

APPENDICES

APPENDIX A

Populations Statistics

Table 1: 65+ Population Statistics in Six Countries

Country	65+ population in 2000 ~(million)	65+ population by 2050 ~(million)	65+ population by 2100 ~(million)
India	50	200	360
Brazil	10	53	64
Turkey	3.5	20	27.5
Egypt	3.0	14	34
Zimbabwe	0.5	2.0	7.5
Cambodia	0.5	1.35	7.0

Table 2: Estimated 65 + Population by 2050 and 2100

Country	In 2000~ (millions)	By the year 2050 ~(millions)	By the year 2100 ~(millions)
SEA			
India	50	200	360
Bangladesh	15	32	57
Thailand	4.0	18.5	13
Nepal	1.0	4.5	9.8
Sri Lanka	1.2	4.2	6.0
PAHO			
Brazil	10	53	64
Mexico	5.0	32	48
Argentina	4.0	10	14.5
Haiti	0.3	1.4	3.1
Cuba	1.1	3.3	2.0
EURO			
Turkey	3.5	20	27.5
Ukraine	6.6	7.5	5.0
Kazakhstan	1.0	2.5	4.0
Romania	3.0	5.0	3.6
Hungary	1.5	2.3	2.1
AFRO			
Zambia	1.0	1.0	12
Zimbabwe	0.5	2.0	7.5
Malawi	0.25	2.0	11
Central African Republic	0.2	0.5	2.2
EMRO			
Egypt	3.0	14.0	34.0
Tunisia	0.6	3.0	3.6
Lebanon	0.25	1.35	1.6

WPRO			
Cambodia	0.5	3.5	7.0
Tonga	0.006	0.014	0.040

APPENDIX B

DEFINITIONS

ADLs - A concept of functioning – activities of daily living are basic activities that are necessary to independent living, including eating, bathing and toileting. This concept has several assessment tools to determine an individual’s ability to perform the activity with or without assistance.³⁸

IADLs - Activities with aspects of cognitive and social functioning, including shopping, cooking, doing housework, managing money and using the telephone.³⁸

Appendix C

UN Convention on the Rights of Persons with Disabilities (CRPD)

179 WHO Member States around the world have ratified the UN Convention on the Rights of Persons with Disabilities (CRPD) since 2007. UNCRPD was adopted on 13 December 2006 during the sixty-first session of the General Assembly by resolution A/RES/61/106. In accordance with its article 42, the Convention was open for signature by all States and by regional integration organizations at UN headquarters in New York on 30 March 2007. The CRPD committed nation-states to providing legal equity, physical, political, social and economic access, and enabling conditions to allow for full participation in society. Listed are the articles in the convention that specifically refer to assistive technology or accessibility in some form.

- Article 4, Sections 1(g) and (h): Section 1(g) refers to states’ commitment to undertake or promote research and development of, and to promote the availability and use of new technologies, including information and communications technologies, mobility aids, devices and assistive technologies, suitable for persons with disabilities, giving priority to technologies at affordable costs. Section 1(h) commits states to providing accessible information to persons with disabilities about mobility aids, devices and assistive technologies, including new technologies, as well as other forms of assistance, support services and facilities.³⁵
- Article 9, Section 2(g) and (h) commit states to promoting the design, development, production, and distribution of accessible ICTs at an early stage, such that these technologies become accessible at a minimal cost.³⁵
- Article 20, Section (b) commits states to facilitating access to quality mobility aids, devices, and assistive technologies and forms of live assistance and intermediaries, including by making them available at affordable cost for persons with disability.³⁵
- Article 21 Section (b) commits states to facilitate augmentative and alternative communication (AAC). Section (c) commits states to urging private entities with an internet presence to providing information in accessible and usable formats. ³⁵
- Article 26, Section 3 requires that states promote the availability, knowledge and use of assistive devices and technologies, designed for persons with disabilities, as they relate to habilitation and rehabilitation. ³⁵
- Article 28, Section 1(a) commits states to ensuring equal access by persons with disabilities to clean water services, and to ensure access to appropriate and affordable services, devices and other assistance for disability-related needs.
- Article 29, Section (ii) requires that states facilitate assistive technologies for the voting process.
- Article 32, Section (d) commits states to providing technical and economic assistance, including by facilitating access to and sharing of accessible and assistive technologies, and through the transfer of technologies.

Appendix D

TYPES OF AIDS/APPLIANCES TO BE PROVIDED by ADIP Scheme

LOCOMOTOR DISABLED

- I. All types of prosthetic and orthotic devices.
- II. Mobility aids like tricycles, wheelchairs, crutches walking sticks and walking frames/rollators. Motorised tricycles for persons with locomotor disability that are likely to cost more than US \$100.46 may be procured and provided in exceptional cases subject to prior approval of Ministry of Social Justice and Empowerment on case to case basis. Extent of subsidy would however continue to be US \$100.46 for all other devices ceiling is US \$100.46
- III. All types of surgical footwear and MCR chappals.
- IV. All types of devices for ADL (activity of daily living).

VISUALLY DISABLED

- I. Learning equipment like arithmetic frames, abacus, geometry kits etc. Giant Braille dots system for slow-learning blind children. Dictaphone and other variable speed recording system. CD player/tape recorder for blind student from X standard.
- II. Science learning equipment like talking balances, talking thermometers, measuring equipment like tape measures, micrometers etc.
- III. Braille writing equipment including Brailers, Braille shorthand machines, typewriters for blind students from X class. Talking calculators, Geography learning equipment like raised maps and globes.
- IV. Communication equipment for the deaf-blind. Braille attachments for telephone for deaf-blind persons.
- V. Low vision aids including hand-held stand, lighted and unlighted magnifiers, speech synthesizers or Braille attachments for computers.
- VI. Special mobility aids for visually disabled people with muscular dystrophy or cerebral palsy like adapted walkers.
- VII. Software for visually handicapped persons using computers that are likely to cost more than US \$100.46 may be procured and provided in exceptional cases subject to prior approval of Ministry of Social Justice and Empowerment on case to case basis. For all other devices ceiling is US \$100.46.

HEARING DISABLED

- I. Various types of hearing aids.
- II. Educational kits like tape recorders / CD players etc.
- III. Assistive and alarming devices including devices for hearing of telephone, TV, doorbell, time alarm etc.
- IV. Communication aids, like, portable speech synthesizer etc.

MENTALLY DISABLED

- I. Any suitable device as advised by Rehabilitation Professional or treating physician.

Appendix E**Overview of Associations and Services provided in Cambodia**

In Phnom Penh	
Source	Services
The Association to Aid the Refugees Cambodian Committee	Wheelchair production
Cambodia Trust	Fitting
Handicap International	Prosthetic feet production
International Committee of the Red Cross (ICRC)	Components for prostheses
Veteran International	Fitting, Prosthetic feet and wheelchairs
Outside of Phnom Penh	
American Red Cross in Kam Pong Speu	Fitting
Catholic Office for Emergency Relief and Refugee in Banteay Mean Chei	Fitting
Cambodia Trust in Sihanoukville and Kam Pong Chang	Fitting
Handicap International in Siem Reap, Pur Sat, Kam	Fitting, production of crutches, wheelchairs and

Pong Cham, Kam Pong Thom, Takeo and Kam Pot	tricycles, runs a National Centre for Paraplegics
The ICRC in Battambang	Fitting
Jesuit Refugee Services in Kan Dal province	Wheelchairs and tricycles, nationwide distribution
Veterans International in Stong Treng and Prey Veng	Fitting, wheelchair production

Appendix F

Science and Technology Interventions 2010 Indicatives, India

- The development of simple solutions/assistive devices for the elderly population in the urban/semi-urban/rural areas;
- Modulation of already existing technology specific for use of elderly to suit Indian conditions;
- Development of technology package for healthcare of elderly to include preventive care in:
 - Cognitive support for elderly (Alzheimer/Parkinson/Dementia)
 - Cost effective visual/hearing aids, dentures/dental implants, etc.
 - Documentation and validation of traditional health practices for elderly
- Safe Kitchens for the elderly;
- The development of assistive devices for improving functionality, cognitive/assisted safety measures, monitoring devices/non-invasive measuring devices/systems (injury preventions, standing and balance training), assistive devices for frequently occurring musculoskeletal problems such as Osteoarthritis of knee, ankle joints and the osteoporosis, special devices/footwear for Diabetic foot and care, automated pill boxes, devices/programmes for fitness of elderly, and simply controlled devices for operating household devices.

Appendix G

Table 6: Price comparison of commercial and newly developed products.

Product	Price of Commercial Product (\$US)	Price of IFRS and Ceará Product (\$US)
Braille Display	4,000.00	1,000.00
Button Mouse	300.00	20.00
Audio Transmitter	1,700.00	Software based; can be used in any Android device, distributed for free through internet
Capacitive Driver	No similar device commercially available.	20.00
Cane Tip for Water Detection	No commercial equivalent is known.	20.00

APPENDIX H

ACRONYMS AND ABBREVIATIONS

ADIP	Assistance to Disabled Persons for Purchase/Fitting of Aids/Appliances
AARP	American Association of Retired Persons
ADL	Activities of Daily Living
AIM	African Index Medicus
ALIMCO	Artificial Limb Manufacturing Company
AT	Assistive Technology
AAC	Augmentative and Alternative Communication
DPF	Disabled Persons Fund
EJAD	Egypt-Japan Assistive Device
EMLIBNET	Eastern Mediterranean Region Library Network
IADL	Instrumental Activities of Daily Living
IMSEAR	Index Medicus for South-East Asia Region
HIC	High-Income Country
LMIC	Low- and Middle-Income Country
N/A	Not Available or Not Applicable
OP CRPD	Optional Protocol Convention on the Rights of Persons with Disabilities
P&O	Prosthetics and Orthotics
PAHO	Pan American Health Organization
PPRPD	Protection and Promotion of the Rights of Persons with Disabilities
PWDi	Person with Disability
RCT	Randomized Controlled Trial
SINTEF	The Foundation for Scientific and Industrial Research
UN CRPD	UN Convention on the Rights of Persons with Disabilities
WHO	World Health Organization
WHO HQ	WHO Headquarters (Geneva)
WHOLIS	WHO Library Database
WKC	WHO Kobe Centre
WPRIM	Western Pacific Region Index Medicus
YLD	Years Lived with Disability