

CMPE 80A: Universal Access: Disability, Technology, and Society



Disability Initiatives from Around the World



UN International Convention on the Rights of Persons with Disabilities

Article 25 HEALTH

- ▶ recognizes that persons with disabilities have the right to the enjoyment of the highest attainable standard of health without discrimination on the basis of disability.
- ▶ Ensure access for persons with disabilities to health services that are gender sensitive
- ▶ Provide health services needed by persons with disabilities specifically because of their disabilities ...as appropriate, ...including among children and the elderly
- ▶ Require health professionals to provide care of the same quality to persons with disabilities as to others....



World Bank's Mission



- ▶ World Free of Poverty
 - To help developing countries and their people
 - build the climate for investment, jobs and sustainable growth, so that economies will grow
 - by investing in and empowering poor people to participate in development
- ▶ Cannot be met without including people with disabilities
 - Poverty causes disabilities and disability causes and exacerbates poverty
 - Good disability policies help other vulnerable people, such as the growing aging populations/temporarily injured or sick persons



Neglecting Disability Comes at a High Cost

- ▶ 10-12% of the world's population has a moderate to severe disability, and disability affects up to 20-25% of households
- ▶ 1/3 of primary school aged children who are out-of-school have disabilities or are looking after family members with disabilities
- ▶ About 5-7% of world GDP is foregone because of inadequate integration of people with disabilities in the labor market and with lack of social services and accessibility. Family members withdraw from the labor market to meet these needs.



Investing in Disability Yields Significant Returns

- ▶ *It generates higher economic returns* through more efficient use of labor force and increased individuals' and overall productivity
- ▶ *Reduces the social costs.* Increased chances for disabled people's participation in economic and social life reduce the probability that they will become burdens on social expenditures
- ▶ *Contributes to greater social equity, inclusion and cohesion.* Human capital formation, development and maintenance is particularly important for disabled people who otherwise might not have a chance to break the cycle of poverty, deprivation and social exclusion
- ▶ *Increases efficacy of individual social sector programs.*
- ▶ *Enables greater labor force participation of other family members,* thus improving the overall family welfare.



World Bank and Disability

- ▶ The work on disability as a development issue initiated at the Bank in 2002
- ▶ It was a response to a strong pressure from Disability organizations, civil society organizations, and Bank members
- ▶ The Bank has evolved into the global knowledge and learning resource on Disabilities
- ▶ 6.7% of Bank lending projects (2002 – 2007) by volume contains reference to disability
- ▶ Portfolio now includes stand-alone disability project to address disasters
- ▶ Check <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALPROTECTION/EXTDISABILITY/0,,menuPK:282704~pagePK:149018~piPK:149093~theSitePK:282699,00.html>



Achievements to date ...

- ▶ Support to the Global Partnership on Disability and Development (GPDD)
- ▶ Adopted the W3C standards on Web accessibility
- ▶ Joint WB/ WHO *World Report on Disability, Rehabilitation and Inclusion*, to be launched in December 2009
- ▶ Regional Disability Coordinators in each of the regions of the Bank
- ▶ Work with many development organizations ([JICA](#), [AusAid](#), [GTZ](#)) and countries (Italy, Norway, Finland, Denmark, Japan)
- ▶ Supported [Washington City Group](#) development of robust census and household survey questions.
- ▶ Development of an internal toolkit
- ▶ Variety of knowledge sharing events.
- ▶ Publications on disability and development.



However ...

- ▶ There is a dearth of evidence-based information on disability and poverty.
- ▶ Today development practices by and large exclude people with disabilities.
- ▶ Constraints on a country's capacity are a major bottleneck, impeding not only aid effectiveness, but also fuller realization of its development goals.
- ▶ Still needs to do:
 - Expand understanding and data collection on disability and poverty
 - Operationalize recommendations of the joint World Bank – WHO Report on Disability (expected at the end of 2009)
 - Advance work on the social insurance and social safety nets coverage and benefits for people with disabilities
 - Expand knowledge on gender and labor market of people with disabilities



GPDD

- ▶ The Global Partnership for Disability and Development
- ▶ A dynamic new initiative to accelerate inclusion of people with disabilities and their families into development policies and practices.
- ▶ An informal Alliance (representatives from developing country governments, bilateral and multilateral donors, development banks, UN agencies, development NGOs, disabled persons' organizations, NGOs working in the field of disability, foundations, enterprises, etc)
- ▶ Formed to increase collaboration among development agencies and organizations to reduce the extreme poverty and exclusion of people with disabilities living in poor countries.
- ▶ Funded by multi-donor trust fund (Finland, Norway, Italy) → World Bank is acting as trustee



How is the objective implemented?

- ▶ Sharing knowledge, capacity building, and research through:
- ▶ Fostering the participation of developing country governments, NGOs, DPOs, UN family, donor countries, donor agencies, universities, employers, media, etc.
- ▶ Preparing papers defining policy issues, providing background, and offering and analyzing policy alternatives.
- ▶ Preparing and disseminating training materials, and organizing training and capacity building events.
- ▶ Advancing the goals of the Alliance by performing catalytic and "service bureau" functions.
- ▶ Supporting the establishment of coalitions of disability stakeholders in and across developing countries.
- ▶ Harmonizing activities in developing countries that build knowledge about disability and development.



The Role GPDD has Played with the HIV/AIDS agenda

- ▶ April 2004 the World Bank issued a report, "HIV/AIDS & Disability: Capturing Hidden Voices"
- ▶ This report started to establish the HIV/AIDS represents a significant threat to individuals with disabilities and populations around the world.
- ▶ This report documented that individuals with disabilities were not included in most AIDS outreach efforts.
- ▶ The dissemination of the findings and on going research efforts which have helped bring the issues of HIV/AIDS onto the global AIDS and disability agendas
- ▶ The GPDD has helped to share this report through numerous forums
- ▶ E.g. Africa Campaign on Disability and HIV & AIDS by African Decade & HI



ITU (International Telecommunication Union)

ITU

191 Member States
+700 Sector Members

ITU-T

Telecommunication standardization of network and service aspects



ITU-D

Assisting implementation and operation of telecommunications in developing countries

ITU-R

Radiocommunication standardization and global radio spectrum management



Mandates on ICTs for persons with disabilities

- ▶ Resolution 56 (WTDC-06, Doha)
 - to support Member States in implementing accessible ICT projects and activities for people with disabilities.
- ▶ WSIS Phase 1-Declaration of Principles & Plan of Action (Geneva 2003)
 - <http://www.itu.int/wsisis/docs/geneva/official/dop.html>
 - <http://www.itu.int/wsisis/docs/geneva/official/poa.html>
- ▶ WSIS Phase 2 –Tunis Agenda & Commitment (2005)
 - <http://www.itu.int/wsisis/docs2/tunis/off/6rev1.html>
 - <http://www.itu.int/wsisis/docs2/tunis/off/7.html>
- ▶ UN Convention on the Rights of Persons with Disabilities (UNGA-06)



ITU-R

- ▶ Radio technologies are increasingly important for sending and receiving data, text, voice and video.
- ▶ Wireless devices are well placed to help people with disabilities gain access to the information society.
- ▶ DTTB Handbook "Digital terrestrial television broadcasting in the VHF/UHF bands" → captioning
- ▶ Rec. ITU-R M.1076 "Wireless communication systems for persons with impaired hearing"
- ▶ Rec. ITU-R BS.1698 'Evaluating fields from terrestrial broadcasting transmitting systems operating in any frequency band for assessing exposure to non-ionizing radiation'
 - can cause radio frequency interference to active implanted or portable medical devices such as portable monitors, prosthetic aids for sight and motion



ITU-T accessibility tools

- ▶ [Question 26 of SG16](#) "Accessibility to Multimedia Systems and Services"
pioneered in the 1990s with Rec. V.18 on a multi-function text telephone
- ▶ [Question 3 of SG2](#) "Human Factors issues on international telecommunication services"
aims at increasing usage and therefore revenues derived from international telecommunications services by improving ease of use and usability
- ▶ Joint Coordination Activity on Accessibility and Human Factors (JCA-AHF)
coordinates related standardization activities and act as a single point of contact within ITU on accessibility matters

<http://www.itu.int/itu-t/jca/ahf>



Recent Standardization Achievements

- ▶ [Telecommunication Accessibility Checklist](#) for standards writers (11/2006)
Early use of checklist in standards process ensures usability by users including those with disabilities
- ▶ [F.790](#) "Telecommunications accessibility guidelines for older persons and persons with disabilities" (01/2007)
F.790 provides general guidelines for standardizing, planning, developing, designing and distributing all forms of telecommunications equipment, software and associated services, to enhance their accessibility for users including those with disabilities



Other ITU Accessibility Achievements

- ▶ [V.18](#) – Harmonization of text telephony
- ▶ [V.151](#) – Text relay end-to-end connection of analogue PSTN text telephones over IP
- ▶ [T.140](#) – General presentation protocol for text conversation
- ▶ [T.134](#) – Text conversation in the T.120 data conferencing environment
- ▶ [H.323](#) – Annex G for text conversation in H.323 packet multimedia environment
- ▶ [H.248.2](#) – Gateway procedures between Text Telephony in PSTN and real-time text in IP [H Series Sup.1](#) - Video communication requirements for sign language and lip reading
- ▶ [E.121](#) – Pictograms, symbols and icons to assist users of the telephone service
- ▶ [F.910](#) – Procedures for designing and selecting symbols, pictograms and icons
- ▶ [E.135](#) – Human factors aspects of public telecommunication terminals for persons with disabilities
- ▶ [E.136](#) – Specification of a tactile identifier for use with telecommunication cards
- ▶ [E.138](#) – Human factors aspects of public telephones to improve their usability for older people



Accessibility in IPTV

Where accessibility needs impact technological development

- ▶ Audio description
- ▶ Subtitles
- ▶ Captions
- ▶ Supplementary video
- ▶ Spoken subtitles
- ▶ Subtitles to recording
- ▶ Audio feedback of remote control
- ▶ Size and color on subtitles and background



ITU-D Special Initiatives

Promoting ICT accessibility for persons with disabilities

- An Initiative creating awareness & skills to mainstream disability issues.
- Equal opportunities for People with Disabilities (PwDs).
- Supporting member states meet obligations under the UN Convention for Rights of Persons with disabilities.



Provides training to policy makers, regulators, operators and other stakeholders working to address ICT needs for persons with disabilities.



BDT & its partners develop tools to assist countries:

- Guidelines for policy makers & regulators.
- An on-line toolkit for capacity building, a platform to share experiences and best practice.
- Supports project implementation for PwDs.



DCAD

- ▶ Dynamic Coalition on Accessibility and Disability
- ▶ <http://www.itu.int/themes/accessibility/DC>
- ▶ Result of an ITU initiative within the Internet Governance Forum (IGF)
- ▶ facilitate interaction between relevant bodies and ensure that ICT accessibility is included in the key debates around Internet Governance
- ▶ Some members:
 - [ITU](#) – International Telecommunication Union
 - [Council of Europe](#)
 - [DAISY Consortium](#) – Digital Accessible Information System Consortium
 - [G3ict](#) – The Global Initiative for Inclusive ICTs
 - [ICDRI](#) – International Center for Disability Resources on the Internet
 - [People Who](#)
 - [UNESCO](#) – United Nations Educational, Scientific and Cultural Organization
 - [W3C](#) – World Wide Web Consortium



Current Members

Partners: Organizations and Institutions

- ▶ [ITU](#) – International Telecommunication Union
- ▶ [ACMA](#) – Australian Communications and Media Authority
- ▶ [Council of Europe](#)
- ▶ [DAISY Consortium](#) – Digital Accessible Information System Consortium
- ▶ [G3ict](#) – The Global Initiative for Inclusive ICTs
- ▶ [ICDRI](#) – International Center for Disability Resources on the Internet
- ▶ [ISOC-AR](#) – Argentina Chapter of Internet Society
- ▶ [NCC](#) – Nigerian Communications Commission
- ▶ [People Who](#)
- ▶ [UNESCO](#) – United Nations Educational, Scientific and Cultural Organization
- ▶ [W3C](#) – World Wide Web Consortium

Individuals

- ▶ Clara-Luz Alvarez (Rapporteur [Q20](#), [ITU-D Study Group 1](#))
- ▶ Frank Mulcahy (Information Officer for [Disabled People's International](#), Europe)



DCAD Work in progress

- ▶ **3rd IGF Meeting**
Hyderabad, India, 3-6 December 2008
- ▶ **The DCAD to organize a workshop:**
"Including Accessibility and Human Factors in the Universalization of the Internet - How to reach persons with disabilities, the 10% of the next billion"
 - will highlight the necessity to make the Internet accessible to all, regardless of individual capabilities of different users.
 - Will respond to the requirements expressed in line with the **WSIS Tunis Agenda** related to reducing illiteracy and providing access and accessible content for marginalized and vulnerable groups of society, including older persons and persons with disabilities

