmes and services and financial assistance provided by the Ministry of Labour and Social Affairs

<table>
<thead>
<tr>
<th>Type of programme and service</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational rehabilitation programmes</td>
<td>625</td>
</tr>
<tr>
<td>Social rehabilitation programmes</td>
<td>1,600</td>
</tr>
<tr>
<td>Comprehensive rehabilitation programmes (vocational and social)</td>
<td>900</td>
</tr>
<tr>
<td>Financial assistance</td>
<td>15,514</td>
</tr>
<tr>
<td>Total number of beneficiaries from the Ministry's programmes</td>
<td>18,639</td>
</tr>
</tbody>
</table>

Table 5. Number of cases on the waiting list to join vocational and social rehabilitation centres of the Ministry of Labour and Social Affairs

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vocational rehabilitation centres for the disabled</td>
<td>788</td>
<td>234</td>
<td>1,022</td>
</tr>
<tr>
<td>2. Social rehabilitational centres</td>
<td>589</td>
<td>391</td>
<td>980</td>
</tr>
<tr>
<td>Total</td>
<td>1,377</td>
<td>625</td>
<td>2,002</td>
</tr>
</tbody>
</table>
Table 6. Total number of cases registered with the Undersecretariat of Social Welfare of the Ministry of Labour and Social Affairs

<table>
<thead>
<tr>
<th>Type of case</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of beneficiaries from institutions of social care for vocational and social rehabilitation</td>
<td>3,125</td>
</tr>
<tr>
<td>No. of beneficiaries from financial assistance</td>
<td>15,514</td>
</tr>
<tr>
<td>Cases on the waiting list to join vocational and social rehabilitation programmes</td>
<td>2,002</td>
</tr>
<tr>
<td>No. of cases registered with the Ministry including the groups who have not yet benefited</td>
<td>28,000</td>
</tr>
<tr>
<td>No. of cases not receiving assistance or services (excluding those on the waiting list to join centres)</td>
<td>7,359</td>
</tr>
</tbody>
</table>

Table 6 shows the large number of cases on the waiting list to join vocational and social rehabilitation institutions for the disabled. This indicates that the present resources need considerable expansion and development. The same table also shows that a large number of cases have not yet been provided with assistance or services by the Undersecretariat of Social Welfare. It is worth noting that the total number of beneficiaries from financial assistance greatly exceeds the total number of beneficiaries from social and vocational rehabilitation programmes, which indicates, as reflected by our field observations, that the current rehabilitation institutions are not sufficient to meet the needs of Saudi Arabia.

Table 7 shows that the number of beneficiaries from various educational, rehabilitational and social programmes as well as financial assistance, whether provided by the Ministry of Labour and Social Affairs or the Ministry of Education, was 23,018, a figure which is much lower than the total number of cases registered with the Ministry of Labour and Social Affairs in 1989 only (including both beneficiaries and non-beneficiaries). This considerable disparity between the available services and programmes and the number of cases indicates that there is a gap in meeting the needs of disabled persons in Saudi Arabia. Furthermore, the actual total number of disabled persons of various groups in Saudi Arabia is not known because of the lack of comprehensive statistics.
Table 7. Total number of beneficiaries from various educational, rehabilitational, social and financial programmes

<table>
<thead>
<tr>
<th>Type of programme or service</th>
<th>No. of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational rehabilitation programmes</td>
<td>625</td>
</tr>
<tr>
<td>Social rehabilitation programmes</td>
<td>1,600</td>
</tr>
<tr>
<td>Comprehensive rehabilitation programmes (vocational and social)</td>
<td>900</td>
</tr>
<tr>
<td>Financial assistance</td>
<td>15,514</td>
</tr>
<tr>
<td>Programmes for the education of the blind</td>
<td>514</td>
</tr>
<tr>
<td>Programmes for the education of the deaf and mute</td>
<td>2,129</td>
</tr>
<tr>
<td>Mental education programmes (for the mentally retarded)</td>
<td>1,428</td>
</tr>
<tr>
<td>Cases expected to return to Saudi Arabia</td>
<td>308</td>
</tr>
</tbody>
</table>

Total 23,018

Volume of the problem

The actual number of disabled persons in Saudi Arabia is not yet known as a result of the lack of studies and surveys in this field which would make it possible to determine the numbers of disabled persons of various categories in order to indicate the dimensions and volume of the problem.

To illustrate the point, a comparison can be made with the results and figures contained in world studies in order to arrive at an approximate assessment of the volume of the problem of the disabled in Saudi Arabia. The figures calculated by the World Health Organization as a result of studies and surveys in a number of countries show that about 10 per cent of the world population are disabled and about 3 per cent are mentally retarded.

There is no doubt that rates of disabled persons in comparison with the total population are higher or lower according to the different conditions of each country. The proportion of children under six years of age in Saudi Arabia is 20 per cent of the total population, and that of children up to 14 years of age is about 45 per cent of the total population. Using these figures and considering the population of Saudi Arabia to be about 7 million, the data in table 8 can be deduced.
Table 8. **Estimates of the number of disabled persons in Saudi Arabia in the light of world rates for the purpose of estimating the rate of the disabled to the total population**

<table>
<thead>
<tr>
<th>Group</th>
<th>Total No. (in millions)</th>
<th>Estimated No. of the disabled (10 %)</th>
<th>Estimated No. of the mentally retarded (3 %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>7</td>
<td>700,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Children below 6</td>
<td>1.4</td>
<td>140,000</td>
<td>42,000</td>
</tr>
<tr>
<td>Children up to 14</td>
<td>3.15</td>
<td>315,000</td>
<td>94,500</td>
</tr>
</tbody>
</table>

In the light of the world rates for disabled persons in comparison with the total population, table 8 shows that the number of disabled children in Saudi Arabia up to the age of 14 is about 315,000, including all groups of disabled persons. This clearly indicates the size of the problem of the disabled, in terms of number, in Saudi Arabia, especially when compared with the number of cases identified by the governmental institutions concerned with providing services for the care of the disabled.

To illustrate this, let us consider that the rate of disabled persons is 5 per cent instead of 10 per cent and that of mentally retarded persons is 1 per cent instead of 3 per cent of the total population; thus we obtain the estimates in table 9. (The two percentages 10 per cent and 3 per cent were used in the data of table 8.)

Table 9. **Estimated number of disabled persons in Saudi Arabia**

<table>
<thead>
<tr>
<th>Group</th>
<th>Total No. of disabled persons (in millions)</th>
<th>Estimated No. of mentally retarded persons (5 %)</th>
<th>Estimated No. of mentally retarded persons (1 %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>7</td>
<td>350,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Children below 6</td>
<td>1.4</td>
<td>70,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Children up to 14</td>
<td>3.15</td>
<td>157,500</td>
<td>31,500</td>
</tr>
</tbody>
</table>
Although the rates used were lower than world rates of the estimated numbers of disabled persons and mentally retarded persons, table 9 shows the number of disabled persons in Saudi Arabia to be about 157,500, including about 31,500 mentally retarded cases. When these figures are compared with those in table 7, we conclude that the number of beneficiaries from educational, rehabilitational, social and financial programmes (estimated to be about 23,018 cases) is much lower than the figures in table 9, despite the lowering of the rates of estimates. The above example projects the shortage and considerable disparity between the target groups and the organs and programmes of services and care.

In general, the size of the problem of the disabled in Saudi Arabia, especially in terms of numbers, is not to be easily dismissed, particularly among children. Through our field research in rural areas in particular to carry out field training activities or conduct studies in local communities, we discovered that a large number of disabled persons have not been beneficiaries of care services, rehabilitation programmes and financial assistance. All this prompts us to consider the data in table 8 as closer to reality for numerous reasons, including the following:

1. The rising number of premature births and low birth weights as a result of early marriage of girls before 16, especially in rural areas;

2. The desire of mothers over 40 to bear children, without consulting a physician, which can result in the birth of disabled children such as children with Down's syndrome.

3. Repeated pregnancies and births at short intervals, also without consulting a physician;

4. Intermarriage between relatives without making the necessary medical tests before marriage to avoid any potential risks for children;

5. Lack of sufficient health awareness, especially among pregnant women in rural areas and poor districts;

6. The fact that, although there is almost no problem as regards use of drugs and alcohol by wives in Saudi Arabia, there is still another problem resulting from the use by pregnant women of some medicines without consulting a physician. There are also many women who, because of lack of health knowledge, take some medicines before and after pregnancy for long periods. Then they get pregnant without consulting a physician and without giving their bodies sufficient time before pregnancy to get rid of the side effects still existing in the body;

7. The fact that despite the improvement of the economic conditions in Saudi Arabia and because of the weak health awareness among many citizens, a considerable number of pregnant women do not know about good nutrition for pregnant women, and consequently do not eat healthy meals which help the embryo to grow better;
8. The fact that, despite the rising income of the Saudi Arabian family and because of lack of health awareness and neglect by breast-feeding mothers, some children still suffer from diseases caused by malnutrition;

9. The fact that, despite the considerable expansion in the provision of health services in Saudi Arabia, not all women are supervised and followed up by a physician. Field observations show that many women do not have regular medical check-ups and instructions;

10. The fact that a large number of Saudi Arabian families now depend on servants (foreign and uneducated) to feed and look after their children, particularly infants;

11. Wrong beliefs by some people with regard to children, especially those with simple congenital problems, i.e., cross-eyed or hard of hearing babies, which are not cases of impairment, but which are considered to be acts of the devil. Dealing with such children on this presumption leads to weakening their abilities, especially their mental abilities, as has been noted during our field work in rural areas in particular;

12. The fact that, despite the improvement of medical services, emphasis has been on the curative rather than preventive aspects;

13. Weakness or absence of orientation programmes on the causes and aspects of disability through the media or the other governmental institutions concerned;

14. Lack of preventive legislation to secure the safety of the pregnant woman and her child;

15. Domestic accidents of various types which under-5 children may have. These include falling from high places, consuming medicines and poisons, etc.;

16. Traffic and car accidents in which children are involved, now a major cause of death and disability for a number of reasons:

   (a) Lack of traffic legislation and regulations to protect children inside the vehicle, such as use of the safety belt, sitting in a safe place when the car is moving instead of sitting in the driver's lap, letting the child lean through the car window while the car is moving;

   (b) Lack of more effective laws to limit driving speeds, especially on motorways, as well as enforcement of such laws;

   (c) Lack of better safety features in imported cars;

   (d) Absence of awareness of traffic dangers among parents and schoolchildren.
When we consider the magnitude of the problem of disability, we conclude on the basis of the above review that the existing services and programmes are not enough to meet society's needs.

Despite the fact that there has been considerable improvement in the education, services and programmes for the disabled in Saudi Arabia in the past few years, there are still numerous defects, especially as regards the programmes and services provided by the Ministry of Labour and Social Affairs. These lack the application of modern methods, particularly in relation to the psychological and social aspects of the disabled. This, of course, is due to many issues, particularly shortage of qualified personnel in this field. Furthermore, social care institutions handle more cases than their capacity to do so. There is a considerable shortage in specialized cadres, which has also been observed in the field and this has a negative impact on the effectiveness of these services.

Undoubtedly, enabling the members of the disabled child's family to adjust themselves to the conditions of their child and to deal with him in a sound manner can be considered as one of the major factors in the provision of programmes and services for the disabled. Field observations show that apart from financial assistance, the services of social care institutions have not yet reached the family, to help the family psychologically and socially and reduce the severe impact of their child's disability as well as guiding them towards the best methods to develop their child's abilities. In addition, many families neglect to visit their children at social care institutions, especially those children who are accommodated there. A report by the Social Rehabilitation Centre in Riyadh showed that about 24 per cent of the children's families had not visited them throughout the year and about 36 per cent of them visited their children fewer than 10 times during the year. The report also stated that many families went to visit their children only under pressure and at the invitation of the Centre and that the visits were not voluntary. It is worth noting in the report that more than 44 per cent of the children at the Centre did not spend any vacation time with their families during religious and national holidays and the summer vacation.

It is our intention in this study to present detailed interpretations and analyses of the psychological and social factors and disorders which lead the families of disabled children to refrain from meeting their children even at intervals. However, it can be briefly noted that the above report only reflected the psychological and social sufferings of the families of these children as a result of their children's disabilities. This helps to focus on the various defects in the programmes and services for the care of the disabled.

From our observations, it can also be concluded that as a result of the shortage of specialized workers in social care institutions as well as their limited experience in this field, the updating and assessment and subsequent reclassification of cases are not yet given high priority at such institutions.
Grants given by the State to the families of disabled children through the Undersecretariat of Social Welfare of the Ministry of Labour and Social Affairs are generous indeed and they aim, as stated in the above-mentioned statutes, at helping the families financially as well as guiding them socially and psychologically to provide care and guidance in a way which suits the child's conditions and abilities. However, it is worth noting that these grants are given without follow-up by the Undersecretariat of Social Welfare and without any psychological or social guidance for the family in order that the family may provide appropriate care and service for the disabled child. This shortage of services has been observed in our field work, particularly in rural areas, which means that these grants fail to achieve their objectives.

What causes an even lower standard of competence in the performance of the institutions and programmes for the rehabilitation, education and guidance of disabled persons is the considerable dearth of necessary research, studies and surveys to identify and define the cases of disability as well as introduce new programmes for services and rehabilitation and assess and develop the existing services to suit the needs of different types of disabilities.

Conclusions and recommendations

The programmes and services for the care of the disabled in Saudi Arabia are relatively new. What has been achieved in the past few years is a major contribution, because the start was almost from scratch. The State continues to devote great attention to this group of citizens. A large number of disabled persons have benefited from these services and programmes. Some of them, particularly blind persons, now hold high academic qualifications. In addition, a large number of disabled persons have received financial assistance and have benefited from educational and rehabilitational programmes. However, there are certain defects, some of which have been identified, such as the need to expand the services programmes, to employ qualified cadres and to use modern methods in this field.

In the light of the above review, the following recommendations can be made:

1. Since the present emphasis on curative programmes for disabled children is insufficient and the preventive aspects in this field are given limited attention, there is an urgent need to promote preventive programmes through the following measures:

   (a) Drawing up the necessary instructions to provide medical tests for those who want to get married, especially relatives;

   (b) Encouraging women to have medical check-ups and consultations before pregnancy;
(c) Drawing up the necessary rules and regulations for periodic tests during pregnancy;

(d) Educating pregnant women and protecting them against certain diseases such as German measles and whooping cough as well as having them avoid harmful radiation such as X-rays;

(e) Introducing health and nutrition educational programmes relevant to pregnant women and their babies. Such programmes should be incorporated into school curricula for girls. In the meantime, there should be identical programmes for male pupils to achieve complementarity and equality in health awareness by both husband and wife;

(f) Provision of advice on the practice of using medicines without consulting a doctor;

(g) Educating parents in the dangers of domestic accidents in which children are involved and how to protect children against them;

(h) Enacting the necessary legislation and regulations and following them up to protect children, especially those under 5, from the dangers of domestic accidents. For instance there is a need to impose the application of stricter specifications on the use of bottles containing drugs and harmful materials so as to make them difficult for children to tamper with. In addition, dangerous liquids should be put in plastic or metal bottles rather than glass bottles to prevent children from breaking or opening them.

(i) Expansion of the programmes providing services, care and rehabilitation for the disabled to suit the size and types of growing demand on such services;

(j) Introducing modern methods in the programmes of rehabilitation and care for the disabled as regards the diagnosis and treatment of cases with regard to health aspects as well as psychological and social aspects;

(k) Improving the level of competence of the personnel at the institutions for the disabled attached to the Ministry of Labour and Social Affairs, and providing the staff working with disabled persons with opportunities for training and academic education;

(l) Given the difficulty of setting up institutions for the care of the disabled throughout the country owing to its vast geographical area, provision of supportive services for the families of disabled children through grants depending on the family's economic status, as well as provision of psychological, social and medical services for disabled children and their families if the children are cared for at home. This can be done through visits to their homes or meetings at a social service institution or both;
(m) Expanding the services and programmes of the institutions for the care of disabled persons to reach their families by helping these positively to adjust themselves to the disability of their children as well as the sound treatment of the disabled child to provide the appropriate family environment for bringing up the disabled child;

(n) Conducting applied research to identify the different groups of disabled persons. Interdisciplinary research should also be promoted to help planners of policies and programmes for the disabled to consider the problem of the disabled from all aspects;

(o) Conducting field research and studies needed to design instruments of diagnosis and psychological assessment of disabled children suitable for the type and characteristics of the Saudi Arabian society.
References

1. تجربة المملكة العربية السعودية في مجال تربية وتعليم الكفوين - المديرية العامة لبرامج التعليم الخاص (وزارة المعارف - الرياض)، 1980.

2. التعليم الخاص في المملكة العربية السعودية - المديرية العامة لبرامج التعليم الخاص (وزارة المعارف - الرياض)، 1981.


5. التقرير السنوي للإدارة العامة للتاميل ومراكزها - وكالة الرعاية الاجتماعية (وزارة العمل والشؤون الاجتماعية - الرياض)، 1982.

6. التقرير السنوي لنشاط مركز التأهيل الاجتماعي بالرياض (مركز التأهيل الاجتماعي - الرياض)، 1987.


10. الحلقة الدراضية لرعاية المعوقين بالدول العربية الخليجية (مكتب المتابعة لجامعة الامارات والشؤون الاجتماعية بالدول العربية الخليجية - البحرين)، 1981.


XXXI. THE SITUATION OF DISABLED PERSONS
IN THE SYRIAN ARAB REPUBLIC

by

Rashika Azouni
CONTENTS

Chapter

Summary ........................................................................................................... 532
Introduction ...................................................................................................... 535

I. THE EXTENT OF THE DISABLED PERSON'S PROBLEM, AND DISABILITY
   TRENDS .................................................................................................. 536
   A. Extent of the disabled person's problem ............................................. 536
   B. Disability trends ................................................................................. 542

II. SERVICES PROVIDED TO THE DISABLED .............................................. 546

III. SOCIAL AND ECONOMIC EFFECTS ON THE COMMUNITY ..................... 551

IV. STATE POLICIES .................................................................................. 552

V. REQUIREMENTS FOR TRAINING AND INTEGRATION OF THE DISABLED .... 555

VI. RECOMMENDATIONS ............................................................................ 558
   A. Prevention ......................................................................................... 558
   B. Provision of services to disadvantaged groups ................................ 558
   C. Educational services .......................................................................... 558
   D. Rehabilitation ................................................................................. 559
   E. Research and studies ....................................................................... 559
   F. Administration of services to the disabled ..................................... 560
   G. Co-ordination .................................................................................. 560
   H. Technical co-operation .................................................................... 560
   I. Staff training .................................................................................... 560
   J. Family education ............................................................................. 561
CONTENTS (continued)

LIST OF TABLES

1. Disabled persons: distribution by category of disability and sex, 1981................................................................. 536


3. Distribution of the disabled by area of residence, 1970 and 1981.... 544

4. Distribution of the disabled by age group, 1970 and 1981............ 544

5. Distribution of the disabled by level of education, 1970 and 1981... 545

6. Distribution of the disabled by employment status, 1970 and 1981.... 545

7. Distribution of government centres for the disabled.................. 548

8. Distribution of the disabled using government centres, 1988........ 549

LIST OF ANNEX TABLES

A.1. Disabled persons by category of disability (urban/rural areas)..... 563

A.2. Disabled persons by category of disability and age .................. 564

A.3. Disabled persons and total population: distribution by age group... 565

A.4. Disabled persons and total population: distribution by level of education................................................................. 566

A.5. Disabled persons (aged 10 and over) by category of disability and occupation................................................................. 567

A.6. Disabled persons (aged 10 and over) by sex and occupation........ 568

A.7. Disabled persons (aged 10 and over) by sex and area of economic activity................................................................. 569

A.8. Disabled persons (aged 10 and over): distribution by category of disability and area of economic activity............................ 570

A.9. Disabled persons (aged 10 and over) by category of disability and employment status....................................................... 571

A.11. Number of disabled persons making use of state and non-governmental centres for the disabled (1978-1987).......................... 573


Sources.................................................................................. 575
Summary

The present study covers the following main points:

Extent of the disabled person's problem

This section covers categories of disability, age groups and distribution by sex, place of residence, level of education and employment status.

The results of the study show that there are 92,436 disabled persons out of a total population of 9,046,144, i.e. 1.02 per cent of the total. Physical disabilities account for the highest proportion of cases, followed by multiple disabilities (18 per cent) and hearing disabilities (17 per cent). Visual and mental disabilities each account for 15 per cent. Most disabled persons live in rural areas, and more males than females are affected by disability.

Disability trends

A comparison of the general population censuses for 1970 and 1981 shows that the ratio of disability cases to the population as a whole is almost constant. The ratio was 1.04 per cent in 1970 and 1.02 per cent in 1981, the population having increased by 44 per cent and the number of disabled by 41 per cent.

There was no significant change in distribution by category of disability, sex, place of residence, age group or level of education, which remained more or less constant.

With regard to employment status, there was a decrease in the proportion of those who were economically inactive and a rise in the number of those employed or providing employment. The number of those working for payment in kind or without pay fell, as did the number of those unemployed, indicating that the services necessary for the employment of disabled persons were being provided.

Available services

Although the State devotes particular attention to disability issues, existing services are still qualitatively and quantitatively inadequate, since only 2.42 per cent of disabled persons benefit from them. Services provided to the disabled include schools and institutes, which provide educational and teaching services to all categories of disabled persons at the elementary level, and to the blind only at the secondary level.

The Centre for the Vocational Training of Handicapped Persons provides other services such as health services, therapy, social and psychological services, prosthetic appliances, cultural, sports and entertainment services, services relating to legislation and staff training.
State policy

The most important feature of State policy with respect to disability issues is the fact that it is an inseparable part of social and economic development planning. It is based on the following:

1. Generalization and dissemination of services to the disabled to include the various regions and all categories of disability and age groups;

2. An endeavour, as far as possible, to avoid isolating the disabled person and to integrate him into society;

3. Development and upgrading of services, and provision of new types of service such as early detection and identification and support for the role of the family;

4. Enactment of the necessary legislation;

5. Co-ordination with the appropriate competent agencies;

6. Training of staff;

7. Arab and international co-operation.

Required services

1. Services for those affected by multiple and severe disabilities and increased services for the physically disabled and those with severe disabilities, including individuals with cerebral palsy;

2. Services relating to early detection, early intervention and support for the role of the family;

3. Educational integration, beginning with pre-school services and ending with employment in the open labour market;

4. Specialized studies and research;

5. Home-based services for pre-school-age children;

6. Use, wherever possible, of facilities available in the local community;

7. Staff training;

8. Linkage of rehabilitation and training to the requirements of the local labour market;

9. In service training in the open labour market;
10. Preventive care and early treatment services;

11. Improved health services for mothers and children;

12. Complementarity and comprehensiveness (women, children and rural areas) in the provision of services.
Introduction

The disabled person's problem is one to which the Syrian Arab Republic devotes particular attention following its emergence in the early 1970s as one of the most important social issues that required an active response. Aspects of problems relating to disability and disabled persons occupied the minds of planners and those responsible for social service matters and overall development issues as a result of a number of factors. These factors included:

1. The extensive scope of the problem, according to the statistics yielded by the general population census conducted in 1970;

2. Economic considerations in relation to disability and their consequences for social and economic development plans;

3. Humanitarian considerations, which affirm the right of the disabled to live in dignity, to enjoy full citizenship with respect to participation in the various activities of the community and to use all its facilities on an equal footing with the non-disabled.

The country's concern for the disabled is based on the following:

1. The provisions of the Constitution of the Syrian Arab Republic, under which a disabled person is considered to be a citizen with the same rights and obligations as the non-disabled. Besides not excluding the disabled from any of the rights guaranteed by the State to its citizens, the Constitution, in article 46, provides that the State shall shield every citizen and his family in case of emergency, sickness, handicap, orphanhood and old age, protect the health of its citizens and provide them with the means to effect prevention, treatment and cure. The State also assumes responsibility, under article 47 of the Constitution, for the provision of educational, social and health services to citizens;

2. Arab and international instruments, including those relating to human rights, women, children, the disabled and the mentally handicapped, the World Programme of Action concerning Disabled Persons, the Charter for the 1980s, etc., in addition to the Arab Charter for Comprehensive Social Development, the Arab Strategy for Comprehensive Social Development, the Arab Charter for the Disabled, the Charter of Rights of the Arab Child, etc.;

3. The development aspect of issues relating to the disabled, which highlights the importance of treating disabled groups as inactive manpower that could be used in the overall construction and development process. Neglect of these groups causes a major waste of resources, seriously undermines development plans and deprives the country of manpower. If the necessary measures are taken to train and rehabilitate disabled persons, they can become productive, self-reliant and competent partners in the production and construction process, instead of continuing to be a heavy burden on the community.
I. THE EXTENT OF THE DISABLED PERSON'S PROBLEM, AND DISABILITY TRENDS

A. Extent of the disabled person's problem

It has become customary to determine the extent of the disabled person's problem by reference to the statistics yielded by the censuses which are conducted in the country every 10 years. The successive censuses carried out in 1960, 1970 and 1981 have provided the statistical base used both to establish the extent of the problem and to identify certain features of the disabled, thus making it possible to draw up more realistic plans to meet the needs of disabled persons.

According to the results of the 1981 general population census, there were 92,436 disabled persons in the country, distributed by sex and category of disability as follows:

Table 1. Disabled persons: distribution by category of disability and sex, 1981

<table>
<thead>
<tr>
<th>Sex</th>
<th>Physical disability</th>
<th>Visual disability</th>
<th>Hearing disability</th>
<th>Mental disability</th>
<th>Other disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20,697</td>
<td>7,352</td>
<td>8,970</td>
<td>9,007</td>
<td>10,934</td>
</tr>
<tr>
<td>Female</td>
<td>12,315</td>
<td>5,569</td>
<td>6,819</td>
<td>5,055</td>
<td>5,718</td>
</tr>
<tr>
<td>Total</td>
<td>33,012</td>
<td>12,921</td>
<td>15,789</td>
<td>14,062</td>
<td>16,652</td>
</tr>
<tr>
<td>(Percentage)</td>
<td>(35)</td>
<td>(15)</td>
<td>(17)</td>
<td>(15)</td>
<td>(18)</td>
</tr>
</tbody>
</table>

How close does the country's disability rate come to the rate determined by the United Nations?

The number of disabled persons in the world according to the latest statistics drawn up by the United Nations is 500 million, with the disability rate in each country ranging from 10 to 15 per cent of the total population. Does this rate apply to the Syrian Arab Republic?

The country's population, according to the 1981 general population census, was 9,046,144, of whom 92,436 were disabled. The proportion of the disabled to the total population was thus 1.02 per cent. If we compare this with the rates estimated by the United Nations, we see that there is a huge difference, which should be discussed in the light of two possibilities:

1. The results of the 1981 census, as they relate to disabled persons, are correct and reflect the actual situation, implying that the causes of disability are rare or limited in the country;
2. The results of the 1981 general population census are incorrect, implying that there are in fact more disabled persons than those suggested by the results. In this case, the reasons for the inaccuracy of the results concerning the disabled could be as follows:

(a) Prevailing customs and traditions, whereby some families are unable for various social reasons to admit cases of disability, particularly when the disabled persons are female;

(b) The low educational level of some families, which makes them decline to admit that there are any disabled persons in the family;

(c) The absence of any centres for the identification and early detection of disability, particularly for those under four years of age;

(d) The failure of the media to explain disability and the services provided to disabled persons by the community. As a result, the family has no wish to report the existence of disabled persons because it thinks that to do so is neither important nor useful;

(e) A lack of awareness on the part of some of those responsible for the collection of data with respect to the importance of accurate information on the situation, characteristics, abilities and requirements of disabled persons in the community. They therefore fail to obtain correct data in this field;

(f) The fact that the general population census questionnaire does not include categories of disability which, if included, might affect the number of disabled persons. These categories include psychiatric disorders, epilepsy, learning disabilities, certain chronic diseases, etc.;

(g) The imprecision of definitions and explanations relating to the categories of disability covered by the questionnaire.

In any event, the existence of no fewer than 92,436 disabled persons in the country means that there is a need to evaluate their situation and to assess their requirements and abilities, with a view to endeavouring to meet those requirements and using and developing their abilities. In order to do this, the features of the disabled population, as revealed by the 1981 general census, must be examined.

1. **Demographic features**

These cover distribution by sex, age and place of residence.

(a) **Distribution by sex**

An examination of table 1 shows that in 1981 there were more male than female disabled persons: the number of male disabled was 56,960, while the number of female disabled was 35,476.
Thus, the disability rate for males was 61.6 per cent, and 38.4 per cent for females. This may be owing to the fact that families declined to admit the existence of disabled females, for the reasons already mentioned. In addition, the possibility of being exposed to accidents and occupational injuries is greater for males than for females, making them more liable to suffer from disability.

(b) Distribution by place of residence

The number of disabled persons in urban areas was 42,898 (46.4 per cent), as opposed to 49,538 (53.6 per cent) in rural areas. The higher number of disabled persons in rural areas could be attributed to the fact that health services are concentrated in the towns and sparse in rural areas, and that levels of education and school attendance are low outside the towns.

Annex table A.1 shows the relative distribution of disabled persons by sex and category of disability in urban and rural areas.

The percentage distribution by categories, as shown in annex table A.1 reveals that physical disability was the most frequently occurring category in both urban and rural areas, while visual disability accounted for a lower percentage in both. The rates for hearing, mental and other disabilities were relatively similar in both towns and villages.

It can be concluded that priorities, with respect to care for the disabled, should be ranked as follows:

(i) Physical disability, to which other disabilities could be added, as it is likely that these will include severe physical disabilities or cases of multiple disability;

(ii) Hearing disability;

(iii) Mental disability;

(iv) Visual disability.

(c) Distribution by age

Annex table A.2 shows that the age group with the highest number of disabled persons was that of 65 and over, with 12,749 disabled individuals or 14 per cent of the total. It was followed by three groups with relatively similar members in each: the 10-14 age group with 11,652 individuals (12.6 per cent); the 15-19 age group with 11,089 individuals (12.0 per cent); and the 5-9 age group with 10,184 individuals (11.0 per cent). If these three age groups are amalgamated, it can be seen that the 5-19 group had the highest rate of disability, with 32,925 disabled persons or 35.6 per cent. This indicates that the services of most vital importance for the disabled are those provided to children and adolescents of school age (primary, intermediate
and secondary). If the 20-24 age-group (7,948 persons, or 8.6 per cent) and the 25-29 group (5,527 persons, or 6 per cent) are added, the number of disabled in the 5-29 group as a whole rises to 46,004, indicating that about half the total number of disabled persons were children, adolescents and young people. The various groups between the ages of 30 and 64, all with a similar number, amounted to a total of 26,400 or 28.5 per cent. This is a significant proportion, particularly since the group included those of a working and productive age.

The group comprising children of pre-school age (under four) amounted to 6,821 persons, or 7.3 per cent. Although this group is small compared with the other groups, it deserves special attention so that services may be provided at as early a stage as possible.

It can be concluded, therefore, that priorities for services to the disabled, by age group, should be ranked as follows:

(i) Children and young people ranging in age from 5 to 29, who need educational and vocational training services in order to be rehabilitated as productive members of the work-force;

(ii) Those aged from 30 to 64, who need vocational guidance and rehabilitation, as well as programmes on recruitment and employment, because they are frequently responsible for providing for their families, as well as themselves;

(iii) Those aged 65 and over, who constitute a significant proportion of the total number of disabled persons. They need to be provided with welfare services;

(iv) Children under the age of four. Although this group is ranked last, it should be noted that it requires special and distinctive attention because, the sooner that services are provided, the more effective and useful they are for the development and growth of the disabled child. Also, the size of this group is expected to be much larger than was indicated in the census, since disability at this age may not be apparent to the family, or may remain unconfirmed by doctors owing to lack of evidence or the possibility of recovery.

The information on the distribution of the disabled by age, as contained in annex table A.2, can also be used to deduce some of the causes of disability:

(i) The concentration of disability cases among younger age groups indicates that the main causes of disability are various types of accident, work injury or occupational disease, making it less likely that disability is due to sickness, heredity or malnutrition;
(ii) The large number of elderly disabled persons indicates that geriatric disorders are among the major causes of disability, particularly since the distribution of disability by age shows that visual and hearing disabilities and paralysis are prevalent in the 65 and over age group: this type of disability may be linked to old age. More attention should therefore be devoted to elderly disabled persons, and to the geriatric disorders in particular, as they may give rise to disability.

With regard to the categories of disability, the statistics indicate that priorities should be ranked as follows:

- Physical disabilities: total 33,012 (35 per cent)
- Hearing disabilities: total 15,789 (17 per cent)
- Mental disabilities: total 14,062 (15 per cent)
- Visual disabilities: total 12,921 (13 per cent)

Other disabilities, which affected 16,652 persons, or 18 per cent of the total, probably include severe physical disabilities and multiple disabilities, which researchers had difficulty in evaluating. The importance of establishing disability identification centres therefore becomes apparent.

2. Educational features

Annex table A.3, which shows the distribution of disabled persons (aged 10 and over) by level of education, indicates the following:

(a) More than half of all disabled persons are illiterate (51,255 out of a total of 75,431). If the 12,652 persons who are described only as being literate are added to this figure, the result indicates that 63,907 disabled persons, or 69 per cent of the total, are without education;

(b) The highest number of educated disabled persons are those who obtained the primary certificate (7,212, or 7.8 per cent), followed by those who obtained the intermediate certificate (2,264, or 2.44 per cent) and secondary certificate (1,350, or 1.46 per cent);

(c) Only 262 disabled persons obtained vocational or technical training, a level of education equivalent to the general secondary certificate or an intermediate stage between secondary school and university;

(d) A total of 388 disabled persons obtained university degrees. Most of them were physically disabled (180), followed by the visually disabled (57), the hearing disabled (35) and the mentally disabled (35). Other disabilities, which accounted for 81 cases, may represent minor physical disabilities which have not been precisely identified;
(e) A total of 12 (2 visually, 6 physically and 4 other) disabled persons obtained doctorates;

(f) The levels of education for males are higher than those for females, in conformity with the situation for the population as a whole. On the basis of the statistics available, it cannot be said, therefore, that the disabilities of females constitute a reason for their not acquiring education;

(g) The high rate of illiteracy among disabled males is not significant and may only be due to the high proportion of males among the disabled in general.

3. Employment

(a) Distribution by occupation

An examination of annex table A.5, which shows the distribution of disabled persons by occupation, allows a number of conclusions to be drawn.

More than half the disabled are economically inactive, thus falling outside the work-force. They number 59,360, out of a total of 75,431 persons in the 10 and over age group, i.e. 79 per cent. If those in the unemployed category (1,304) are added to this number, the figure rises to 60,664, or 80 per cent. Thus, the majority of disabled persons do no work and constitute a heavy burden in terms of care for both the family and the community. They consume without producing and also prevent a considerable number of family and community members from fulfilling their roles as producers because they have to devote all or some of their time to the service and care of the disabled. This confirms the importance of training and rehabilitation for the disabled and of organizing employment for them so that they have the possibility of serving and providing for themselves and of participating in production. They are thus converted from consumers into active partners in the construction and progress of the community. The number of the disabled in employment was 15,598, or about 20 per cent of the total.

Annex table A.5 also shows the distribution of the unemployed and economically inactive by category of disability.

From this distribution it can be seen that approximately 2 per cent (1,304) of the disabled were unemployed. It can also be noted that the highest proportion of those who are unemployed or economically inactive occurs among the physically disabled, followed by the mentally disabled, with the lowest proportion occurring among those with hearing disabilities, followed by those with visual or other disabilities.

An examination of annex table A.6 shows that there were fewer employed females than males and that the number of unemployed females, and those who are economically inactive, was also lower than in the case of males. This demonstrates, with respect to disabled females, that the disability itself is
not the only cause of unemployment: the fact that there are fewer unemployed females than males is owing to the higher overall number of disabled males.

(b) **Distribution by economic activity**

An examination of tables A.7 and A.8 reveals the following:

(i) The highest proportion of employed disabled persons was engaged in the agriculture, forestry, fishing and livestock-raising sector (4,072, or 26 per cent), followed by manufacturing industries (2,861, or 18 per cent), where they probably are engaged in packaging, followed by community, social and personal services (2,351, or 15 per cent), building and construction (2,169, or 14 per cent) and wholesale and retail trade (1,956, or 13 per cent).

(ii) Small numbers worked in the following sectors:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport, storage and communications</td>
<td>583</td>
</tr>
<tr>
<td>Finance, insurance and property services</td>
<td>103</td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>98</td>
</tr>
<tr>
<td>Mines and quarries</td>
<td>62</td>
</tr>
</tbody>
</table>

(iii) Disabled women were employed in the following sectors:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing industries</td>
<td>274</td>
</tr>
<tr>
<td>Agriculture, fishing and livestock-raising</td>
<td>263</td>
</tr>
<tr>
<td>Community and social services</td>
<td>239</td>
</tr>
</tbody>
</table>

(c) **Distribution by employment status**

Annex tables A.8 and A.9 shows us the distribution of disabled persons by employment status, i.e. the nature of the position they occupied in their work. An examination of this table leads us to the following conclusions:

(i) The highest proportion of employed disabled persons works for payment in cash (8,102, or 52 per cent), followed by the self-employed (4,599, or 29 per cent).

(ii) A total of 1,122 disabled persons worked for their relatives without pay (7 per cent).

(iii) Disabled employers were 658 in number; 24 disabled persons worked for persons other than their relatives without pay; and 69 worked for payment in kind.

B. **Disability trends**

It is difficult to make a precise determination of disability trends without field studies and statistical research conducted regularly at specific
periods, which are of use in the process of comparison and realistic identification of precise trends in disability. However, in an attempt to make such a determination, the available statistics for disabled persons, as yielded by the general population censuses of 1970 and 1981, will be compared.

The country's population in 1970 was 6,258,000; the number of disabled in that year was 65,281, i.e. 1.04 per cent of the population. The total population reached 9,046,114 in 1981, of whom 92,436 were disabled (1.02 per cent of the total). The distribution of the disabled by category is shown in Table 2.

Table 2. Disabled persons: distribution by category of disability, 1970 and 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>Visual</th>
<th>Hearing</th>
<th>Mental</th>
<th>Physical</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>29 756</td>
<td>10 410</td>
<td>11 164</td>
<td>4 261</td>
<td>10 091</td>
<td>65 282</td>
</tr>
<tr>
<td>1981</td>
<td>12 921</td>
<td>15 789</td>
<td>14 062</td>
<td>33 012</td>
<td>16 652</td>
<td>92 436</td>
</tr>
</tbody>
</table>

Therefore, while the total population increased by 44 per cent between 1970 and 1981, the disabled population increased by only 41 per cent.

If the figures for the total population and the disabled in each administrative district for the years 1970 and 1981 are compared, the following can be noted:

1. The disability growth rate was higher than the population growth rate in the city of Damascus (80 per cent), in the rural areas of Damascus (70 per cent), Homs (69 per cent), Hama (64 per cent) and Idlib (65 per cent), but lower in other administrative districts.

2. The reason for the 80 per cent rate of increase in disability in the city of Damascus (as compared with the 32 per cent increase in the number of inhabitants) may have been because the risk of exposure to accidents (roads, work injuries and household injuries) was higher there than in other districts. The injuries which incurred as a result of wars and Israeli attacks, together with the high rates of internal migration to the city, should also be taken into account.

In terms of distribution by area of residence, there were more disabled persons in rural than in urban areas.
Table 3. Distribution of the disabled by area of residence, 1970 and 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban disabled</th>
<th>Rural disabled</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>24,088</td>
<td>41,194</td>
<td>65,282</td>
</tr>
<tr>
<td>1981</td>
<td>42,898</td>
<td>49,538</td>
<td>92,436</td>
</tr>
</tbody>
</table>

The distribution by age group is shown in table 4.

Table 4. Distribution of the disabled by age group, 1970 and 1981

<table>
<thead>
<tr>
<th>Age group</th>
<th>1970</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>70</td>
<td>6,817</td>
</tr>
<tr>
<td>5-9</td>
<td>1,813</td>
<td>10,184</td>
</tr>
<tr>
<td>10-14</td>
<td>3,978</td>
<td>11,652</td>
</tr>
<tr>
<td>15-19</td>
<td>4,941</td>
<td>11,089</td>
</tr>
<tr>
<td>20-24</td>
<td>4,339</td>
<td>7,948</td>
</tr>
<tr>
<td>25-29</td>
<td>3,850</td>
<td>5,527</td>
</tr>
<tr>
<td>30-34</td>
<td>3,844</td>
<td>4,795</td>
</tr>
<tr>
<td>35-39</td>
<td>4,162</td>
<td>3,781</td>
</tr>
<tr>
<td>40-44</td>
<td>3,966</td>
<td>3,740</td>
</tr>
<tr>
<td>45-49</td>
<td>3,465</td>
<td>3,386</td>
</tr>
<tr>
<td>50-54</td>
<td>3,476</td>
<td>4,154</td>
</tr>
<tr>
<td>55-59</td>
<td>3,018</td>
<td>2,989</td>
</tr>
<tr>
<td>60-64</td>
<td>4,212</td>
<td>3,555</td>
</tr>
<tr>
<td>65-69</td>
<td>3,051</td>
<td>2,682</td>
</tr>
<tr>
<td>70 and over</td>
<td>6,222</td>
<td>10,067</td>
</tr>
<tr>
<td>Not known</td>
<td>5,298</td>
<td>66</td>
</tr>
<tr>
<td>Total</td>
<td>65,282</td>
<td>92,436</td>
</tr>
</tbody>
</table>

The above figures show that there was no significant change in the distribution by age group. Disabled persons were concentrated in the younger age groups in both 1970 and 1981, as well as in the oldest age group (70 and over). However, the number of disabled persons aged 70 and over rose sharply in the 1981 census. This may be explained by the advances made in medical services.
Table 5 shows the distribution of the disabled (aged 10 and over) by level of education:

Table 5. Distribution of the disabled by level of education, 1970 and 1981

(Aged 10 and over)

<table>
<thead>
<tr>
<th>Level of education</th>
<th>1970</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>49 354</td>
<td>51 255</td>
</tr>
<tr>
<td>Literate</td>
<td>7 493</td>
<td>12 652</td>
</tr>
<tr>
<td>Primary</td>
<td>1 763</td>
<td>7 212</td>
</tr>
<tr>
<td>Intermediate</td>
<td>434</td>
<td>2 264</td>
</tr>
<tr>
<td>Secondary</td>
<td>244</td>
<td>1 350</td>
</tr>
<tr>
<td>Technical/vocational</td>
<td>39</td>
<td>262</td>
</tr>
<tr>
<td>Bachelor's/master's degrees</td>
<td>78</td>
<td>388</td>
</tr>
<tr>
<td>Doctorate</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Not known</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>59 421</td>
<td>75 431</td>
</tr>
</tbody>
</table>

Table 6 shows the trend in the employment status of the disabled.

Table 6. Distribution of the disabled by employment status, 1970 and 1981

<table>
<thead>
<tr>
<th>Employment status</th>
<th>1970</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>390</td>
<td>657</td>
</tr>
<tr>
<td>Self-employed</td>
<td>9 926</td>
<td>4 599</td>
</tr>
<tr>
<td>Paid in cash</td>
<td>5 531</td>
<td>8 102</td>
</tr>
<tr>
<td>Paid in kind</td>
<td>152</td>
<td>69</td>
</tr>
<tr>
<td>Employed by relatives without pay</td>
<td>1 898</td>
<td>1 122</td>
</tr>
<tr>
<td>Employed by others without pay</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Not known</td>
<td>32</td>
<td>193</td>
</tr>
<tr>
<td>Unemployed, no previous job</td>
<td>1 595</td>
<td>1 304</td>
</tr>
<tr>
<td>Total</td>
<td>19 549</td>
<td>16 171</td>
</tr>
</tbody>
</table>
An analysis of this table reveals that:

1. The number of economically inactive persons was lower in 1981 than in 1970;

2. The number of employers was higher in 1981;

3. Fewer individuals were paid in kind or employed without pay in 1981;

4. The number of those paid in cash was higher in 1981;

5. There were fewer unemployed in 1981 than in 1970.

It is not possible to draw on the annual statistics published by the Ministry of Social Affairs and Labour concerning the activities of institutions for the disabled during the period 1978-1987, as they are incomplete and do not give a realistic and precise picture of disability trends, for the following reasons:

(a) The information relates to disabled persons making use of the institutions, rather than to the disabled in general;

(b) The information refers to the scope of the institutions' activities in terms of their policies of absorption and expansion;

(c) The information concerns the nature and location of the services provided. Therefore, it covers only some categories of disabled persons, namely those who fulfil the conditions of acceptance and who live where the institutions are located.

II. SERVICES PROVIDED TO THE DISABLED

The forms and nature of the services provided to disabled persons in the country have varied as they have developed, according to the thinking which prevailed at each stage. The motives and objectives have therefore also varied.

Since a new era was ushered in by independence (in the 1940s), there have been individual, non-organized, initiatives to care for the blind. These were based on humanitarian reasons of compassion and charity, and did not take any account of the fact that the disabled are entitled to such services and that the services constitute a social necessity which affects the economic and social situation.

In the 1950s, these efforts were organized in the form of charitable associations based, essentially, on voluntary non-governmental activities for the provision of welfare services and some simple educational programmes for the visually disabled. This was the situation until the late 1950s and early
1960s, when the Ministry of Social Affairs and Labour was established (in 1958). Among its many functions, the Ministry was entrusted with the task of organizing non-governmental activities and of supervising charitable associations, including associations for the care of the disabled. One of the first results of the Ministry's activity in this connection was its establishment of the number of disabled persons through the use of comprehensive surveys of those suffering from visual, hearing and motor disabilities. The results of the surveys, which were conducted between 1958 and 1960, were instrumental in focusing attention on the problem of disabled persons in the country and in identifying their characteristics in terms of demography, social status, education and employment. This stage marked an important turning-point in the effort to assess the dimensions of the problem and to evaluate its seriousness. The seriousness of the problem and the importance of addressing it was further confirmed by the results of the first general population census, conducted in 1960, despite the fact that the information was limited and inadequate, as it recorded the numbers of the disabled and their distribution by administrative district. Nevertheless, the information from surveys carried out by the Ministry of Social Affairs and Labour constituted the principal reference for the extension of services to the disabled, including new categories such as the deaf, the dumb, persons with motor disabilities and elderly disabled persons. The first and second development plans (1961-1965 and 1966-1970) awarded foundation and expansion subsidies for both the support of existing associations for the care of the disabled and for the establishment of new associations, with a view, in general, to improving and extending the level of services. At the same time, contacts were initiated and a dialogue opened with specialized international agencies for the purpose of obtaining expertise and advice and exchanging related experience and information, particularly with respect to the foundation of centres for the vocational rehabilitation of the disabled.

Such were the beginnings of organized action for the purpose of expanding services to include categories which until that time had not benefited and others which had not previously existed. However, all these efforts were misdirected because of the failure to adopt an integrated and comprehensive approach to requirements, and because the non-governmental sector was not in a position to absorb the expansion and development plans as it was materially and financially unequal to the task. As a result, the State had to address the problem directly upon the inauguration of the third five-year plan (1971-1975). The plan provided, for the first time, for the establishment of centres for the various categories of disabled persons, under the responsibility of the Ministry of Social Affairs and Labour, in accordance with the latest technical specifications and scientific principles. In order to ensure the comprehensiveness of such services, the Ministry adopted the various laws, regulations and rules needed to organize work at the centres and to ensure that the disabled were granted privileges which might enable them to live in better conditions and to obtain the services they required. The Ministry also decided to adopt the principle of co-ordination with relevant bodies and authorities such as the Ministries of Health, Education, Information and Culture, other people's organizations such as the General
Federation of Trade Unions and the General Federation of Women, and representatives of non-governmental bodies, with a view to providing more integrated and comprehensive services.

The Ministry based all this action on its perception of the economic and social aspects of the problem of the disabled, bearing in mind the disabled person's right to obtain the services he required and the State's responsibility to provide them, and recognizing that services provided to the disabled represent an inseparable element of community services.

In accordance with this approach, the 1970 general population census included statistical information which had a far-reaching effect in guiding planning policies to assess the needs of the disabled and to formulate the programmes needed to meet those needs. Since that time, the five-year plans of the Ministry of Social Affairs and Labour (the authority responsible for disabled persons in the country) have included projects for the disabled which have been backed by the necessary funds in successive investment budgets, while the Ministry has continued to supervise and support the services provided by the non-governmental sector, as a reserve to complement those provided by the State.

The services provided to the disabled include the following:

1. Government centres for the disabled

The country now has 16 government centres, which come under the responsibility of the Ministry of Social Affairs and Labour. The distribution of these centres by administrative district is shown in table 7.

Table 7. Distribution of government centres for the disabled

<table>
<thead>
<tr>
<th>District</th>
<th>Visual</th>
<th>Hearing</th>
<th>Motor</th>
<th>Mental</th>
<th>Cerebral palsy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damascus</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Homs</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Aleppo</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Latakia</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

The number of disabled persons in each administrative district was taken into account when these centres were established. It was decided that each centre should provide services to neighbouring districts, as follows:
According to the 1988 statistics, approximately 1,841 disabled persons made use of these centres. Table 8 shows the distribution of the disabled using these centres in 1988.

Table 8. Distribution of the disabled using government centres, 1988

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Number of users</th>
<th>Number of disabled (1981)</th>
<th>Percentage of users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>227</td>
<td>12,921</td>
<td>1.75</td>
</tr>
<tr>
<td>Hearing</td>
<td>842</td>
<td>15,789</td>
<td>5.33</td>
</tr>
<tr>
<td>Motor/cerebral palsy</td>
<td>298</td>
<td>33,012</td>
<td>0.90</td>
</tr>
<tr>
<td>Mental</td>
<td>474</td>
<td>14,062</td>
<td>3.37</td>
</tr>
<tr>
<td>Total</td>
<td>1,841</td>
<td>75,784</td>
<td>2.42</td>
</tr>
</tbody>
</table>

The above information shows that only 2.42 per cent of disabled persons made use of the services provided in the country. It should also be noted that the physically disabled received the lowest proportion of services, although they constituted the most numerous category (35 per cent). If the category of other disabilities (which accounts for 18 per cent of the total and usually includes severe physical and multiple disabilities) is added to this figure, the total rises to 53 per cent of the disabled population. This means that there is a major shortcoming in the services provided to disabled persons in general, and to the physically disabled in particular.

2. **Non-governmental services to the disabled**

There are 19 non-governmental associations providing parallel services which are complementary to those of the government sector. Their distribution by category is as follows: visual, 10; hearing, 3; mental, 2; motor, 3; cerebral palsy, 1.

In addition, the following centres provide services:

(a) The Federation of Associations for the Care of the Blind, founded in 1960;

(b) The Federation of Associations for the Care of the Deaf, founded in 1964;
(c) The Syrian Federation for Disabled Persons' Sports, founded in 1987;

(d) The Arab Federation of Associations for the Care of the Deaf, based at Damascus, founded in 1972.

Annex table A.10 shows the number of non-governmental and government centres for the disabled in existence during the period 1978 to 1987, while annex table A.11 shows the number of disabled persons making use of these centres during the same period.

The centres for the disabled endeavour, in accordance with their statutes, to ensure that the following services are available, free of charge, to males and females ranging in age from 5 to 40, both during the day and at night:

(i) Education and instruction;

(ii) Training and vocational rehabilitation;

(iii) Employment in sheltered workshops and in the open labour market;

(iv) Social and psychological assistance;

(v) Health education and physiotherapy;

(vi) Recreation, sports and cultural services;

(vii) Family education and other support services.

Annex table A.12 shows the type of care and services provided by government centres in 1988, together with the number of staff and users of these centres.

The country also has sophisticated health education services, which includes: (a) the health education hospital, coming under the Ministry of Health; (b) the artificial limbs factory, coming under the Ministry of Defence; and (c) the physiotherapy section of Ibn al-Nafis Hospital, coming under the Ministry of Health.

In the field of legislation, the country has adopted a number of laws relating to the disabled, including the following:

(a) Law No. 144 of 1958, which deals with the blind;

(b) Legislative Decree No. 54 of 1970, which relates to vocational training for the disabled;

(c) Legislative Decree No. 40 of 1970, which relates to instruction for the deaf;
(d) Law No. 29 of 1977, which relates to the exemption from taxes and fees of machines, equipment, devices and materials produced for use at social welfare institutions;

(e) Labour Law No. 91 of 1959, which deals with the employment of disabled persons in private sector factories, in accordance with a quota of 2 per cent;

(f) Law No. 1 of 1985, which provides for the employment of disabled persons in State and public sector bodies, in accordance with a quota of 4 per cent;

(g) A series of ministerial executory and implementing decisions concerning the application of these laws.

With a view to facilitating the employment of disabled persons in state and public sector bodies, Decree No. 54 of 1970 included a provision that exempted the disabled from having to provide the health certificate which has to be submitted with letters of appointment. The certificate granted by the Centre for the Vocational Training of Handicapped Persons is treated as being equivalent to the certificate of physical fitness. The decree also establishes the organizational structure and functions of the Supreme Council for the Co-ordination of Services for the Disabled, whose membership includes — apart from the relevant Ministries — representatives of people's organizations and non-governmental bodies.

III. SOCIAL AND ECONOMIC EFFECTS ON THE COMMUNITY

As is well known, the effects of disability go beyond the disabled person and are felt by his family and by the community as a whole. The disabled constitute no less than 10 per cent of the population in a given country, which means that about 25 per cent of the population is affected in some way or other. Meanwhile, every community bears a heavy burden in terms of expenditure in caring for its disabled members. It would be possible to reduce this expense and achieve enormous economic and social benefits if the disabled could be incorporated into the community as active and productive partners.

The Syrian Arab Republic, like other nations of the world, suffers from this problem and feels its social and economic consequences. Statistics for 1986 compiled by the Ministry of Social Affairs and Labour indicate that expenditure on education at its institutions for the disabled amounted to some 14 million Syrian pounds (LS). Total expenditure on projects for the disabled in the fifth five-year plan was over LS 60 million, and by the end of the sixth five-year plan in 1990, total expenditure on projects for the disabled will be in excess of LS 10 million.
Bearing in mind that disabled persons constitute 1.04 per cent of the population, that about 82 per cent of them are of a working, productive age, that their illiteracy rate is about 68 per cent, that about 78 per cent of them are unemployed or economically inactive, i.e. that they are outside the work-force, and that the services provided in the country reach only 2.42 per cent of the disabled, it can be concluded that the majority of disabled persons are deprived of education and training and therefore dependent on others. The serious consequences of the disability problem should therefore be seen in terms of the economic and social situation. The care of the disabled imposes a heavy burden on the community, limits the activities of a large number of those related to them and affects their productivity, stability and prospects. This is because the presence of a disabled person in the family causes psychological frustration and economic and social embarrassment.

Nevertheless, it must be acknowledged that strong family ties greatly reduce the negative effects of disability, as the binding power of the family in the community may be drawn upon for the purpose of implementing the principle of social integration for the disabled.

IV. STATE POLICIES

In its policy concerning disabled persons, which revolves essentially around the five-year plans for social services under the Ministry of Social Affairs and Labour, the State adheres to the following lines:

1. The provision of services to the greatest possible number of disabled persons, bearing in mind horizontal dispersal, the avoidance, as far as possible, of establishing large institutions in the centres of administrative districts and the need to establish small day centres spread throughout the country and in the different quarters of the major cities. This effort is based on a desire to provide services to the disabled in the places where they live, to avoid isolating them from the community and to prevent their being removed from their families and natural environments, with a view to preparing for their integration into society and promoting the participation of the family and local communities;

2. The extension of services to new categories which remain deprived of help, such as those suffering from severe and multiple disabilities, pre-school-age children and geriatric cases;

3. An endeavour to extend services to rural areas;

4. The provision of new types of service that were previously unavailable, such as early detection of disability, sheltered workshops, and entertainment and sports services;

5. An endeavour to upgrade and improve existing services by:
(a) Educating and training staff and preparing the necessary instruction materials;

(b) Constructing new buildings in accordance with proper architectural specifications;

(c) Providing the necessary aids and prosthetic appliances;

(d) Providing support services and preparing curricula and textbooks to back up the education process;

(e) Enacting legislation to promote the progress and development of the process;

6. Co-operation and co-ordination with the appropriate authorities and departments with a view to providing more integrated and comprehensive services;

7. Co-operation and co-ordination with the appropriate authorities to change society’s attitudes to disabled persons, with a view to ensuring that disability and the disabled gain proper acceptance in order that they may live in dignity and enjoy the respect they require if they are to be integrated into the community. In an endeavour to implement this policy, the State – inspired by the new horizons and stimuli offered by the International Year of Disabled Persons and the United Nations Decade of Disabled Persons, and bearing in mind the principles, objectives and plans included in the World Programme of Action concerning Disabled Persons – has incorporated within its fifth and sixth five-year plans (1981–1985 and 1986–1990) projects which constitute a genuine revolution in the field of services for the disabled and a fundamental turning-point that has transformed many ideas and attitudes in their favour. More than LS 60 million were spent under the state investment budget on projects for the disabled during the fifth five-year plan, and no less than LS 10 million have been allocated for such projects during the term of the sixth plan. These include new projects, as well as the completion of a number of projects that were launched under previous plans and the replacement and renewal of existing services. Among the most important of these projects are:

(a) The foundation of five schools for disabled children between the ages of 5 and 12 in the Damascus (rural), Latakia, Homs, Deir-ez-Zor and Der'a administrative districts;

(b) The establishment of a vocational training centre at Aleppo;

(c) The establishment of an institution to care for those suffering from severe and multiple disabilities in the Damascus (rural) district;

(d) The establishment of four institutions for the care of geriatric cases at Damascus, Aleppo, Latakia and Hama;
The completion of projects begun during the terms of previous plans, and the inauguration and commissioning of others, include the following:

(e) New buildings for the Institute for the Deaf, the Foundation for the Blind and Al-Amal School for Physically Disabled Children at Aleppo;

(f) The completion of the new building for the Institute for the Deaf at Damascus;

(g) The inauguration of the Institutes for the Deaf at Homs and Latakia;

(h) The inauguration of the institutes for mentally retarded children at Homs and Aleppo and of two such institutes at Damascus;

(i) The inauguration of the section for vocational training of the mentally retarded, at the Centre for the Vocational Training of Handicapped Persons in Damascus;

(j) The inauguration of three centres for children with cerebral palsy at Damascus and preparations for the inauguration of additional centres at Homs and Aleppo;

(k) The inauguration of sections for pre-school-age deaf children.

With respect to new services, 1987 saw the foundation of the Syrian Federation for Disabled Persons' Sports. With a view to ensuring the early detection and identification of disability, experts from UNESCO were brought in to provide advice and consultants' services in this connection.

With regard to the development of existing services, the State - represented by the Ministry of Social Affairs and Labour - established the Training Centre for Social Welfare Personnel. The centre organizes training courses for those working at centres for the disabled, in co-operation with international agencies and organizations, and prepares the necessary training materials.

The State has also set aside a plot of land on which to build a regional institute for the training of special education teachers. Contacts are now being made with UNESCO and the Arab League Educational, Cultural and Scientific Organization (ALECSO) with a view to obtaining the financial and technical assistance required for the establishment of the institute.

A number of Ministry of Social Affairs and Labour employees who work with the disabled have been sent on study and training missions outside the country, for the purpose of acquiring experience and acquainting themselves with the latest techniques and methods of work with disabled persons. They have also been encouraged to take part in most of the international conferences and symposia held on this subject. With regard to the preparation of curricula and textbooks, special curricula have been drawn up for the
institutes for the deaf and textbooks have been compiled and printed for the preparatory and elementary stages. Efforts are now being made to establish special education curricula for the mentally retarded, as well as textbooks linked to such curricula, concentrating on instruction in self-help, concepts applied in daily life, linguistic skills and principles of reading and arithmetic.

The Ministry of Social Affairs and Labour is endeavouring to integrate disabled persons into society by ensuring that they can be employed in the open labour market. A study is now being conducted on the possibility of training the disabled at the community's existing industrial installations, in an attempt to link vocational training programmes to local market requirements.

In the field of legislation, a comprehensive draft law on the disabled has been drawn up, guaranteeing their rights and ensuring that they are provided with educational services, vocational training and employment.

V. REQUIREMENTS FOR TRAINING AND INTEGRATION OF THE DISABLED

The services which must be provided in order to train and integrate disabled persons depend, to a great extent, on the following factors:

(a) The situation of the disabled, their features in terms of demography, social status, employment and education, the nature of their requirements and their abilities;

(b) The extent and nature of the disability problem in the community, and the material and human resources that can be deployed to deal with it;

(c) Disability trends and the manner in which they develop;

(d) The nature of existing services and their level in proportion to the number of disabled persons.

Services provided to the disabled should conform to the following basic principles:

1. Programmes for the disabled should be treated as an integrated part of social and economic development plans.

2. Emphasis should be given to programmes of a continuous nature that address the short- and long-term aspects of the disability problem.

3. Services should be comprehensive, to ensure that all disabled persons - of both sexes, all categories and all ages - benefit from them, and integrated, so that all requirements relating to health, social status, education, training, rehabilitation and employment are covered.
4. Services which aim to isolate the disabled person from his family should be avoided as far as possible; the right of the disabled person to remain with his family and in his own natural environment should be maintained.

5. The role of the family and the ability of parents to play an active part in services for the disabled should be promoted; to this end, use should be made of the strength of family ties in the community.

6. Disability should be detected at an early stage and services provided at an early age wherever possible.

7. Care for the disabled should emphasize the development of their abilities and of their personalities; services provided to them should be based on their abilities and special requirements, bearing in mind that each disabled person is an individual case.

8. It should be borne in mind that action in the area of preventive services involves less effort and is less costly.

9. All systems, programmes and services to benefit the disabled should be constantly updated in order always to meet their latest requirements.

10. Use should be made, as far as possible, of the local community for the provision of services to the disabled. Local skills and resources should be mobilized so that the community conducts the rehabilitation process, in conjunction with the disabled persons themselves, their families and other citizens. An endeavour should be made to provide appliances and aids at a low cost from the local market.

11. Practical skills should be developed at the community's existing work places, in response to the demands of the labour market.

12. Every effort should be made to eliminate all the administrative, organizational, legislative and architectural barriers restricting the access of disabled persons to services and public facilities in the community.

13. Incentives and training should be offered to instructors, specialists, social workers, teachers and local authorities.

14. The legal right of disabled persons to employment opportunities in the open labour market should be ensured, and an endeavour should be made to offer incentives to employers of the disabled (by covering the cost of adapting installations and equipment to permit their use by disabled workers).

15. Self-employment of the disabled should be promoted: disabled persons should be trained to manage small businesses and be encouraged to engage in collective or co-operative work, as well as household training services and production co-operatives.
16. Emphasis should be placed on educational integration at public schools as a means of paving the way for and enhancing the chances of integrating the disabled into the community, bearing in mind that the integration process represents both a solution to economic difficulties and helps the disabled to enjoy their right to live normal lives in their communities, to make use of all the available opportunities in the way of accommodation, family life, education, training and employment and to exercise all the liberties available to the non-disabled.

17. An endeavour should be made to ensure that disabled persons are given the opportunity to participate in the building of their community and the fulfilment of their obligations to the community on an equal footing with the non-disabled.

18. The rehabilitation process should be conducted along the following lines:

(a) Early detection and early treatment of the disability;
(b) Medical care, treatment and therapy;
(c) Psychological and social assistance;
(d) Provision of technical aids;
(e) Training in the functions of daily life and self-care, particularly mobility and communication skills, and the provision of special equipment;
(f) Educational services;
(g) Vocational guidance and training;
(h) Placement in open or sheltered employment positions;
(i) Follow-up and evaluation.

19. Preventive services should be designed to cover the following:

(a) Improvement of educational, cultural, economic and social conditions;
(b) Detection of symptoms and indications of disability at the earliest possible stage, to be followed immediately by the necessary treatment;
(c) Improvement of medical services for the elderly;
(d) Reduction of accidents in industry, agriculture, the home and on the roads, and action to combat pollution and the abuse of drugs and alcohol;
(e) Improvement of health services, particularly with respect to the health of mothers and children, immunization against diseases and the early detection and identification of disability in the pre- and post-natal periods;

(f) Attention to consciousness-raising, health and improved nutrition.

VI. RECOMMENDATIONS

Following the consideration of the situation of disabled persons in the country, the following recommendations can be made:

A. Prevention

The assistance of all competent departments should be enlisted to take the active measures required to prevent disability and limit its occurrence through early detection and treatment, and at an early stage wherever possible. Apart from the provision of health services to all social groups and the improvement of such services, this requires the establishment of special centres for the early detection and identification of disability. These centres should be adjuncts to health centres, hospitals, public clinics and school health clinics.

There must be an increase in awareness with respect to the prevention of all types of accidents, such as those in the home and on the roads, and occupational injuries and diseases, and checks must be carried out to verify whether industrial installations comply with employment conditions.

B. Provision of services to disadvantaged groups

Services must be extended to the following groups:

1. Women;

2. Pre-school-age children;

3. The elderly;

4. Disabled persons in rural areas; use may be made of the rural development centres to provide the necessary services, drawing on the facilities available in the local community.

C. Educational services

1. Qualified teaching staff must be educated and trained to provide the necessary personnel for existing institutes and for those to be opened in the future.
2. Educational integration should be tested initially by creating special classes for the disabled at certain public schools (which should then be provided with follow-up and support services), prior to conducting the experiment on a broader scale in the future. The experiment should begin with minor disabilities and then proceed to incorporate all disabled persons with abilities that allow them to be integrated into an ordinary school.

3. Educational support centres should be established to provide the necessary expertise to institutes for the disabled, as well as special classes at ordinary schools, and to supply the required educational tools and materials.

D. Rehabilitation

1. Rehabilitation programmes should be linked to the local labour market and disabled persons should be trained, wherever possible, at public work places in ordinary vocational training institutes.

2. Disabled persons should be employed, wherever possible, in the open labour market and assigned to sheltered workshops only in special cases.

3. Grant-supported workshops should be developed and properly organized so as to provide an appropriate starting-point for disabled persons through the selection of locally profitable occupations.

4. There should be co-operation with industrial installations, with a view to adapting work and equipment conditions to suit disabled workers.

5. A wage policy should be adopted in respect of disabled workers whose productivity is lower than that of ordinary workers.

6. Qualified instructors should be used for the training of disabled persons, and use should be made of instructors who are themselves disabled wherever possible.

E. Research and studies

1. Precise criteria and definitions must be adopted for use in research, studies and general population censuses.

2. Attention should be given to the conducting of statistical surveys and specialized field studies of the disabled with a view to determining their various features, the nature of their problems and requirements and their abilities and making it possible to draw up more useful and effective programmes. At the time of a general population census, it would be useful if census officers were provided with a questionnaire concerning disabled persons — separate from the ordinary census form — prepared by the Ministry of Social Affairs and Labour in conjunction with the Central Bureau of Statistics. The
census officer would fill in the questionnaire with those families which proved to have disabled members, and the information yielded by the questionnaires would be treated separately from the census forms. The results would be submitted to the Ministry of Social Affairs and Labour, where specialists would analyse the data and use the results to formulate policies for the disabled. It would thus be possible to acquire precise and comprehensive information on disabled persons, with less effort and at a lower cost.

3. A study should be carried out of jobs available in the local market which could be filled by disabled persons with a view to linking training programmes to the local market.

4. Studies should evaluate services provided to the disabled with a view to ensuring that they are improved and developed.

F. Administration of services to the disabled

1. The administrative and technical apparatus responsible for the planning and supervision of services to the disabled in the Ministry of Social Affairs and Labour should be strengthened and supported by qualified staff.

2. Attention should be given to training those in charge of centres for the disabled to administer appropriate services.

G. Co-ordination

1. The Supreme Council for the Co-ordination of Services to the Disabled should be mobilized so that it plays a part in co-ordination among the agencies responsible for care of the disabled, with a view to providing more integrated services.

2. Disabled persons should be involved in decisions affecting them.

H. Technical co-operation

Arab and international co-operation for the exchange of expertise and information should be mobilized and encouraged with a view to promoting services for the disabled. Disabled persons themselves should, wherever possible, be involved in such activities.

I. Staff training

1. An institute for the training of special education teachers should be opened to supply institutes and foundations for the disabled with qualified staff.

2. Continued use should be made of grants and missions for the training of staff outside the country by means of bilateral agreements or through specialized international agencies.
J. **Family education**

Steps should be taken to support the family and to strengthen its ability to participate in the services provided to the disabled by the following means:

1. Parents' associations should be established at the institutes for consultation on education and rehabilitation plans.

2. Advice should be provided to parents concerning the instruction of pre-school-age disabled children.

3. Parents should be provided with the educational and teaching materials required for their disabled children, as well as with advice on how to use such materials to develop the children's abilities.

4. Educational pamphlets should be published on the subject of disability, methods of interaction with the disabled and their education and welfare.

5. Public meetings should be held to discuss issues relating to the disabled and the services provided to them.
Annex
<table>
<thead>
<tr>
<th>Distribution by area</th>
<th>Physical disability</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loss of hand</td>
<td>Loss of both hands</td>
</tr>
<tr>
<td>Urban areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1 004</td>
<td>400</td>
</tr>
<tr>
<td>Female</td>
<td>406</td>
<td>345</td>
</tr>
<tr>
<td>Total (Percentage)</td>
<td>1 410</td>
<td>745</td>
</tr>
<tr>
<td>Rural areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1 325</td>
<td>340</td>
</tr>
<tr>
<td>Female</td>
<td>577</td>
<td>360</td>
</tr>
<tr>
<td>Total (Percentage)</td>
<td>1 902</td>
<td>710</td>
</tr>
<tr>
<td>Male</td>
<td>2 329</td>
<td>750</td>
</tr>
<tr>
<td>Female</td>
<td>983</td>
<td>705</td>
</tr>
<tr>
<td>Total (Percentage)</td>
<td>3 312</td>
<td>1 455</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(33.0)</td>
<td>(16.0)</td>
</tr>
</tbody>
</table>

Table A1: Distribution of disability (total population)
## Table A.2: Disabled Persons by Category of Disability and Age

<table>
<thead>
<tr>
<th>Age group</th>
<th>Visual</th>
<th>Hearing</th>
<th>Loss of hand</th>
<th>Loss of both hands</th>
<th>Loss of leg</th>
<th>Loss of both legs</th>
<th>Paralysis</th>
<th>Mental</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1</td>
<td>129</td>
<td>85</td>
<td>25</td>
<td>38</td>
<td>9</td>
<td>26</td>
<td>118</td>
<td>32</td>
<td>53</td>
<td>515</td>
</tr>
<tr>
<td>1-4</td>
<td>819</td>
<td>1,444</td>
<td>541</td>
<td>639</td>
<td>88</td>
<td>125</td>
<td>1,661</td>
<td>362</td>
<td>562</td>
<td>6,306</td>
</tr>
<tr>
<td>5-9</td>
<td>169</td>
<td>2,660</td>
<td>181</td>
<td>67</td>
<td>242</td>
<td>309</td>
<td>3,263</td>
<td>1,638</td>
<td>558</td>
<td>9,387</td>
</tr>
<tr>
<td>10-14</td>
<td>851</td>
<td>2,418</td>
<td>265</td>
<td>91</td>
<td>321</td>
<td>235</td>
<td>3,549</td>
<td>2,296</td>
<td>1,700</td>
<td>11,722</td>
</tr>
<tr>
<td>15-19</td>
<td>672</td>
<td>1,968</td>
<td>341</td>
<td>56</td>
<td>296</td>
<td>211</td>
<td>3,491</td>
<td>2,170</td>
<td>1,763</td>
<td>11,089</td>
</tr>
<tr>
<td>20-24</td>
<td>525</td>
<td>1,480</td>
<td>283</td>
<td>86</td>
<td>272</td>
<td>102</td>
<td>2,120</td>
<td>1,660</td>
<td>1,420</td>
<td>7,948</td>
</tr>
<tr>
<td>25-29</td>
<td>448</td>
<td>855</td>
<td>210</td>
<td>63</td>
<td>342</td>
<td>160</td>
<td>1,171</td>
<td>1,144</td>
<td>1,134</td>
<td>5,527</td>
</tr>
<tr>
<td>30-34</td>
<td>618</td>
<td>782</td>
<td>244</td>
<td>119</td>
<td>195</td>
<td>51</td>
<td>753</td>
<td>887</td>
<td>1,246</td>
<td>4,895</td>
</tr>
<tr>
<td>35-39</td>
<td>481</td>
<td>461</td>
<td>153</td>
<td>61</td>
<td>207</td>
<td>75</td>
<td>627</td>
<td>730</td>
<td>985</td>
<td>3,380</td>
</tr>
<tr>
<td>40-44</td>
<td>619</td>
<td>495</td>
<td>201</td>
<td>36</td>
<td>190</td>
<td>28</td>
<td>593</td>
<td>620</td>
<td>977</td>
<td>3,309</td>
</tr>
<tr>
<td>45-49</td>
<td>446</td>
<td>407</td>
<td>110</td>
<td>21</td>
<td>241</td>
<td>96</td>
<td>573</td>
<td>505</td>
<td>927</td>
<td>3,386</td>
</tr>
<tr>
<td>50-54</td>
<td>782</td>
<td>529</td>
<td>204</td>
<td>46</td>
<td>229</td>
<td>33</td>
<td>788</td>
<td>502</td>
<td>1,041</td>
<td>4,154</td>
</tr>
<tr>
<td>55-59</td>
<td>528</td>
<td>305</td>
<td>155</td>
<td>21</td>
<td>183</td>
<td>58</td>
<td>671</td>
<td>216</td>
<td>792</td>
<td>2,989</td>
</tr>
<tr>
<td>60-64</td>
<td>946</td>
<td>430</td>
<td>127</td>
<td>32</td>
<td>162</td>
<td>23</td>
<td>814</td>
<td>294</td>
<td>727</td>
<td>3,555</td>
</tr>
<tr>
<td>&gt; 65</td>
<td>4,222</td>
<td>1,857</td>
<td>238</td>
<td>49</td>
<td>424</td>
<td>80</td>
<td>2,988</td>
<td>796</td>
<td>2,092</td>
<td>12,746</td>
</tr>
<tr>
<td>Not known</td>
<td>10</td>
<td>7</td>
<td>1</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>11</td>
<td>11</td>
<td>26</td>
<td>66</td>
</tr>
<tr>
<td>Total</td>
<td>12,921</td>
<td>17,383</td>
<td>3,312</td>
<td>1,425</td>
<td>3,401</td>
<td>1,622</td>
<td>23,293</td>
<td>14,061</td>
<td>15,956</td>
<td>91,774</td>
</tr>
<tr>
<td>Age group</td>
<td>&lt; 1</td>
<td>1-4</td>
<td>5-14</td>
<td>15-24</td>
<td>25-39</td>
<td>40-59</td>
<td>&gt; 60</td>
<td>Not known</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
<td>-----------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td><strong>Total population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>353 307</td>
<td>1 395 378</td>
<td>2 636 581</td>
<td>1 019 075</td>
<td>2 116 730</td>
<td>1 081 152</td>
<td>442 544</td>
<td>1 377</td>
<td>9 046 144</td>
<td></td>
</tr>
<tr>
<td>(Percentage)</td>
<td>(3.91)</td>
<td>(15.43)</td>
<td>(29.15)</td>
<td>(11.27)</td>
<td>(23.40)</td>
<td>(11.95)</td>
<td>(4.89)</td>
<td>(0.02)</td>
<td>(100.00)</td>
<td></td>
</tr>
<tr>
<td><strong>Disabled persons</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>515</td>
<td>6 306</td>
<td>21 836</td>
<td>19 037</td>
<td>14 103</td>
<td>14 269</td>
<td>16 304</td>
<td>66</td>
<td>92 436</td>
<td></td>
</tr>
<tr>
<td>(Percentage)</td>
<td>(0.56)</td>
<td>(6.12)</td>
<td>(23.62)</td>
<td>(20.60)</td>
<td>(15.26)</td>
<td>(15.43)</td>
<td>(17.64)</td>
<td>(0.07)</td>
<td>(100.00)</td>
<td></td>
</tr>
<tr>
<td>Level of Education</td>
<td>Bachelor's Degrees</td>
<td>Master's Degrees</td>
<td>Doctorate Degrees</td>
<td>Total Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>28,666</td>
<td>5,674</td>
<td>1,668</td>
<td>36,908</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literate Male</td>
<td>22,394</td>
<td>2,396</td>
<td>262</td>
<td>25,052</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literate Female</td>
<td>12,621</td>
<td>2,346</td>
<td>228</td>
<td>15,205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63,671 (67.95%)</td>
<td>10,316 (10.00%)</td>
<td>712 (0.79%)</td>
<td>74,699 (79.20%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Population</td>
<td>160,619 (25.10%)</td>
<td>20,048 (30.99%)</td>
<td>1,399 (2.14%)</td>
<td>182,066 (100.00%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Aged 10 and over)
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Visual</th>
<th>Hearing</th>
<th>Loss of hand</th>
<th>Loss of both hands</th>
<th>Loss of leg</th>
<th>Loss of both legs</th>
<th>Paralysis</th>
<th>Total physical</th>
<th>Mental</th>
<th>Other</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and technical</td>
<td>117</td>
<td>41</td>
<td>40</td>
<td>20</td>
<td>49</td>
<td>25</td>
<td>107</td>
<td>241</td>
<td>--</td>
<td>157</td>
<td>556</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>--</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>--</td>
<td>3</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Clerical</td>
<td>73</td>
<td>73</td>
<td>109</td>
<td>25</td>
<td>88</td>
<td>18</td>
<td>199</td>
<td>429</td>
<td>--</td>
<td>257</td>
<td>842</td>
<td></td>
</tr>
<tr>
<td>Sales and purchasing</td>
<td>197</td>
<td>209</td>
<td>147</td>
<td>20</td>
<td>169</td>
<td>28</td>
<td>346</td>
<td>710</td>
<td>--</td>
<td>640</td>
<td>1756</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>95</td>
<td>215</td>
<td>197</td>
<td>19</td>
<td>12</td>
<td>14</td>
<td>131</td>
<td>333</td>
<td>--</td>
<td>415</td>
<td>1058</td>
<td></td>
</tr>
<tr>
<td>Agriculture, livestock, forestry,</td>
<td>356</td>
<td>1300</td>
<td>312</td>
<td>41</td>
<td>217</td>
<td>68</td>
<td>301</td>
<td>939</td>
<td>--</td>
<td>1519</td>
<td>4114</td>
<td></td>
</tr>
<tr>
<td>Fishing</td>
<td>604</td>
<td>1723</td>
<td>390</td>
<td>97</td>
<td>389</td>
<td>141</td>
<td>914</td>
<td>1997</td>
<td>--</td>
<td>2106</td>
<td>6420</td>
<td></td>
</tr>
<tr>
<td>Machines and transport and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal A</strong></td>
<td>1442</td>
<td>3563</td>
<td>1096</td>
<td>223</td>
<td>986</td>
<td>301</td>
<td>2059</td>
<td>4665</td>
<td>--</td>
<td>5097</td>
<td>14767</td>
<td>19.6</td>
</tr>
<tr>
<td><strong>Unemployed</strong></td>
<td>108</td>
<td>533</td>
<td>66</td>
<td>15</td>
<td>46</td>
<td>23</td>
<td>215</td>
<td>365</td>
<td>--</td>
<td>298</td>
<td>1304</td>
<td>1.1</td>
</tr>
<tr>
<td>Economically inactive</td>
<td>9604</td>
<td>1901</td>
<td>1003</td>
<td>413</td>
<td>1931</td>
<td>828</td>
<td>15905</td>
<td>20540</td>
<td>12030</td>
<td>9285</td>
<td>59360</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal B</strong></td>
<td>9712</td>
<td>8434</td>
<td>1469</td>
<td>488</td>
<td>1977</td>
<td>851</td>
<td>16120</td>
<td>20905</td>
<td>12030</td>
<td>9583</td>
<td>60664</td>
<td>78.1</td>
</tr>
<tr>
<td><strong>Grand total A and B</strong></td>
<td>11154</td>
<td>11997</td>
<td>2565</td>
<td>711</td>
<td>2963</td>
<td>1152</td>
<td>18119</td>
<td>25570</td>
<td>12030</td>
<td>14680</td>
<td>75431</td>
<td>100.0</td>
</tr>
<tr>
<td>Sex</td>
<td>Professional, technical and related</td>
<td>Administrative</td>
<td>Clerical</td>
<td>Sales and purchasing</td>
<td>Services</td>
<td>Agriculture, livestock-raising, forestry and fishing</td>
<td>Industrial machines, transport and equipment</td>
<td>Unemployed, with no previous employment experience</td>
<td>Economically inactive</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------</td>
<td>----------------</td>
<td>----------</td>
<td>----------------------</td>
<td>----------</td>
<td>----------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>444</td>
<td>11</td>
<td>724</td>
<td>1 734</td>
<td>978</td>
<td>3 851</td>
<td>6 136</td>
<td>1 202</td>
<td>32 291</td>
<td>47 371</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>212</td>
<td>--</td>
<td>118</td>
<td>22</td>
<td>80</td>
<td>263</td>
<td>294</td>
<td>102</td>
<td>27 069</td>
<td>28 060</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>556</td>
<td>11</td>
<td>842</td>
<td>1 756</td>
<td>1 058</td>
<td>4 114</td>
<td>6 430</td>
<td>1 304</td>
<td>59 360</td>
<td>75 431</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Percentage)</td>
<td>(0.7)</td>
<td>(0.1)</td>
<td>(1.1)</td>
<td>(2.3)</td>
<td>(1.4)</td>
<td>(5.4)</td>
<td>(8.5)</td>
<td>(1.7)</td>
<td>(79.0)</td>
<td>(100.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table A.6: Disabled persons aged 10 and over, by sex and occupation.
Table A.7. Disabled persons (aged 10 and over) by sex and area of economic activity

| Area of economic activity | Total | Known | Not personal services | Not professional, scientific and technical | Not construction | Not wholesale and retail trade, storage and repair of motor vehicles and motorcycles | Not transport, storage and post, and communication | Not mining and quarrying | Not manufacturing industries | Not agriculture, forestry and fishing | finance, insurance, real estate and business services | Total
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4,072</td>
<td>62</td>
<td>2,461</td>
<td>98</td>
<td>561</td>
<td>88</td>
<td>2,112</td>
<td>504</td>
<td>13,879</td>
<td>94</td>
<td>524</td>
<td>100</td>
</tr>
<tr>
<td>Female</td>
<td>2,662</td>
<td>62</td>
<td>1,918</td>
<td>90</td>
<td>561</td>
<td>88</td>
<td>2,112</td>
<td>504</td>
<td>13,879</td>
<td>94</td>
<td>524</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>6,734</td>
<td>124</td>
<td>4,379</td>
<td>176</td>
<td>1,122</td>
<td>176</td>
<td>4,224</td>
<td>1,008</td>
<td>27,758</td>
<td>94</td>
<td>1,048</td>
<td>100</td>
</tr>
<tr>
<td>Area of economic activity</td>
<td>Visual</td>
<td>Hearing</td>
<td>Mental</td>
<td>Loss of mind</td>
<td>Loss of both hands</td>
<td>Loss of leg</td>
<td>Loss of both legs</td>
<td>Paralysis</td>
<td>Physical</td>
<td>Other</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>---------</td>
<td>--------</td>
<td>-------------</td>
<td>-------------------</td>
<td>------------</td>
<td>------------------</td>
<td>-----------</td>
<td>----------</td>
<td>-------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fisheries</td>
<td>353</td>
<td>1 293</td>
<td>--</td>
<td>308</td>
<td>41</td>
<td>211</td>
<td>67</td>
<td>292</td>
<td>919</td>
<td>1 507</td>
<td>4 072</td>
<td></td>
</tr>
<tr>
<td>Mines and quarries</td>
<td>6</td>
<td>7</td>
<td>--</td>
<td>4</td>
<td>--</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>12</td>
<td>31</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Manufacturing industries</td>
<td>303</td>
<td>771</td>
<td>--</td>
<td>144</td>
<td>34</td>
<td>166</td>
<td>66</td>
<td>536</td>
<td>946</td>
<td>841</td>
<td>2 861</td>
<td></td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>4</td>
<td>13</td>
<td>--</td>
<td>11</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>21</td>
<td>50</td>
<td>31</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>Building and construction</td>
<td>161</td>
<td>653</td>
<td>--</td>
<td>144</td>
<td>33</td>
<td>108</td>
<td>45</td>
<td>229</td>
<td>559</td>
<td>396</td>
<td>2 169</td>
<td></td>
</tr>
<tr>
<td>Wholesale and retail trade, restaurants and hotels</td>
<td>211</td>
<td>242</td>
<td>--</td>
<td>166</td>
<td>21</td>
<td>189</td>
<td>30</td>
<td>382</td>
<td>788</td>
<td>715</td>
<td>1 956</td>
<td></td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>46</td>
<td>71</td>
<td>--</td>
<td>64</td>
<td>11</td>
<td>53</td>
<td>15</td>
<td>90</td>
<td>233</td>
<td>233</td>
<td>583</td>
<td></td>
</tr>
<tr>
<td>Finance, insurance and property services</td>
<td>11</td>
<td>10</td>
<td>--</td>
<td>8</td>
<td>5</td>
<td>14</td>
<td>3</td>
<td>18</td>
<td>48</td>
<td>34</td>
<td>103</td>
<td></td>
</tr>
<tr>
<td>Community, social and personal services</td>
<td>212</td>
<td>295</td>
<td>--</td>
<td>203</td>
<td>61</td>
<td>190</td>
<td>58</td>
<td>399</td>
<td>911</td>
<td>773</td>
<td>2 251</td>
<td></td>
</tr>
<tr>
<td>Not known</td>
<td>75</td>
<td>108</td>
<td>--</td>
<td>44</td>
<td>12</td>
<td>42</td>
<td>13</td>
<td>88</td>
<td>199</td>
<td>130</td>
<td>512</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1 462</td>
<td>3 563</td>
<td>--</td>
<td>1 016</td>
<td>223</td>
<td>986</td>
<td>301</td>
<td>2 059</td>
<td>4 655</td>
<td>5 097</td>
<td>14 767</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>Visual</td>
<td>Hearing</td>
<td>Mental</td>
<td>Loss of hand</td>
<td>Loss of both hands</td>
<td>Loss of leg</td>
<td>Loss of both legs</td>
<td>Paralysis</td>
<td>Total physical</td>
<td>Other</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>---------</td>
<td>--------</td>
<td>--------------</td>
<td>--------------------</td>
<td>-------------</td>
<td>------------------</td>
<td>-----------</td>
<td>----------------</td>
<td>--------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Employer/ manager</td>
<td>72</td>
<td>22</td>
<td>1</td>
<td>46</td>
<td>15</td>
<td>55</td>
<td>21</td>
<td>96</td>
<td>233</td>
<td>231</td>
<td>664</td>
<td>14</td>
</tr>
<tr>
<td>Self-employed</td>
<td>448</td>
<td>928</td>
<td>1</td>
<td>57</td>
<td>346</td>
<td>68</td>
<td>584</td>
<td>1 434</td>
<td>1 789</td>
<td>4 435</td>
<td>146</td>
<td>4 599</td>
</tr>
<tr>
<td>Paid in cash</td>
<td>841</td>
<td>1 908</td>
<td>1</td>
<td>598</td>
<td>141</td>
<td>513</td>
<td>181</td>
<td>1 201</td>
<td>2 634</td>
<td>2 719</td>
<td>7 585</td>
<td>517</td>
</tr>
<tr>
<td>Paid in kind</td>
<td>4</td>
<td>21</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>15</td>
<td>29</td>
<td>67</td>
<td>2</td>
<td>69</td>
<td>0.48</td>
</tr>
<tr>
<td>Employed by relatives</td>
<td>48</td>
<td>552</td>
<td>1</td>
<td>53</td>
<td>8</td>
<td>48</td>
<td>28</td>
<td>123</td>
<td>260</td>
<td>262</td>
<td>934</td>
<td>1 122</td>
</tr>
<tr>
<td>without pay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed by others</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>--</td>
<td>6</td>
<td>11</td>
<td>8</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>without pay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not known</td>
<td>28</td>
<td>28</td>
<td>1</td>
<td>15</td>
<td>--</td>
<td>18</td>
<td>3</td>
<td>42</td>
<td>78</td>
<td>59</td>
<td>192</td>
<td>1</td>
</tr>
<tr>
<td>Total active disabled</td>
<td>1 442</td>
<td>3 563</td>
<td>0</td>
<td>1 096</td>
<td>223</td>
<td>986</td>
<td>301</td>
<td>2 059</td>
<td>4 665</td>
<td>5 097</td>
<td>13 898</td>
<td>871</td>
</tr>
</tbody>
</table>
Table A.10. Number of centres for disabled persons in the country by category of disability, 1978-1987

<table>
<thead>
<tr>
<th>Years</th>
<th>For visual disabilities</th>
<th>For hearing disabilities</th>
<th>For physical disabilities</th>
<th>For mental disabilities</th>
<th>For elderly disabled persons</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Governmental Total</td>
<td>Non-Governmental Total</td>
<td>Non-Governmental Total</td>
<td>Non-Governmental Total</td>
<td>Non-Governmental Total</td>
<td>Total</td>
</tr>
<tr>
<td>1987</td>
<td>2 6 8</td>
<td>4 2 6</td>
<td>3 1 4</td>
<td>5 1 6</td>
<td>2 2 4</td>
<td>16 12 28</td>
</tr>
<tr>
<td>1986</td>
<td>2 6 8</td>
<td>4 2 6</td>
<td>2 1 3</td>
<td>5 1 6</td>
<td>2 2 4</td>
<td>15 12 27</td>
</tr>
<tr>
<td>1985</td>
<td>2 6 8</td>
<td>4 2 6</td>
<td>2 1 3</td>
<td>4 1 5</td>
<td>2 2 4</td>
<td>14 12 26</td>
</tr>
<tr>
<td>1984</td>
<td>2 6 8</td>
<td>4 2 6</td>
<td>2 1 3</td>
<td>3 1 4</td>
<td>2 2 4</td>
<td>13 12 25</td>
</tr>
<tr>
<td>1983</td>
<td>2 6 8</td>
<td>4 2 6</td>
<td>2 1 3</td>
<td>2 1 3</td>
<td>2 3 5</td>
<td>12 12 24</td>
</tr>
<tr>
<td>1982</td>
<td>2 6 8</td>
<td>4 2 6</td>
<td>2 1 3</td>
<td>3 1 4</td>
<td>2 3 5</td>
<td>13 13 26</td>
</tr>
<tr>
<td>1981</td>
<td>2 6 8</td>
<td>3 2 5</td>
<td>2 1 3</td>
<td>2 -- 2</td>
<td>2 4 6</td>
<td>11 13 24</td>
</tr>
<tr>
<td>1980</td>
<td>2 6 8</td>
<td>2 2 4</td>
<td>2 1 3</td>
<td>2 -- 2</td>
<td>2 4 6</td>
<td>10 13 23</td>
</tr>
<tr>
<td>1979</td>
<td>2 6 8</td>
<td>2 2 4</td>
<td>2 1 3</td>
<td>2 -- 2</td>
<td>2 5 7</td>
<td>10 14 24</td>
</tr>
<tr>
<td>1978</td>
<td>2 6 8</td>
<td>2 1 3</td>
<td>2 1 3</td>
<td>-- -- --</td>
<td>2 5 7</td>
<td>8 13 21</td>
</tr>
</tbody>
</table>
Table A.11. Number of disabled persons making use of state and non-governmental centres for the disabled (1978-1987)

<table>
<thead>
<tr>
<th>Year</th>
<th>Physical disability</th>
<th>Category of disability</th>
<th>Total</th>
<th>Visual</th>
<th>Hearing</th>
<th>Mental</th>
<th>Multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>125</td>
<td>3</td>
<td>125</td>
<td>3</td>
<td>125</td>
<td>3</td>
<td>125</td>
</tr>
<tr>
<td>1979</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1980</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1981</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1982</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1983</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1984</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1985</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1986</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>1987</td>
<td>125</td>
<td>9</td>
<td>134</td>
<td>1</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>Name of Centre</td>
<td>Category of disability</td>
<td>Date of establishment</td>
<td>Type of care</td>
<td>Services provided</td>
<td>Users</td>
<td>Employ-</td>
<td>Tech.-</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>-------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>Centre for the Vocational Training of Handicapped Persons</td>
<td>All categories</td>
<td>1966</td>
<td>X</td>
<td>--</td>
<td>85</td>
<td>17</td>
<td>102</td>
</tr>
<tr>
<td>Al-Ameel School for Physically Disabled Children, Damascus</td>
<td>Physical</td>
<td>1974</td>
<td>X</td>
<td>--</td>
<td>47</td>
<td>36</td>
<td>83</td>
</tr>
<tr>
<td>Al-Ameel School for Physically Disabled Children, Aleppo</td>
<td>Physical</td>
<td>1987</td>
<td>X</td>
<td>--</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Institute for Children afflicted with Cerebral Palsy, Damascus</td>
<td>Severe physical</td>
<td>1984</td>
<td>X</td>
<td>--</td>
<td>60</td>
<td>43</td>
<td>103</td>
</tr>
<tr>
<td>Institute for Intellectual Development, Qoubiye, Damascus</td>
<td>Mental</td>
<td>1979</td>
<td>X</td>
<td>--</td>
<td>115</td>
<td>63</td>
<td>178</td>
</tr>
<tr>
<td>Institute for Intellectual Development, Homs</td>
<td>Mental</td>
<td>1982</td>
<td>X</td>
<td>--</td>
<td>90</td>
<td>50</td>
<td>140</td>
</tr>
<tr>
<td>Institute for Intellectual Development, Aleppo</td>
<td>Mental</td>
<td>1994</td>
<td>X</td>
<td>--</td>
<td>56</td>
<td>25</td>
<td>81</td>
</tr>
<tr>
<td>Institute for Intellectual Development, Muazzah, Damascus</td>
<td>Mental</td>
<td>1985</td>
<td>X</td>
<td>--</td>
<td>45</td>
<td>30</td>
<td>75</td>
</tr>
<tr>
<td>Model Foundation for Rehabilitation of the Blind, Damascus</td>
<td>Visual</td>
<td>1969</td>
<td>X</td>
<td>--</td>
<td>88</td>
<td>45</td>
<td>133</td>
</tr>
<tr>
<td>Model Foundation for Rehabilitation of the Blind, Aleppo</td>
<td>Visual</td>
<td>1974</td>
<td>X</td>
<td>--</td>
<td>74</td>
<td>20</td>
<td>94</td>
</tr>
<tr>
<td>Institute for the Deaf, Damascus</td>
<td>Hearing</td>
<td>1970</td>
<td>X</td>
<td>--</td>
<td>212</td>
<td>150</td>
<td>362</td>
</tr>
<tr>
<td>Institute for the Deaf, Aleppo</td>
<td>Hearing</td>
<td>1974</td>
<td>X</td>
<td>--</td>
<td>161</td>
<td>101</td>
<td>262</td>
</tr>
<tr>
<td>Institute for the Deaf, Homs</td>
<td>Hearing</td>
<td>1982</td>
<td>X</td>
<td>--</td>
<td>81</td>
<td>59</td>
<td>140</td>
</tr>
<tr>
<td>Institute for the Deaf, Latakia</td>
<td>Hearing</td>
<td>1982</td>
<td>X</td>
<td>--</td>
<td>41</td>
<td>37</td>
<td>78</td>
</tr>
</tbody>
</table>
Sources


XXXII. REPORT ON PROGRAMMES AND METHODS OF CARE FOR DISABLED PERSONS IN THE UNITED ARAB EMIRATES

by

Fathi Abd al-Rahim
Arabian Gulf University
Summary

Special education programmes and services in the United Arab Emirates were initiated in basic form in the early 1980s.

The Ministry of Education collaborates with the Ministry of Labour and Social Affairs in running the current programmes for the care of disabled persons, and some limited work is also done by non-governmental agencies.

The Ministry of Education focusses its efforts on certain minor cases - in particular, children who are slow to learn - while the Ministry of Labour and Social Affairs deals with other cases, such as mental retardation and deafness.

The Ministry of Education began to set up special education classes, attached to ordinary schools, in the academic year 1979/1980. These classes admit students with psychological, behavioural or health-related problems which represent a handicap to study and social adjustment.

At the outset, in 1979/80, there were only five special education classes. There are now 90, spread throughout all the country's educational districts.

The Ministry of Education adopted the system of special classes attached to ordinary schools because it believed that the system would be a suitable way of integrating the "special" category into normal education. Their special needs could be met in small classes, through special programmes adapted to their circumstances.

The Ministry of Labour and Social Affairs began to demonstrate interest in disabled persons and methods of caring for them in 1981. This interest led to the opening of two centres for the Care and Rehabilitation of Disabled Persons, one in Dubai and the other in Abu Dhabi.

The two Centres endeavour to provide educational, social and psychological services to disabled persons, in accordance with a series of general principles.

Each Centre operates through specialized units which independently - in the vocational unit attached to each section - provide the services required by individuals in each category of disability, from the preparatory level to the conclusion of training.

The educational process in the country's special education classes and Centres for the Care and Rehabilitation of Disabled Persons is based on the curricula of normal schools. Consideration should be given to the possibility of developing educational curricula which are more appropriate for special categories and more responsive to their needs.
I. INTRODUCTION: GENERAL FACTS

Special education programmes and services in the United Arab Emirates were initiated in basic form in the early 1980s or, more precisely, at the time of the commemoration of the International Year of Disabled Persons. The currently existing services for the care of disabled persons are thus a relatively recent development.

The Ministry of Education collaborates with the Ministry of Labour and Social Affairs in running the current programmes of care for disabled persons, although limited work is also done by non-governmental agencies. The Ministry of Education focuses its efforts on minor cases – such as children who are slow to learn – while the Ministry of Labour and Social Affairs deals with other cases, such as mental retardation and deafness.

Although there is a limited amount of co-ordination between the efforts of the Ministry of Education and those undertaken by the Ministry of Labour and Social Affairs, this co-ordination takes place in the absence of a comprehensive national plan for special education and the care of disabled persons.

There is at present no clear fixed procedure for the identification and evaluation of disability cases, under clear and specific laws. This gives rise to the possibility of spurious cases, receiving services which may not be entirely appropriate for them.

A programme for the training of special education teachers was launched at the United Arab Emirates University recently (less than two years ago). This should help to produce specialized teachers for employment at special education centres, which will at least reduce the present shortage. There remains a need for programmes to train the other technicians required if the performance of special education programmes is to be improved.

II. EFFORTS UNDERTAKEN BY THE MINISTRY OF EDUCATION IN THE FIELD OF SPECIAL EDUCATION

Work in the field of special education is governed by Ministerial Decision No. 385/2 of 1988, as adopted by the Minister of Education, concerning the regulations for special education classes. The Decision provides as follows:

(a) Students who have difficulty in adapting to school education curricula by reason of a minor intelligence defect or learning disability constitute a human resource which must be drawn upon within the overall development plan;
(b) Education officers must take account of the special circumstances of such students, enable them to exercise their natural right as children to social training, stimulate their existing abilities and harness those abilities in such a way as to ensure maximum productivity.

The Ministry of Education began to set up special education classes, attached to ordinary schools, in the academic year 1979/80. These classes admit students with minor psychological, behavioural, health-related or mental problems which represent a handicap to study and social adjustment. The classes have been staffed with teachers specially qualified to work with these categories of persons.

The Ministry of Education established a series of objectives for the special education classes, foremost among which were the following:

(a) The treatment of such psychological, behavioural and social problems and learning disabilities as impeded the educational development of students;

(b) Fulfilment of education as a humanitarian task, through concern for the individual and his well-being;

(c) An endeavour to develop the learning abilities of students so that they can keep pace with ordinary students and join in normal school classes;

(d) The promotion of better understanding of their problems, and their acceptance by society.

Admittance to the special education classes run by the Ministry of Education was limited to specific cases governed by law. These were as follows:

(a) Slow learners;

(b) Those behind in their studies;

(c) Those with problems impeding their adjustment and ability to keep up with teaching in a normal class, such as:

   (i) Speech defects;

   (ii) Defective hearing or vision;

   (d) Those suffering from psychological, emotional, social or behavioural disorders;

   (e) Other cases which the special education team believes should be admitted to its classes, if in keeping with the objectives and capacities of the classes.
The regulations for admittance to special education classes specify a number of general conditions, including the following:

(a) That the student be declared fit to study, on the basis of a medical test;

(b) That he should be capable of conforming emotionally, psychologically and socially;

(c) That his intelligence quotient (IQ) should be no lower than 70-75;

(d) That he should not be afflicted by multiple disabilities.

Instruction in special education classes follows the regular curricula, subject to certain special considerations, e.g. diversification of teaching methods, regard for individual cases, reinforcement of knowledge and repetition of lessons, simplification of the regular curriculum, use of more varied and more numerous teaching materials, etc.

The special education classes are overseen by an administrative unit known as the Special Education Unit, which reports, for administrative purposes, to the Social Service Department of the Ministry of Education. Besides overseeing special education classes, the Unit co-ordinates with centres for the care and rehabilitation of disabled persons, with a view to ensuring that care is properly integrated, by the following means:

(a) The referral of mentally retarded students to the Centre for the Care and Rehabilitation of Disabled Persons, run by the Ministry of Labour and Social Affairs, as the appropriate facility for the care of such cases;

(b) Use of the facilities offered by the Centre in terms of identification and treatment services for students who are enrolled at its schools on a regular basis and suffer from:

(i) Hearing disabilities;

(ii) Speech defects;

(iii) Motor disabilities;

(iv) Other disabilities covered by services offered at the Centre.

Table 1 gives details of the number of special education classes and the total number of teachers (male and female) in the various educational districts of the United Arab Emirates from the academic year 1979/80 to the current academic year (1988/89).

The figures in table 1 indicate the following:
(a) The total number of special education classes has risen by a factor of 18, increasing from five classes in the academic year 1979/80 to 90 classes in 1988/89, over a period of approximately 10 years. The rate of increase, indicating the expansion of services, is therefore positive;

(b) The number of teachers of special education classes has increased at the same rate during the period;

(c) The teacher-class ratio is 1 to 1, meaning that there is a teacher for every class, although there are no assistants.

Table 2 shows the numbers of students (male and female), their distribution by educational district and the growth of these numbers between 1979/80 and 1988/89.

The overall information contained in table 2 indicates that there were 41 students in 1979/80 (when special education classes began), rising to 693 students in the current academic year (1988/89). Also, the classes were at first restricted to the Abu Dhabi and Dubai districts but now cover all educational districts of the country, showing that progress has been made.

An examination of the data in tables 1 and 2 shows that there are, on average, between seven and eight students in each class. This is a good ratio.

The Ministry of Education adopted the system of special classes attached to ordinary schools because it believed that the system would be a suitable way of integrating the "special" category into normal education. Their special needs could be met in small classes, through special programmes adapted to their abilities, and students could at the same time interact with their non-disabled peers in extra-curricular activities.
| Academic year | Total number of classes | Total number of teachers | Abu Dhabi | No. of classes | Male | Female | Al-Ain | No. of classes | Male | Female | Dubai | No. of classes | Male | Female | Sharjah | No. of classes | Male | Female | Ajman | No. of classes | Male | Female | Umm al-Qaiwain | No. of classes | Male | Female | Ras al-Khaimah | No. of classes | Male | Female | Eastern district | No. of classes | Male | Female |
|---------------|------------------------|-------------------------|-----------|----------------|------|--------|--------|----------------|------|--------|-------|----------------|------|--------|---------|----------------|------|--------|--------|----------------|------|--------|----------|----------------|------|--------|-----------|----------------|------|--------|-----------|
| 1979/80       | 5                      | 5                       | 1         | 2              |      |        | 1      | 2              |      |        | 1      | 1              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1980/81       | 13                     | 13                      | 2         | 2              |      |        | 2      | 3              | 1    | 1      | 1      | 1              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1981/82       | 23                     | 23                      | 2         | 3              | 1    |        | 2      | 4              | 1    | 2      | 1      | 1              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1982/83       | 26                     | 26                      | 2         | 3              | 1    |        | 3      | 5              | 1    | 2      | 1      | 1              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1983/84       | 25                     | 25                      | 2         | 3              | 1    |        | 2      | 5              | 1    | 2      | 1      | 1              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1984/85       | 38                     | 38                      | 3         | 4              | 2    |        | 3      | 5              | 3    | 3      | 2      | 2              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1985/86       | 50                     | 50                      | 7         | 5              | 3    |        | 5      | 7              | 5    | 4      | 1      | 2              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1986/87       | 57                     | 57                      | 8         | 5              | 3    |        | 5      | 8              | 5    | 4      | 1      | 2              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1987/88       | 79                     | 79                      | 10        | 8              | 4    |        | 6      | 10             | 6    | 5      | 1      | 2              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |
| 1988/89       | 90                     | 90                      | 13        | 9              | 6    |        | 6      | 12             | 6    | 5      | 1      | 2              |      |        |          |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |                |      |        | 1         |

Table 1: Special education classes and teachers, 1979-80 to 1988-89, by educational district.
<table>
<thead>
<tr>
<th>Academic year</th>
<th>Total number of students</th>
<th>Abu Dhabi</th>
<th>Al Ain</th>
<th>Dubai</th>
<th>Sharjah</th>
<th>Ajman</th>
<th>Al-Ain</th>
<th>Ras Al-Khaimah</th>
<th>Umm Al-Qaiwain</th>
<th>Fujairah</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979/80</td>
<td>41</td>
<td>8</td>
<td>17</td>
<td>-</td>
<td>9</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1980/81</td>
<td>101</td>
<td>16</td>
<td>17</td>
<td>-</td>
<td>10</td>
<td>22</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1981/82</td>
<td>148</td>
<td>16</td>
<td>23</td>
<td>7</td>
<td>15</td>
<td>27</td>
<td>9</td>
<td>17</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>1982/83</td>
<td>209</td>
<td>16</td>
<td>23</td>
<td>7</td>
<td>15</td>
<td>39</td>
<td>8</td>
<td>18</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>1983/84</td>
<td>295</td>
<td>15</td>
<td>24</td>
<td>10</td>
<td>15</td>
<td>39</td>
<td>8</td>
<td>15</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>1984/85</td>
<td>291</td>
<td>22</td>
<td>28</td>
<td>15</td>
<td>17</td>
<td>17</td>
<td>41</td>
<td>28</td>
<td>24</td>
<td>24</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>1985/86</td>
<td>251</td>
<td>56</td>
<td>42</td>
<td>25</td>
<td>17</td>
<td>41</td>
<td>55</td>
<td>55</td>
<td>42</td>
<td>25</td>
<td>42</td>
<td>25</td>
</tr>
<tr>
<td>1986/87</td>
<td>515</td>
<td>65</td>
<td>42</td>
<td>24</td>
<td>17</td>
<td>44</td>
<td>67</td>
<td>40</td>
<td>34</td>
<td>9</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>1987/88</td>
<td>632</td>
<td>97</td>
<td>63</td>
<td>30</td>
<td>23</td>
<td>50</td>
<td>81</td>
<td>40</td>
<td>43</td>
<td>41</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>1988/89</td>
<td>693</td>
<td>97</td>
<td>69</td>
<td>37</td>
<td>9</td>
<td>48</td>
<td>84</td>
<td>44</td>
<td>43</td>
<td>43</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>
III. EFFORTS UNDERTAKEN BY THE MINISTRY OF LABOUR AND SOCIAL AFFAIRS
FOR THE CARE AND REHABILITATION OF DISABLED PERSONS

The Ministry of Labour and Social Affairs began to demonstrate interest in disabled persons and methods of caring for them in 1981, at the time of the
commemoration of the International Year of Disabled Persons. This interest led to the opening by the Ministry of two Centres for the Care and
Rehabilitation of Disabled Persons, one in Dubai and the other in Abu Dhabi.

The two Centres endeavour to provide educational, social and
psychological services to disabled children, in accordance with a series of
general principles, as follows:

(a) To ensure the child's optimum intellectual development, subject to
his abilities;

(b) To ensure the optimum development of the child's knowledge and
learning, subject to his abilities and talents, particularly with respect to
progress in language, arithmetic, physical growth and everyday social skills;

(c) To ensure the child's optimum social development for the purposes of
social adjustment and appropriate interaction with others in his family and
community environment;

(d) To ensure the child's optimum physical development and use of motor
skills;

(e) To ensure the child's optimum development in terms of health,
proportioned bodily growth and resistance to disease;

(f) To ensure the optimum gradual and integrated growth of the disabled
person in such a way that he may be guided towards the vocational tasks of
which he is capable and be trained to earn his living in an honourable manner;

(g) To ensure that the disabled person achieves an appropriate sense of
well-being, assurance and proper interaction with others in everyday
situations;

(h) To ensure the optimum sound development of the disabled child's
personality, in such a way that he becomes a fit citizen living in peace and
harmony with his community.

Each of the two Centres caters to both male and female nationals of the
United Arab Emirates suffering from mental retardation, deafness, loss of
vision and motor disabilities, as well as a few cases of cerebral palsy and
multiple disabilities.

Each Centre operates through specialized units which independently - in
the vocational unit attached to each section - provide the services required
by individuals in each category of disability, from the preparatory level to the conclusion of training.

The sections in each Centre are as follows:

(a) The intellectual development section, and its vocational unit;

(b) The section for the deaf, and its vocational unit;

(c) The section for the blind, and its vocational unit;

(d) The section for victims of paralysis, and its vocational unit.

The numbers of those making use of the services offered at the two centres are distributed, by category of disability, as follows:

<table>
<thead>
<tr>
<th>Disability</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing disability</td>
<td>84</td>
</tr>
<tr>
<td>Visual disability</td>
<td>12</td>
</tr>
<tr>
<td>Motor disability</td>
<td>25</td>
</tr>
<tr>
<td>Mental retardation</td>
<td>145</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>266</strong></td>
</tr>
</tbody>
</table>

Of the total numbers shown in the paragraph above, 128 cases are at the Abu Dhabi Centre for the Care and Rehabilitation of Disabled Persons (85 males and 43 females) and 138 at the Dubai Centre (90 males and 48 females). The ages of those at both Centres range from five to thirty.

The education and training schedule for the various categories of disability is organized as follows:

(a) For the deaf: primary level (6 years, not counting kindergarten); vocational preparation level (2 years); vocational training level (4 years);

(b) Intellectual development: primary level (8 years, including kindergarten); vocational preparation level (1 year); vocational training level (4 years);

(c) For the blind: primary level (6 years); preparatory level (3 years); vocational training (2 years), or continuation of academic studies at Ministry of Education schools;

(d) For victims of paralysis: primary level (3 years), followed by studies at Ministry of Education schools.

The growth of the two Centres during the time since they were founded may be seen from the figures in table 3.
Table 3. Numbers of classes and students at the Abu Dhabi and Dubai Centres for the Care and Rehabilitation of Disabled Persons, by year

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Number of classes</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981/82</td>
<td>19</td>
<td>123</td>
</tr>
<tr>
<td>1982/83</td>
<td>22</td>
<td>163</td>
</tr>
<tr>
<td>1983/84</td>
<td>28</td>
<td>192</td>
</tr>
<tr>
<td>1984/85</td>
<td>34</td>
<td>205</td>
</tr>
<tr>
<td>1985/86</td>
<td>35</td>
<td>220</td>
</tr>
<tr>
<td>1986/87</td>
<td>41</td>
<td>241</td>
</tr>
<tr>
<td>1987/88</td>
<td>46</td>
<td>257</td>
</tr>
<tr>
<td>1988/89</td>
<td>48</td>
<td>266</td>
</tr>
</tbody>
</table>

The figures in table 3 indicate that the number of classes has increased by 150 per cent since 1981, while the number of students has risen by 100 per cent. Since the increase in the number of classes is greater than the increase in numbers of students, we can expect an improvement in performance, by virtue of the smaller number of students in each class. The number of students in a class presently varies between five and six, which is a good average.

There are currently 50 teachers and assistants at the two Centres (9 male teachers and 3 male assistants, for a total of 12; and 30 female teachers and 8 female assistants, for a total of 38). There are also 6 teachers of technical vocation.

In addition to the teachers, there are 3 experts in psychology, 6 experts in social work, 1 general physician, 6 nurses and 1 physiotherapy expert.

The administrative corps consists of 2 directors (one for each Centre), 2 deputy directors, 2 administrative supervisors and 5 heads of section.

IV. GOVERNMENT POLICIES AND RECOMMENDATIONS

The key to establishing an effective programme for the care of disabled persons lies in the training of staff in various occupational fields, such as health, education and social services. These multi-specialized professionals must collaborate closely to assess the requirements for special education and treatment programmes and to develop curricula and teaching methods which will meet these requirements. The inauguration of a programme to train special education teachers, under the auspices of the United Arab Emirates University, may represent a positive step in this direction. However, attention must also be paid to the training of needed technicians in other fields such as health, psychology and social services.
There is at present a lack of basic information and data on the incidence of different disabilities in the country: such information would constitute a basis for any planning of special education and other programmes for the care of disabled persons. An effort must be made to encourage the provision of such information from various sources, including the conduct of surveys and the acquisition of census data, etc.

The educational process in the country's special education classes and Centres for the Care and Rehabilitation of Disabled Persons is, to a large extent, based on the curricula of normal schools. Consideration should be given to the possibility of developing educational curricula which are more appropriate for special categories and more responsive to their needs. An endeavour should also be made to develop basic structures in support of the production of materials appropriate to such curricula, together with teaching materials, appropriate tools and technological aids which would be of positive benefit to the process of educating disabled persons.

The idea of continuing education is now widely accepted, meaning that education does not end when one leaves school. Although education is now available to school-age disabled children, the principle of continuing education requires that more attention be devoted to the vocational education and training of disabled adults.

Sources

1. Information and data were obtained from interviews with officials during a visit to the United Arab Emirates (27-29 March 1989). Foremost among these officials were:
   
   (a) Aminah Ahmad Abdullah, Head of the Special Education Unit (Ministry of Education);

   (b) Abd al-Latif Ahmad al-Rais, Director of the Dubai Centre for the Care and Rehabilitation of Disabled Persons, and his staff;

   (c) Maryam Muhammad Kalfan al-Rumi, Director of the Abu Dhabi Centre for the Care and Rehabilitation of Disabled Persons, and her staff.

2. Regulations governing special education classes, published by the Special Education Unit, incorporating Ministerial Decision No. 385/2 of 1988.

3. Seminar on slow learners: ways of identifying them and caring for them in the United Arab Emirates, 4-6 February 1989.

4. Reports of the Abu Dhabi and Dubai Centres for the Care and Rehabilitation of Disabled Persons.
XXXIII. STUDY OF THE DISABLED IN THE YEMEN ARAB REPUBLIC

by

Hussein Ahmed al-Husni
University of Aden
CONTENTS

Page

Summary................................................................. 591
Introduction......................................................... 594

Chapter

I. GEOGRAPHICAL SITUATION AND POPULATION OF THE YEMEN ARAB REPUBLIC.. 594
   A. Geographical situation........................................ 594
   B. Population.................................................... 595

II. ECONOMIC AND SOCIAL DEVELOPMENT PLANS.......................... 596

III. GOVERNMENT POLICIES........................................... 597
   A. Association for the Care and Rehabilitation of the Disabled... 598
   B. Co-operation concerning the disabled.......................... 603

IV. INSTITUTES AND SERVICES......................................... 603
   A. Centres for the Care and Rehabilitation of the Blind........ 603
   B. Institute of Light for the Blind.............................. 603
   C. Association of Persons with Motor Disabilities.............. 604
   D. Centre for Rehabilitation, Training and Physiotherapy....... 604
   E. Projects for the disabled under the Third Five-Year Plan..... 606

V. NUMBER OF DISABLED............................................... 607

VI. CONCLUSION.......................................................... 609

LIST OF TABLES

1. Population according to governorate and governorate centre........ 595

2. Artificial limbs and medical aids fitted at the Centre for
   Rehabilitation, Training and Physiotherapy in 1988.............. 605

3. Types of disability and their percentage of the total number of
disabled by governorate.............................................. 608
CONTENTS (continued)

4. Percentage of disabled persons in the population by governorate......  608
5. Percentage of disabled in the country by governorate.................  609

References.................................................................  611
Summary

The Yemen Arab Republic is concerned with the disabled as a social category. It endeavours to co-ordinate the efforts of all the ministries and institutions concerned with providing social and health care to the disabled. It has enacted appropriate legislation and continues to supplement such legislation for the care of this social category in order to help it to integrate and participate in the development of the community. It does this through establishing rehabilitation and training programmes with the aim of integrating the disabled in the community.

According to the Second General Population Census (1986), the total population of the country was 9,274,173.

1. Number of disabled

No social or economic surveys have been carried out in the Yemen Arab Republic to ascertain the number of disabled persons and there are no statistics on the subject.

This problem was taken into account when drawing up the questionnaire for the Second General Population Census (1986). The census questionnaire included a question on the various types of disability. However, the final results of the census have not yet been published.

A study undertaken by the Central Planning Organization in 1989 was based on the preliminary results of the 1986 census, covering eight out of eleven governorates. The study showed that the average proportion of disabled persons in the population for the eight governorates was 2.2 per cent. An examination of the study shows that the proportion of disabled persons is greater in the country than in towns. This may be due to the dearth of health services, undernourishment and the low level of consciousness in the country.

2. Government policies

The State has devoted attention to health and social care for the disabled and has enacted laws which guarantee their rights regarding medical, social and educational welfare, as well as their right to work, which guarantees their human dignity as workers or active and productive members of the community.

In the context of the State's concern for the disabled, a Study Workshop was held in San'a in April 1989 on the Role of the Community in the Rehabilitation of the Disabled, in which ministries and institutions concerned with health and social care participated. Among the topics discussed at the Workshop was the role and contribution of the family and the community in the provision of health and social care to the disabled through programmes of basic community rehabilitation. The Workshop recommended taking quick steps to proclaim a national committee for the care and rehabilitation of the physically, mentally and psychologically disabled.
3. Institutes and services

There are two Centres for the Care and Rehabilitation of the Blind, in San'a' and Al-Hodeida. A total of 89 patients benefited from the Institute of Light for the Blind in San'a' in 1988. There is also a Centre for Rehabilitation, Training and Physiotherapy in San'a, which was officially opened in 1982. It provides services to the ill, disabled persons, victims of work-related accidents, traffic accidents and injuries sustained in the defence of the country. It has a Physiotherapy Department, which handled a total of 75,586 patients during 1988, who were given various types of physiotherapy treatment, such as infra-red rays, massage, electric vibrations and physical exercises. The Centre also has other departments. In 1988, a total of 2,901 persons were fitted with artificial limbs or prosthetic appliances in the Centre. The Centre aims to expand its services in the future and intends to establish a Department of Osteopathy and Plastic Surgery which will be well-equipped with appliances and patients' beds.

The Third Five-Year Economic and Social Development Plan (1987-1991) is aimed at guaranteeing social welfare to the blind, the disabled and the elderly and helping them with rehabilitation and training. The Third Five-Year Plan aims to complete projects currently being implemented in San'a' and Al-Hodeida in order to increase the capacity of social guidance centres, to develop the Institutes of Light for the Care and Rehabilitation of the Blind in San'a' and Al-Hodeida. During the Plan various other projects will be completed, such as the Disabled Rehabilitation Project in San'a', the Occupational Health and Safety Project in San'a', the country-wide Nutrition and School Health Project, the country-wide Basic Services Project, the country-wide Preventive Medicine Project and the Artificial Limb Centres Project in San'a', Ta'izz, Al-Hodeida and Hajjah. This last project is aimed at manufacturing artificial limbs and spare parts, in addition to rehabilitation and physiotherapy.

4. Conclusion

In conclusion, among the recommendations made by the study were the following:

(a) To take quick steps to form a national committee for the care and rehabilitation of the physically, mentally and psychologically disabled;

(b) To create a national statistical system to report on cases of disability and the reasons for them (congenital, traffic accidents, work-related accidents, other);

(c) To encourage the involvement of families in providing social and health care to the disabled and to hold training courses to train members of the community in such care, in order to alleviate the burden on the State of establishing and running such institutions;
(d) To study the trades and professions for which the disabled can be trained in order for this category to become a productive social group;

(e) To grant a greater role to the Local Councils for Co-operative Development in informing public opinion about the disabled and urging members of the community to participate in social and health care projects for the disabled.
INTRODUCTION

The State is concerned with the disabled as a social category. It endeavours to co-ordinate the efforts of all the ministries and institutions concerned with providing social and health care to the disabled. It has enacted appropriate legislation and continues to supplement such legislation for the care of this social category in order to help it to integrate and participate in the development of the community. It does this through establishing rehabilitation and training programmes with the aim of integrating the disabled in the community.

The State devotes attention to the disabled. The Third Five-Year Plan (1987-1991) includes numerous projects for the social welfare of the blind, the disabled and the elderly in order to help them with rehabilitation and training so that all may take part in the process of development. Projects currently being implemented in San'a and Al-Hodeida will be supplemented with a view to increasing their capacity. The Third Five-Year Plan has also devoted attention to country-wide projects on health, vocational safety, rehabilitation of the disabled, nutrition and school hygiene, as well as to the project on primary health care in order to provide prevention and treatment services to 50 per cent of the population during the period of the Plan. There are also projects on preventive medicine and artificial limb centres in San'a, Ta'izz, Al-Hodeida and Hajjah.

All of these projects will permit the development of social care and health services for the disabled and curtail the increase in the numbers of the disabled. Communal participation and the characteristic spirit of co-operation and collaboration of Yemeni society in numerous development projects will have fruitful consequences for the support and aid of institutions for the various categories of the disabled.

I. GEOGRAPHICAL SITUATION AND POPULATION OF THE YEMEN ARAB REPUBLIC

A. Geographical situation

The Yemen Arab Republic (henceforth referred to as Yemen) is situated in the south-western part of the Arabian peninsula. It is bordered on the north by Saudi Arabia, on the south and south-east by Democratic Yemen (the southern portion of the Yemeni homeland), on the west by the Red Sea and on the east by the Empty Quarter Desert.

1. Natural regions

The country is divided into four natural regions, each with its characteristic climate and flora:
1. The low-lying coastal plain or Tihamah, which runs along the Red Sea in the west;

2. The central foothills and middle heights;

3. The central highlands;

4. The eastern semi-desert plateau.

2. Administrative divisions

Yemen is divided into 11 governorates, which in turn are divided into 40 sub-governorates containing 197 districts. Usually, the governorate centres are towns from which the governorates take their names.

B Population

Table 1. Population according to governorate and governorate centre

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Governorate</th>
<th>Percentage</th>
<th>Governorate centre</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>San'a'</td>
<td>1 856 876</td>
<td>20.0</td>
<td>427 150</td>
<td>47.1</td>
</tr>
<tr>
<td>Ta'izz</td>
<td>1 643 901</td>
<td>17.7</td>
<td>178 043</td>
<td>19.6</td>
</tr>
<tr>
<td>Al-Hodeida</td>
<td>1 294 359</td>
<td>14.0</td>
<td>155 110</td>
<td>17.1</td>
</tr>
<tr>
<td>Ibb</td>
<td>1 511 879</td>
<td>16.3</td>
<td>48 806</td>
<td>5.4</td>
</tr>
<tr>
<td>Dhamar</td>
<td>812 981</td>
<td>9.3</td>
<td>47 733</td>
<td>5.3</td>
</tr>
<tr>
<td>Hajjah</td>
<td>897 814</td>
<td>10.7</td>
<td>15 878</td>
<td>1.8</td>
</tr>
<tr>
<td>Sa'dah</td>
<td>344 152</td>
<td>3.6</td>
<td>11 759</td>
<td>1.3</td>
</tr>
<tr>
<td>Al-Mahwit</td>
<td>322 226</td>
<td>3.5</td>
<td>5 166</td>
<td>0.6</td>
</tr>
<tr>
<td>Al-Bayda'</td>
<td>381 249</td>
<td>4.1</td>
<td>12 370</td>
<td>1.4</td>
</tr>
<tr>
<td>Ma'rib</td>
<td>121 437</td>
<td>1.3</td>
<td>1 457</td>
<td>0.2</td>
</tr>
<tr>
<td>Al-Jawf</td>
<td>87 299</td>
<td>0.9</td>
<td>2 216</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Total 9 274 173 100.0 905 688 100.0


The urban population forms 11.4 per cent of the total. In San'a' Governorate the proportion is 19.5 per cent, in Ta'izz 10.2 per cent, Al-Hodeida 29.9 per cent and Al-Bayda' 12.5 per cent. In the remaining governorates the proportion ranges between 2.1 per cent and 6.2 per cent.
II. ECONOMIC AND SOCIAL DEVELOPMENT PLANS

The Three-Year Economic and Social Development Programme was implemented, followed by the First and Second Five-Year Plans over the ten years between 1977 and 1986. These plans made it possible to build production and service infrastructures, which subsequently contributed to development and the raising of the standard of living and level of culture of the population.

The Third Five-Year Economic and Social Development Plan (1987-1991) is based on long-range future considerations for economic and social development which spring from the long-term objectives of the glorious September revolution, from the principles of national work, as enshrined in the National Charter, and the future development guidelines drawn up by the Government until 2001. The Plan is aimed at increasing local production and ensuring a growing measure of self-sufficiency and food security.

As far as possible, efforts are being made to form and qualify specialist, technical and management staff and to provide the Yemeni work-force with vocational knowledge and skills by developing the education, rehabilitation and training systems and to link elements of their curricula with the requirements for development, with job and production opportunities opened up by development areas in the various economic and social sectors and activities. First priority in developing commodity production sectors is given to agriculture and fishing, the extraction of crude oil and natural gas and mineral resources for manufacturing industries which rely on local raw materials and finally to the energy, fuel and water resource requirements of that development. Equal priority is also given to the services necessary to develop Yemeni human resources, especially services in education, rehabilitation, culture, health, medical treatment and prevention. In addition, attention is devoted to promoting the environment and protecting it from pollution. There is a strong trend in favour of supporting regional and local development potential, reaping maximum benefit from local council organizations and popular initiatives in mobilizing idle or unutilized resources and encouraging mass participation in development efforts at the regional, local and community levels. The Plan takes into consideration the need to strengthen development activities and projects in order to achieve a just distribution of resources in favour of deprived and remote areas. This should help to narrow the disparity between town and country regarding the quality of life and opportunities for work and production.

Investments of the Third Five-Year Plan totalled 308,582 million Yemeni rials (YRls) (= US $31,487.9 million).1/

1/ The United States dollar was worth YRls 9.80 in 1987.
YRls 24,970 million, or 64.72 per cent of total investments were allocated to increasing production capacity and raising employment levels in the commodity sectors of agriculture, foodstuffs, oil and gas, the manufacturing industries, electricity, water, construction and the economic services sector.

YRls 13,612 million, or 35.28 per cent of total investments of the Third Five-Year Plan were allocated to both central and local public services provided free or at less than cost price by the Government and local councils. Such services included public administration, education, health, security, defence, culture, information, youth activities and social services.

III. GOVERNMENT POLICIES

The Government's care for the disabled is demonstrated by the appropriate legislation it has enacted. It is continuing these policies in order to care for this category of the community and give it the opportunity of joining in and participating in community development. It does this through establishing rehabilitation and training programmes. The standing Constitution of the Yemen Arab Republic, adopted in 1973, stipulates the following:

"Article 32. Education is a right of all Yemenites, guaranteed by the State through the establishment of schools and cultural and educational institutions and their expansion within the means available. The State devotes particular attention to the physical, mental and moral growth of young people.

"Article 33. Health care is a right of all Yemenites, guaranteed by the State through the establishment of hospitals and health institutions and their expansion within the means available.

"Article 35. The State, according to the law, guarantees support for the family, protection for motherhood care for children, the disabled and the elderly."

The National Charter, published on 28 August 1982, guarantees citizens social justice and decent human living conditions for all members of the community, noting that

"social solidarity is one of the most important aspects of social justice, through which decent human living conditions may be achieved to provide each individual with at least the basic living necessities. We want social justice to free individuals from want, subjugation and economic exploitation and to provide the appropriate conditions to enable each individual to make the fullest use of his qualifications and potential."
The State devotes attention to the disabled; since the establishment of the Ministry of Social Affairs and Labour in March 1974 it has made a number of attempts to provide social services to the disabled and to integrate them in the community. Decree 133 (1976) of the Command Council redefined and reorganized the sphere of authority of the Ministry of Social Affairs and Labour and set up the Department of Social Welfare, which is the official body responsible for the rehabilitation of the disabled and the provision of the means to ensure their rehabilitation and re-integrate them in the community. Republican Decree 15 (1980) again reorganized the Ministry and enabled it to do much to build up basic services for the disabled. The first step was to gather the necessary data to identify the extent of the problem and ascertain the number of disabled persons, their categories and geographical distribution within the country.

The State issued Social Security Law 2 (1980) which specified the right of the disabled to rehabilitation, training and employment. This was the first piece of social legislation that concerned itself with the social and vocational rehabilitation and employment of the disabled. Among its provisions were the following:

"**Article 32.** The Social Affairs Department of the Ministry shall grant disabled persons who have undergone rehabilitation a Disabled Certificate showing the profession for which they have been rehabilitated.

"**Article 33.** The Social Affairs Department of the Ministry shall work in collaboration with the Ministry's Agency for the Labour Sector to get trainees from the Institute of Vocational Training jobs commensurate with their abilities and potential in government and non-government institutions and organizations. These bodies shall accept candidates proposed by the Department."

In preparation for the International Year of the Disabled (1981) a decree was issued in February 1981 by the Council of Ministers to form a National Committee for the Preparation of the International Year of the Disabled. The Committee included a number of experts and other people concerned with the disabled from the relevant ministries, institutions and popular organizations, however it did not continue its activities. The most significant project it carried out was to draw up the statutes for the National Association for the Care and Rehabilitation of the Disabled, which were adopted by the Council of Ministers, but have not yet been issued.

A. **Association for the Care and Rehabilitation of the Disabled**

The statutes of the Association for the Care and Rehabilitation of the Disabled laid down the following objectives for the Association:

The Association endeavours to contribute to the care and rehabilitation of the disabled and provides the necessary elements for physical rehabilitation, training, guidance and employment, in accordance with State
policy and the means of the Association. In particular, it aims to achieve the following:

(a) To concentrate the efforts of individuals and organizations in the field of care and rehabilitation for the disabled and encourage the community to donate time, effort and money to promote the dissemination of the main services for the disabled, in collaboration and co-ordination with the relevant administrative authorities;

(b) To contribute to study and research on care and rehabilitation, to improve the situation of the disabled by diagnosing disabilities and providing the necessary equipment and tools for examinations and tests, benefiting from the most up-to-date technological products, and medical, scientific, psychological and educational knowledge concerning the rehabilitation of the disabled, and, in general, by procuring advanced, effective technology which will enable the disabled to integrate and participate in everyday life;

(c) To help to establish and manage care and rehabilitation institutions for the disabled in order to involve them, together with the non-disabled, in the fields of education, training and work, and to organize collaboration between these institutions and families of the disabled in order to help the families understand their role in the treatment, rehabilitation and integration of the disabled;

(d) To work to maintain the rights of the disabled through encouraging the State to enact the necessary legislation and to follow up the implementation of the rights guaranteed by the Labour Law and the Social Security Law, as well as other laws for the disabled;

(e) To help to rehabilitate the disabled by providing social, medical, psychiatric, teaching, vocational and educational services to enable them to overcome the effects of their disabilities; to endeavour to obtain from the relevant authorities employment for each disabled person according to his abilities and potential; to rehabilitate severely disabled persons who are able to work part-time and to guide them to fields of work commensurate with their real abilities; to care for disabled persons who are completely unable to work through helping to establish specialized centres and providing social, medical, psychiatric and other services in such a way as to ensure a peaceful, dignified existence;

(f) To participate as far as possible in national, Arab and international seminars and conferences on the disabled or on social problems;

(g) To help to establish programmes of artistic, literary, traditional crafts and musical activities; to organize festivals for such activities by the disabled; to organize camps and suitable sporting and recreational activities; to participate in annual exhibitions and festivals for the disabled at home and abroad;
(h) To co-ordinate with the Ministry of Social Affairs and Labour and with other relevant organizations in order to achieve the objectives of the Association, to reduce the phenomenon of disability in the community, to raise public awareness through the media and educational institutions and to hold scientific conferences and seminars on disability in general;

(i) To establish fruitful relations with relevant Arab, regional and international bodies and organizations with the aim of reaping maximum benefit from their expertise and technical and material aid in the field of care for the disabled, after consultation and co-ordination with the relevant administrative authorities and with their approval.

The organizational structure of the Association will consist of a General Assembly and a Board of Directors. The General Assembly is the governing body of the Association, which supervises its affairs; the General Assembly is composed of individuals and legal entities. Its terms of reference are as follows:

(a) To elect members to the Board of Directors by secret ballot;

(b) To draw up the general plan and to take decisions and make recommendations concerning the activities of the Association;

(c) To discuss, adopt and amend the statutes and rules and regulations;

(d) To discuss and approve the final accounts and the annual report presented by the Board of Directors.

The Board of Directors is the executive and administrative authority of the Association. It enjoys the powers and prerogatives necessary to achieve the objectives of the Association, which it represents to the Government authorities and to the judiciary. The Board of Directors is composed of seven volunteer members elected by the General Assembly by secret ballot under the supervision of the relevant administrative authority. Its terms of reference are as follows:

(a) To prepare the annual plan within the framework of the objectives of the Association and the decisions of the General Assembly;

(b) To prepare the final accounts and the annual report for submission to the General Assembly at its annual meeting.

The State has devoted attention to health and social care for the disabled and has enacted laws which guarantee the free exercise of their rights regarding medical, social and educational welfare, as well as their right to work, which guarantees their human dignity as workers or active and productive members of the community.

State welfare for the disabled will increase, as will its encouragement of popular participation and involvement of the community in the alleviation
of the problems of the disabled, with the co-operation of charity institutions with the relevant institutions in providing social and health care to the disabled.

In the context of the State's concern for the disabled, a Study Workshop was held in San'a' from 3 to 5 April 1989 on the Role of the Community in the Rehabilitation of the Disabled, in which ministries and institutions concerned with health and social care participated. Among the topics discussed at the Workshop was the role and contribution of the family and the community in the provision of health and social care to the disabled through programmes of basic community rehabilitation. The Workshop felt there was a need to increase family and community awareness through the media, to change attitudes towards the disabled and boost acceptance of the integration of the disabled and their participation in building the community. The Workshop made the following recommendations:

(a) To take quick steps to proclaim a national committee for the care and rehabilitation of the physically, mentally and psychologically disabled. The Ministry of Social Affairs and Labour should follow up this proclamation and the Committee should be composed of all the relevant bodies, such as the Ministry of Social Affairs and Labour, the Ministry of Health, charity organizations, the University of San'a', the Central Planning Organization and Local Councils for Co-operative Development. This Committee should undertake full-length studies and implement policies of care and rehabilitation. The Association for the Care and Rehabilitation of the Disabled should also be included in the Committee;

(b) To propose legislation and to review existing legislation with a view to putting an end to discriminatory practices against the physically, psychologically and mentally disabled in various fields such as education, training and work;

(c) To urge the Ministry of Social Affairs and Labour to help make the disabled a productive social group and to increase material support to them;

(d) To work to increase community awareness and interest in the problems of the disabled by proclaiming a national day of the disabled and making fullest use of the media;

(e) To urge the health sector to work to curtail the occurrence of disabilities, to seek early detection, to provide treatment or to refer cases to specialists in the early stages;

(f) To seek the aid of international organizations and bodies such as voluntary international organizations and others in order to create permanent work and training services on all levels;

(g) To request the Ministry of Social Affairs and Labour and all other relevant ministries to follow up the recommendations of this Study Workshop.
The services currently available are provided by various government ministries such as Health, Education and Instruction, Social Affairs and Labour, etc. It is imperative to co-ordinate activities between them so that all the efforts exerted should flow in the same direction towards the objective, which is the rehabilitation of the disabled. To this end, the Study Workshop recommended that:

(a) The Ministry of Information and Culture should intensify its programmes to involve the community in rehabilitation for the disabled;

(b) The Ministry of Awqaf (Religious Endowments) and Religious Guidance should organize religious seminars and through Friday sermons alert the public to the extent of the problem and urge it to help to solve it by the various ways and means available to it;

(c) Local Councils for Co-operative Development should also work to alert the public to the problem;

(d) The Yemeni Women's Association should work actively to raise the awareness of the family and the community through its centres, through field trips and through collecting donations for the disabled;

(e) The establishment of the Association for the Care and Rehabilitation of the Disabled should be commended and it should be invited to unify and intensify its efforts.

A committee was formed to follow up the implementation of the recommendations by the relevant authorities. This committee included delegates from the Ministry of Health, the Ministry of Education and Instruction, the Ministry of Information and Culture, the Red Cross, the University of San'a', the Central Planning Organization, the Association for the Care and Rehabilitation of the Disabled, the Preventive Medicine Project and a representative from the World Health Organization (WHO);

(f) Government and popular efforts should be redoubled to provide social and health care to the disabled and, as part of government policy, the Ministry of Social Affairs and Labour should work to establish popular associations for the social welfare of the disabled in order to help to integrate the disabled in the community and not to consider them as pariahs.

The State is also concerned with primary health care. Since 1980 the Primary Health Care Programme has been implemented with the aim of achieving health for all in all regions of the country. It has made tangible progress in the dissemination of health services and the generalization of prevention and treatment in the countryside. By 1988, over 300 health centres and clinics and over 400 primary health care units had been built. The personnel necessary to staff these centres and units had also been trained, as well as health care instructors and midwives with a view to combating endemic and infectious diseases, providing care for mothers and children, preventing the
spread of infectious children's diseases by vaccination and working to improve nutrition in the countryside.

In addition, the Primary Health Care Programme devotes great attention to guidance and health education in order to ensure that individuals make a positive contribution to improving their own levels of health and prevention. Attention has also been devoted to child health and immunizing them against children's, and especially infants' diseases such as tuberculosis, measles, polio, asphyxia, whooping cough and tetanus.

B. Co-operation concerning the disabled

The State endeavours to strengthen relations with friendly and fraternal countries and international organizations concerned with care for the disabled such as the International Labour Organisation (ILO), the United Nations Development Programme (UNDP) and WHO.

Yemen is a member of the International Federation of the Disabled and was a founding member of the International Federation of the Blind (now the World Blind Union) in 1984. Yemen has relations with associations for the disabled in numerous Arab countries such as Kuwait, Tunisia, the Sudan, as well as with the Regional Bureau of the Middle East Committee for the Welfare of the Blind. Yemen participates in various camps for the blind and in regional and international conferences. Since 1981-1983 there have been contacts with relevant Arab organizations such as the Arab League Educational, Cultural and Scientific Organization (ALECSO) and the Arab Family Organization, as well as with certain Arab countries in order to obtain grants for the rehabilitation of 40 deaf, dumb, mentally retarded and physically disabled children. By 1985 such children had been sent to Kuwait, the Syrian Arab Republic and the United Arab Emirates.

IV. INSTITUTES AND SERVICES

A. Centres for the Care and Rehabilitation of the Blind

There are two Centres for the Care and Rehabilitation of the Blind, in San'a' and Al-Hodeida, under the supervision of the Ministry of Social Affairs and Labour. These centres provide social, health and psychiatric care as well as comprehensive assistance for their pupils. They also carry on educational and cultural activities, such as organizing festivities and trips. The Ministry of Education and Instruction curriculum is followed in Braille.

B. Institute of Light for the Blind

The Institute of Light for the Blind was established in 1967 in San'a'. It provides educational, social and cultural services, as well as boarding facilities. A total of 83 patients, including three girls, benefit from its services.
C. Association of Persons with Motor Disabilities

The Association of Persons with Motor Disabilities was established in September 1988, with headquarters in San'a'. It carries on cultural, social and sporting activities.

D. Centre for Rehabilitation, Training and Physiotherapy

The Centre for Rehabilitation, Training and Physiotherapy was officially opened in 1982 as a health service centre under the Ministry of Health. It is the only such centre in the country and its headquarters are in the capital, San'a'. It provides services to the ill, disabled persons, victims of work-related accidents, traffic accidents and injuries sustained in the defence of the country. Patients come from all parts of the country, sometimes being referred from hospitals and health centres. In order to provide the services for which it was set up, the Centre is divided into a number of departments, as follows:

1. Physiotherapy Department

The Physiotherapy Department is one of the most important in the Centre, in view of the great number of cases treated and patients who consult it. A total of 75,586 patients were handled by the Department during 1988 and given various types of physiotherapy treatment, such as infra-red rays (14,902), massage (28,850), electric vibrations (9,864) and physical exercises (21,970). The Physiotherapy Department is divided into men's and women's sections each of which has a physical exercise room and an electrotherapy room. Cases are treated with electrical equipment providing massage, infra-red rays, hot compresses and electric vibrations. Types of ailments included:

(a) Total and partial paralysis in children and adults;
(b) Muscular and nervous dystrophy;
(c) Accident-related injuries;
(d) Burns;
(e) Certain internal diseases;
(f) Diseases of the spinal column and slipped discs;
(g) Gynaecological disorders.

2. Department of Casts and Measurements

Measurements are taken of the patient, according to each case, for artificial limbs and prosthetic appliances. Then plaster casts are made.
3. **Department of Upper and Lower Limbs**

This department makes various sorts of limbs: above the knee, below the knee and artificial kneecaps. It also produces wooden legs and crutches locally.

4. **Department of Arms**

This department repairs artificial arms according to each case: above or below the elbow. There are two types of artificial arms: mechanical and electronic.

5. **Department of Metal Prosthetic Appliances**

This department makes and repairs wheelchairs used by paralytics and other persons unable to get around by themselves. During 1988, the Centre was able to design and produce sufficient wheelchairs for the use of the disabled, thus curtailing imports. The Department also makes iron and aluminium crutches and walkers and repairs prosthetic appliances for certain illnesses such as spinal supports and appliances for persons with partial paralysis or muscular dystrophy.

The Centre also has Departments of Moulding and Plastics; Medical Footwear; Belts and Leatherwork; and a Training Department. The Training Department gives patients training in how to walk with artificial limbs and prosthetic appliances.

The Centre aims to expand its services in the future and intends to establish a Department of Osteopathy and Plastic Surgery which will be well-equipped with appliances and patients' beds.

In 1988, a total of 2,901 persons were fitted with artificial limbs or prosthetic appliances in the Centre, as shown in table 2:

Table 2. **Artificial limbs and medical aids fitted at the Centre for Rehabilitation, Training and Physiotherapy in 1988**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total number of artificial limbs and medical aids fitted</strong></td>
<td>2,901</td>
</tr>
<tr>
<td><strong>Artificial limbs</strong></td>
<td></td>
</tr>
<tr>
<td>Limbs below the knee</td>
<td>83</td>
</tr>
<tr>
<td>Limbs above the knee</td>
<td>95</td>
</tr>
<tr>
<td>Kneecaps</td>
<td>8</td>
</tr>
<tr>
<td>Arms</td>
<td>17</td>
</tr>
<tr>
<td>Locally-made feet</td>
<td>87</td>
</tr>
</tbody>
</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>Medical aids</th>
<th>2611</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical appliances and casts</td>
<td>371</td>
</tr>
<tr>
<td>Medical footwear</td>
<td>414</td>
</tr>
<tr>
<td>Spinal supports</td>
<td>47</td>
</tr>
<tr>
<td>Wheelchairs</td>
<td>48</td>
</tr>
<tr>
<td>Crutches</td>
<td>494</td>
</tr>
<tr>
<td>Repairs</td>
<td>603</td>
</tr>
<tr>
<td>Miscellaneous belts</td>
<td>634</td>
</tr>
</tbody>
</table>


E. Projects for the disabled under the Third Five-Year Plan

The Third Five-Year Economic and Social Development Plan (1987-1991) is aimed at guaranteeing social welfare to the blind, the disabled and the elderly and helping them with rehabilitation and training so that all may participate in development.

In order to achieve this objective, measures will be taken to establish a social security organization to implement the Social Security Law and to provide social security to persons working in the private sector, thus enhancing their stability and increasing their productivity and providing welfare to victims of work-related accidents, old age, incapacity or death.

Investments in fixed assets with a view to expanding social and labour services will be approximately YRls 173 million over the years of the Plan, 1987-1991. Of this sum, YRls 13 million will go to social security organizations.

The Third Five-Year Plan aims to complete projects currently being implemented in San'a' and Al-Hodeida in order to increase the capacity of social guidance centres, to complete and develop the Institute of Light for the Care and Rehabilitation of the Blind in San'a' and to equip and furnish the Centre for the Care and Rehabilitation of the Blind in Al-Hodeida, at a total cost of YRls 23 million.

1. Disabled Rehabilitation Project, San'a'

This project is aimed at providing social security to members of society in difficult social circumstances and to give them the appropriate training to enable them to produce in accordance with their capacities. The cost of the project is YRls 17 million.
2. **Occupational Health and Safety Project, San'a'**

This project is aimed at creating specialist supervisory personnel in the field of occupational health and safety, protecting the work-force from work hazards and training workers in industry in occupational health and safety methods. The cost of the project is YRls 15 million.

3. **Nutrition and School Health Project, country-wide**

This project is aimed at protecting pupils from diseases resulting from malnutrition by serving appropriate food and providing them with school health care. The cost of the project is YRls 22.5 million.

4. **Basic Services Project, country-wide**

This project is aimed at achieving comprehensive primary health care, including both prevention and treatment, for 50 per cent of the population during the Third Five-Year Plan. The cost of the project is estimated at YRls 400 million.

5. **Preventive Medicine Project, country-wide**

This project is aimed at protecting children from the six diseases which are responsible for 90 per cent of child deaths, by large-scale immunization, combating malaria, bilharzia and tuberculosis, and immunizing all women of child-bearing age (15-45) against tetanus. For the period of the Five-Year Plan YRls 4 million have been allocated to this project.

6. **Artificial Limb Centres Project, San'a', Ta'izz, Al-Hodeida and Hajjah**

This project is aimed at manufacturing artificial limbs and spare parts, in addition to rehabilitation and physiotherapy. Three small workshops will be set up in Ta'izz, Al-Hodeida and Hajjah to repair artificial limbs and replace parts. The cost of the project is estimated at YRls 19 million.

V. **NUMBER OF DISABLED**

No social or economic surveys have been carried out in Yemen to ascertain the number of disabled persons and there are no statistics on the subject.

This problem was taken into account when drawing up the questionnaire for the Second General Population Census (1986). The census questionnaire included a question on the various types of disability. However, the final results of the census have not yet been published.

A study undertaken by the Central Planning Organization in 1989 was based on the preliminary results of the 1986 census, covering eight out of eleven governorates, however these data did not list the disabled by age-groups.
Table 3. Types of disability and their percentage of the total number of disabled by governorate

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Paralyzed</th>
<th>Mentally retarded</th>
<th>Loss of limb</th>
<th>Deaf and dumb</th>
<th>Dumb</th>
<th>Blind</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>San'a'</td>
<td>11</td>
<td>14</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>Ta'izz</td>
<td>10</td>
<td>15</td>
<td>7</td>
<td>10</td>
<td>12</td>
<td>19</td>
<td>29</td>
</tr>
<tr>
<td>Al-Hodeida</td>
<td>8</td>
<td>14</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Dhamar</td>
<td>8</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>12</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Sa'dah</td>
<td>8</td>
<td>11</td>
<td>7</td>
<td>7</td>
<td>12</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>Al-Mahwit</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>Ma'rib</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>14</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Al-Jawf</td>
<td>6</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>13</td>
<td>26</td>
<td>26</td>
</tr>
</tbody>
</table>


The study showed that the average proportion of disabled persons in the population for the eight governorates was 2.2 per cent. This percentage appears very low at way below 10 per cent, possibly because, for a number of reasons, people are reluctant to report disabled persons in their families.

Table 4. Percentage of disabled persons in the population by governorate

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Percentage of disabled persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>San'a'</td>
<td>0.84</td>
</tr>
<tr>
<td>Ta'izz</td>
<td>1.51</td>
</tr>
<tr>
<td>Al-Hodeida</td>
<td>1.63</td>
</tr>
<tr>
<td>Dhamar</td>
<td>8.24</td>
</tr>
<tr>
<td>Sa'dah</td>
<td>1.30</td>
</tr>
<tr>
<td>Al-Mahwit</td>
<td>2.04</td>
</tr>
<tr>
<td>Ma'rib</td>
<td>1.06</td>
</tr>
<tr>
<td>Al-Jawf</td>
<td>1.12</td>
</tr>
</tbody>
</table>

An examination of the study shows that the proportion of disabled persons, as shown by table 5, is greater in the country than in towns in seven governorates (the study did not mention the capital, San'a'). This may be due to the dearth of health services, undernourishment and the low level of consciousness in the country.

Table 5. Percentage of disabled in the country by governorate

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Percentage of disabled in the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ta'izz</td>
<td>88.2</td>
</tr>
<tr>
<td>Al-Hodeida</td>
<td>71.3</td>
</tr>
<tr>
<td>Dhamar</td>
<td>92.9</td>
</tr>
<tr>
<td>Sa'dah</td>
<td>86.9</td>
</tr>
<tr>
<td>Al-Mahwit</td>
<td>80.2</td>
</tr>
<tr>
<td>Ma'rib</td>
<td>95.3</td>
</tr>
<tr>
<td>Al-Jawf</td>
<td>97.7</td>
</tr>
</tbody>
</table>


VI. CONCLUSION

The State is concerned about the disabled and it endeavours to co-ordinate the efforts of all the ministries and institutions that provide social and health care to the disabled. It has organized national seminars to enable the problems of the disabled to be studied by various government authorities and for appropriate solutions to be found for them.

In order to develop social and health care services, greater attention should be paid to involving the community in assuming some of the burdens faced by the State, in view of the scarcity of resources.

Yemeni society, with its characteristic spirit of co-operation and popular participation, should be involved in a number of development projects. If such efforts can be organized they may result in fruitful support and aid to institutions for the various types of the disabled.
In order to develop social and health care services, it is necessary:

(a) To take quick steps to form a national committee for the care and rehabilitation of the physically, mentally and psychologically disabled;

(b) To create a national statistical system to report on cases of disability and the reasons for them (congenital, traffic accidents, work-related accidents, other);

(c) To encourage the involvement of families in providing social and health care to the disabled and to hold training courses to train members of the community in such care, in order to alleviate the burden on the State of establishing and running such institutions;

(d) To draw up the appropriate legislation to provide suitable social and health care to the various categories of the disabled;

(e) To study the trades and professions for which the disabled can be trained in order for this category to become a productive social group;

(f) To work to increase social awareness of the disabled and to encourage the media to devote more attention to programmes on community involvement in care and rehabilitation of the disabled;

(g) To grant a greater role to the Local Councils for Co-operative Development in informing public opinion about the disabled and urging members of the community to participate in social and health care projects for the disabled;

(h) To found an association for the disabled and to invite them to unify and intensify their efforts;

(i) To request international organizations and bodies to help to provide continuous practical and training services at all levels;

(j) To urge the Yemeni Women's Association to contribute effectively to raising the awareness of the family and the community through its centres, through field visits and by collecting donations for the disabled;

(k) To organize training courses at home and abroad for the staff of institutions for the disabled, as well as for those working in the field of social and health care for the disabled;

(l) To develop existing social and health care services for the disabled.
References


3. قانون رقم (2) لسنة 1980 بشأن الضمان الاجتماعي - الجمهورية اليمنية - رئيسة الجمهورية ومجلس الوزراء صادر في 1 كانون الثاني/يناير 1980.


6. محمود شاهر عبد الرحمن، خدمات رعاية وتاهيل المعوقين - الجمهورية العربية اليمنية - وزارة الشؤون الاجتماعية والعدل - صنعاء (بدون سنة الإصدار).


9. مشروع النظام الأساسي لجامعية رعاية وتاهيل المعوقين - وزارة الشؤون الاجتماعية والعدل - صنعاء (بدون سنة الإصدار).