**Joint G3ict/ITU Workshop on
Inclusive ICTs for Disaster and Emergency Preparedness for
Persons with Disabilities and those with specific needs**
12 June 2017

No Person Left Behind:

An Inclusive approach to Disaster management

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The world is diverse

- The world is full of different types of people with differing needs, strengths and capabilities.

- Mainstream information, resources and processes can benefit all, but need to be inclusive.

- Groups such as the elderly, persons with disabilities, children, women, ethnic minorities, migrant communities, economically disadvantaged and the illiterate are rendered vulnerable due to varying factors and unable to access and enjoy mainstream resources and information.

- They comprise a substantial percentage of the world population. For instance, merely the disabled constitute on an average 15% of the world population, over 1.3 billion.

- **Hence, any disaster management policies and strategies will only be partially effective if they are not made with accessibility and inclusion in mind.**

The Report

- Joint Report from ITU-APT, G3ict and CIS submitted to ITU-D Study group.

- Engages in depth with the issue of inclusive disaster management (DM) using ICTs, with special focus on the Asia Pacific region.

- The APAC region is 4 times more susceptible to disasters than Africa, and 25 times more susceptible than Europe or North America. Three fourths of all disasters between 1970-2011 and 80% of monetary losses from disasters in 2011 alone were in APAC.

- The report proposes a multi-hazard, multi-phased, multi-technology and multi-stakeholder approach.

- It provides detailed information about policies and strategies which are needed for inclusive disaster management, highlights useful case studies of policies and technology use, and concludes with stakeholder-wise recommendations needed to implement these changes.

Multi-hazard

- Disaster and emergency situations are varied; require different kinds of preparedness and response mechanisms in place.

- Disasters may be natural (floods, earthquakes), human or technology induced (oil spills) or man-made (terrorist attacks).

- Emergency situations such as fires, medical emergencies or stampedes during pilgrimages also require similar responses.

- Persons with disabilities (and other vulnerable groups) are often excluded from disaster and emergency planning, response and recovery.

International Mandate

- **Hyogo Framework for Action** (2005-15): Specifically calls for considering age, cultural diversity and vulnerable groups in activities; equal access to appropriate training and education for women and vulnerable groups; regular review of DM policies and practices; ensured inclusion of vulnerable groups.

- **UNCRPD**:
  - Article 11 calls for protection and safety during situations of risk and humanitarian emergencies.
  - Article 9 mandates access to information and ICTs, the Internet and new media; other basic human rights such as education and employment which are critical to disaster management.
  - Article 26 calls for habilitation and rehabilitation of persons with disabilities.
  - Article 31 mandates data collection and statistics on persons with disabilities.

International mandate (contd.)

- Other international agreements: Yogyakarta Declaration on disaster risk reduction in Asia and the Pacific (2012), Phuket Declaration on Disaster Preparedness for Persons with Disabilities (2009), Biwako Millennium Framework for Action (2003-2012).

- The specific role of ICTs in disaster management situations was recognized in the Doha WTDC conference of 2006.

- A resolution was passed marking early warning, preparedness and mitigation as critical areas of concern.

Consequences of disasters

- People face heightened risks and vulnerabilities due to lack of access to resources, emergency response services, residing in high-risk areas, and dependence on support services.

- Loss of life, death, disablement, or displacement of self or loved ones, property damage, loss of livelihoods.

- Persons with disabilities are faced with inaccessibility of physical and technological resources and information, separation from family, caregivers and assistive technologies, and inaccessible shelters and encampments.

- Disability consideration is especially important, both to deal with persons who are living with disabilities, as well as those who acquire disabilities during the disaster.

Vulnerable Groups

- **Persons with disabilities**: Have different capabilities and needs (physical, sensory, cognitive, psychosocial), and are often excluded from the disaster planning, response and recovery efforts.

- **Women**: Often primary caregivers for their family; often unable to get education for disaster preparedness due to chores, formal, or informal workload or cultural barriers. Participation is crucial but often absent.

- **Children/young adults**: Often required to take on active roles during disasters and hence need to be educated.

- Other groups such as l**inguistic minorities, migrant communities, elderly and the illiterate** all face barriers to accessing information and resources.

- Information and knowledge are key tools to reducing fear and ensuring safety.

Multi-phased

- Disaster management can be understood as a cyclical process, with different phases, which are often overlapping or lead to each other. They broadly require different sets of activities:

- **Planning and preparedness**: Activities prior to a disaster including Assessment of needs, data collection, disaster prediction and warning systems, creation of accessible shelters and training materials, conducting trainings for various groups, creating maps, developing information systems/ICT-based resources, mobile applications etc.

- **Response**: Activities during a disaster - Instant communication about disasters, location of groups, relief personnel and camps, lost family, etc. through traditional and new media, including television, radio, websites, text messages, WhatsApp, Facebook etc. as well as providing physical, medical and food aid.

- **Recovery and reconstruction**: Activities that follow the needs of a disaster –.to meet the needs of vulnerable groups,

- **Mitigation-** Activities that reduce the effect of a disaster – increasing awareness, vulnerability assessment etc. which will feedback into the first phase (planning and preparedness).

- Hence, needs of groups that face particular vulnerability risks must be assessed and included at every stage of disaster management i.e. mitigation, preparedness, response, relief, recovery and reconstruction.

Multi-technology

- Access to ICT is critical for providing information, connectivity, communication and accessing resources throughout the disaster management cycle.

- Different types of technologies can be used across the DM cycle to communicate- both mainstream and specific.

- ICT offers multiple modes of communication. Example- Mumbai attacks (twitter and Flicker images to locate victims), Typhoon Pablo (crises map using images on Twitter).

- India Disaster Resource Network- on line resource containing specialist resources for disaster response.

- UNOSAT- satellite application programme which provides satellite solutions for humanitarian aid organisations.

- ITU has deployed satellite telecommunications for rescue and relief efforts during disasters.

Multi technology (contd)

The world of ICT today involves

- Traditional forms of ICT i.e. television and radio,
- Landline telephones, cellular and mobile audio telephony, text messaging/SMS
- Internet based resources and services such as websites, video, instant messaging over the Internet, voice over Internet protocol services, web conferencing, social media which allow for instant communications, instant photo/video capture and sharing
- Satellite communications.

ICTs help in data gathering- active and passive data collection, which can then be analysed to yield information that can aid disaster management

- Big Data, ICT based early warning systems
- GIS

Accessible ICTs enable inclusive disaster planning and response

ICTs can play a critical role through all phases of disaster management

1. Planning and Preparedness
   - ICT enabled vulnerability assessments
   - Public awareness announcements – multi channel, multi-lingual, multi-media [audio/visual/text].
   - Registries and Database, Accessible government websites
   - Training
   - E.g. Television- information about disasters can be communicated in multiple ways. Example Sesame Street educated children through specific episodes like 'Sesame Street gets through a storm' and mobile app 'Lets get ready'.

2. Response
   - Disaster management platforms and systems, google person finder
   - Use of Google groups by workers of the Sphere project to coordinate response efforts.
   - Crowd sourcing- Haiti earthquake
   - Emergency call numbers
   - Community radio- good way to reach vulnerable groups in remote areas – initiatives to train girls/women to use ham radio
   - Electronic public address systems, TV alerts with captions and SMS

Accessible ICTs are critical for disaster relief and mitigation

3. Relief and Reconstruction
   – Disaster management systems and e governance
   – Information about temporary housing, shelter etc. shared via Social media, crowdsourcing, TV, email, radio, SMS
   – Building inclusive accessible ICTs
4. Mitigation
   – Increased access to accessible ICTS
   – Knowledge sharing portals,
   – Media awareness
   – GIS database, vulnerability assessment

A few points to keep in mind
- Technology and content should be accessible, otherwise they will not be inclusive.
- Websites, television and radio, electronic documents, mobile applications etc. should conform to accessibility standards.
- Information must be communicated in multiple ways- audio, text, visual etc.

Closing the gap

- Community involvement and capacity building- example training girls to use ham radio in Orissa

- Building resilience through education

- Bringing persons with disabilities to the table- DRR network in Germany

- Availability and affordability of ICTs

- ICT accessibility

- Inclusive policy- FCC requires emergency and disaster information to be accessible.

- Interoperability of ICTs

- Ethical data collection and sharing.

- Intergovernmental, inter agency and public-private partnership

Multi stakeholder

- Several agencies and bodies can play a crucial role in inclusive disaster management nationally and internationally

- National Disaster Management Authorities, ministries for IT, Telecommunications, those overlooking welfare of women, children, persons with disabilities, ethnic minorities, tribals etc., regulatory authorities, UN agencies, CSOs, media houses etc.

- Specific recommendations for all actors.

Thank you