

# ACKNOWLEDGEMENTS

The Mainstreaming Disability in Disaster Management toolkit is an initiative towards the attainment of broader objective of DRM which is capacity building and institutionalization. An initiative taken up under GOI-UNDER Disaster Risk Management Programme, this manual has been accomplished under the guidance and constant support of the DRM team in UNDP and officials of the Ministry of Home Affairs, Government of India.

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#### **Asha Hans**

Shanta Memorial Rehabilitation Centre Bhubaneswar

#### **Contributors:**

Asha Hans, SMRC
Amrita M Patel, SWS
Ram Kishore Sharma, VRC
Deepa Prasad, UNDP
Kalika Mahapatra, UNDP
Reena Mohanty, SMRC

# **Technical Support:**

**SMRC** 

# **Overall Support:**

Mr. P.K.Jena, IAS, UNDP

### **Advisor:**

Ashok Hans, SMRC

IAG	Inter Agency Group
IAS	Indian Administrative Service
IAY	Indira Awas Yojana
ICDS	Integrated Child Development Scheme
IEC	Information Education Communication
IHSs	Institute of Health Sciences
IMD	Indian Meteorological Department
INGO	International Non Governmental Organization
IPH	Institute for the Physically Handicapped
IRCS	Indian Red Cross Society
KVIC	Khadi & Village Industries Commission
LWS	Lutheran World Service
MCR	Micro Cellular Rubber
MHA	Ministry of Home Affairs
MoSJ&E	Ministry of Social Justice and Empowerment
MSES	Mini Self Employment Scheme
MVSN	Mahila Vikash Samabaya Nigam
NABARD	National Bank for Agricultural and Rural Development
NAC	Notified Area Council
NCC	National Cadet Corps
NDMA	National Disaster Management Authority
NDMRC	National Disaster Mitigation Resource Centre
NEC	National Executive Committee
NGO	Non Governmental Organization
NHFDC	National Handicapped Financial Development Cooperation
NIDM	National Institute of Disaster Management
NIMH	National Institute for the Mentally Handicapped
NIOH	National Institute for the Orthopaedically Handicapped
NIVH	National Institute for the Visually Handicapped
NSCFDC	National Scheduled Caste Finance & Development Corporation
NSKFDC	National Safai Karmcharis Finance & Development Corporation
NSS	National Social Service
NSTFDC	National Scheduled Tribes Finance & Development Corporation
ODMM	Orissa Disaster Mitigation and Management
OSDMA	Orissa State Disaster Mitigation Authority
OSFDC	Orissa State Financial Development Corporation
OT	Occupational Therapist
PCO	Public Call Office
PHCs	Primary Health Centres

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#### WHAT DOES THE TOOLKIT CONTAIN?

The toolkit does not replace manuals available but promotes an understanding of the main issues and concerns from the perspective of Persons with Disabilities in the context of disasters. It attempts to provide an understanding on which proper integration and mainstreaming can be carried out.

The comprehensive toolkit provides a step by step approach for the inclusion of disability in disaster management.

- It provides the user with a resource to help plan in mainstreaming disability in disaster management
- A guidance note, which summarizes the mainstreaming needs and enables users to understand them
  from the perspective of a Person with Disability.
- A guidance on the most appropriate methodology to be adopted for including disability in the disaster management process, to monitor and evaluate it; a good practice scenario and a road map.
- A checklist for use and FAQs are provided in the last section. Section wise essential readings and a reference, which refers specifically to the issue, has been provided to give the background and deeper understanding. Most of these are accessible through the Internet. At the end of the document additional references are provided. This section refers to the most important writings, handbooks and guidelines available. As very few resources have been developed on the subject, generic material has been included.

#### WHO IS THE TOOLKIT FOR?

Intended users of the Toolkit are Policy makers, Government officials, Members of Panchayati Raj Institutions, NGOs, DPOs and DM practitioners as well as for organisations working on disability.



# **SECTION 2**

# GUIDING PRINCIPLES: DISASTER AND DISABILITY MAINSTREAMING

Lack of resources and recognition denies Persons with Disabilities equality with the rest of the population.

Traditionally, Persons with Disabilities face multiple barriers and are exposed to several vulnerabilities. These may be physical, psychological and at the cost of self-esteem. Some of the unique vulnerabilities of Persons with Disabilities must be understood as the discrimination is based on stereotyped roles, which label them as weak, defenseless, and with no ability. The stigma attached to the word disability is entrenched in societal structures but disasters provide an opportunity to create positive change. Vulnerabilities can be overcome if barriers are removed and they are allowed to access their rights.

# Box-2: Persons with Disabilities and their Marginalization

- They are poor and have little access to resources and assets.
- Their right to decision making and specifically right to use resources is limited.
- They are normally the most illiterate.
- The vulnerabilities among women with disabilities, the elderly and children multiply with increase in barriers.

#### **DISABILITY MAINSTREAMING IN DISASTER MANAGEMENT**

Combating inequality on the ground of disability is aimed at transforming social, economic and political structures so that all Persons with Disabilities can enjoy and exercise their full human rights. In any democratic political system all citizens are equal in all aspects.

Although Persons with Disabilities are among the most vulnerable, as noticed during recent disasters, as a

**Box-3: Importance of Mainstreaming Disabilities** 

Emphasizing the importance of mainstreaming disability issues as an integral part of relevant strategies of sustainable development (United Nations Convention on the Rights of Persons with Disabilities).

group they are not recognized, whether it is in formulating policy or implementing programs (IDRM. 2005; Kett, Sue Stubbs and Yeo Rebecca, 2005). They are neither included in any decision making processes nor are they invited to participate in committees to manage disasters nor is any funding earmarked for meeting their needs. The inequality that the Persons with Disability experience in society is exacerbated during disasters because there is no recognition of disability differences and their specific needs. Except in rare instances, Persons with Disabilities are not even invited to participate in CBDP exercises for their so-called functional 'limitations'. Even in Disaster related Acts and Policies there is no mention or reference to Persons with Disabilities.

India, Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995	Chapter V: Education: Appropriate Governments and local authorities shall ensure that every child with disability has access to free education  Chapter VI: Employment: Appropriate Governments shall identify posts in the establishments which can be reserved for Persons with Disabilities  Chapter VII: Affirmative Action: make schemes to provide assistive devices.
India, National Policy for Persons with Disabilities, 2006	<ul> <li>Prevention of Disability</li> <li>Train personnel to meet needs.</li> <li>Emphasis on education and training.</li> <li>Increased employment opportunities.</li> <li>Focusing on gender equality.</li> <li>Improving access to public services.</li> </ul>

In India though neither the Act nor the Policy refer specifically to disasters, but disability rights taken from a generic perception can be related to any situation including disasters.

One important method of inclusion is to obtain community participation, as today the main focus is on Community Based Disaster Preparedness or Risk Management (CBDP or CBDRM), and communities are the first responders to emergencies. The community must be involved with the process from the identification of persons with disabilities to their inclusion in the development process.

#### **Box-4: Mortality during Tsunami 2004**

"There was a polio epidemic in Car Nicobar Island (India) several years ago, which resulted in about 700 people becoming disabled. I went there three days after the disaster tsunami struck but could not locate a single disabled person! They may be dead, as they may not have been able to run up the hills to save their lives." Dr. S.P. Saha, Head of Orthopedic Department in Govind.Bhallav Pant Hospital, Port Blair (Chari and Padmanabhan, 2004).

# COMMUNITY FRIENDLY METHODS OF IDENTIFICATION OF DISABILITY AND REGISTRATION

Persons with Disabilities, as per the UN Convention, have long term physical, mental, intellectual, or sensory impairments such as blindness, deafness, impaired mobility, and developmental impairments. Some people may have more than one form of disability and many, if not most people, will acquire a disability at some time in their life due to physical injury, disease or ageing (United Nations, 2007).

# MAINSTREAMING DISABILITY IN DISASTER MANAGEMENT

SI.	Disability Associated with	Understanding	Identifying (Questions)*	Recognizing/ Method	Needs
No	Associated with		(Questions)*	Method	
4	Developmental	It is a condition and not a disease. Such persons have difficulty in learning, understanding and communicating to others and in adjusting their behavior to various situations in everyday life. Intellectual/Mental impairment can result from damage to the brain or from incomplete development of the brain during the developmental period. (0-18 years).	Do you have difficulty remembering or concentrating?  a) No- no difficulty b) Yes - some difficulty c) Yes - a lot of difficulty	Difficulty in understanding and or following , instructions to limit or prevent risks etc.	Personal Care assistants needed especially if family missing.
5	Multiple	A person who has a combination of two or more disabilities is considered to have multiple disabilities. The effect of multiple disabilities can be more than a combination of two individual disabilities.	All the above as per disability		All the above as per disability.

\*Source: United Nations, 2007



# **SECTION 3**

# PROTECTION OF LIFE & SECURITY DURING DISASTERS

"nothing about us without us!"

DPI

Till recently, disasters have been treated as crisis situations to be dealt with when they occur. Today, the situation has changed and most governments and relief agencies view it from a broad multi - dimensional perspective. It is being analyzed from a development perspective in which preparedness and mitigation are accorded priority.

During preparedness process, the crucial factors for inclusion of disability issues are consultations, participatory planning, vulnerability assessment, resource and capacity mapping.

#### **VULNERABILITY ASSESSMENT AND PLANNING**

It is a population's vulnerability to a disaster and not simply the magnitude of that event that determines the extent of disasters. This understanding has subsequently encouraged a greater emphasis on "vulnerability analysis" as a tool in disaster management. During disaster preparedness, a risk assessment is usually carried out to identify risks faced by communities.

#### **Key Issues**

- Persons with Disabilities are not included in the mapping exercise and their needs are not recognized.
- Definition of diversity and clarity on entitlements and eligibility of Persons with Disabilities is absent.

#### **Box-5: Barrier Free Environments**

Accessible or barrier free environment enables people with disabilities to move about safely and freely, and use the facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can participate without assistance, in every day activities (India, National Policy for Persons with Disabilities, 2006, Section 33).

#### **Actions**

- Identify Persons with Disabilities in vulnerable areas and inform volunteers of their specific needs.
- Map houses of Persons with Disabilities for evacuation in the DM plans
- ldentify and put in place special protection measures for rehabilitation facilities/institutions (e.g. special homes, rehabilitation service centres etc.). The sizeable number of persons living in these facilities can be saved when confronted with a life threatening disaster situation.

#### **COPING MECHANISMS**

Existing disaster management programs pay little attention to the specific needs of Persons with Disabilities, though disasters create new disabilities and worsen the condition of those with existing impairments. The absence of prevention of disability strategies during disasters remains a major gap in the system. Appropriate coping strategies and mechanism for persons with existing disability as well as a newly acquired disability have to be put in place.

**Table-3: Concerns and Coping Strategies** 

Persons with Disabilities	Concerns	Coping Strategies & Mechanisms
Newly acquired disabilities.	<ul> <li>People can acquire disability/ impairment during disasters due to physical trauma- either head or spinal injury, sustain severe fractures or loose vision or hearing. According to WHO, after the Indian Ocean Tsunami, 2004 there was about 20% increase in disability. In Thailand for instance 800 more people acquired disability (Akiyama, 2005).</li> <li>Need immediate transfer to a hospital with trauma and critical care unit.</li> <li>Referral to appropriate health facilities becomes difficult during disasters. There is an existing scarcity of rehabilitation personnel so more persons with disabilities would mean overburdening of existing structures.</li> <li>They will not be able to cope in their existing workplaces with their newly acquired disabilities.</li> </ul>	<ul> <li>They will need special handling to minimize future impairment and so communities must be prepared to manage the injured or those affected by trauma.</li> <li>An assessment of rehabilitation facilities would facilitate early care and reduction of disability.</li> <li>Ensure that in the DM process rehabilitation is understood and used as part of the health care system.</li> <li>To minimize the problems associated with loss of livelihood due to disaster and inability to cope with existing jobs due to disability, new adaptation skills would be needed.</li> <li>The strategy should focus on some areas such as mainstreaming disability into operations, increasing the knowledge base so as to inform</li> </ul>
Existing disabilities	<ul> <li>Many persons with disabilities do not survive a disaster because of their impairments and exclusion from preparedness plans.</li> <li>Besides the high mortality, persons with disabilities are marginalized due to poor access to entitlements.         There is also the breakdown of community support.     </li> </ul>	policy and implementing agencies, and raising awareness through outreach and support to government and non-governmental efforts.  Inclusion of needs of persons with disabilities if identified at preparedness stage would assist in minimizing vulnerabilities.

circumstances, people including volunteers and government employees are the most important facilitators. They can help the Persons with Disabilities by :

- i. Building a network in the community that can provide disability friendly information on impending disasters.
- ii. Designing appropriate early warning systems to reach persons with disabilities
- iii. Including persons with disabilities in the planning process at all levels.

#### **Box-8: Good Practices in Training**

- Provide training in accessible format such as Braille, special computer software, audio versions, large print and use of sign language interpreters.
- Production and use of communication tools through a booklet highlighting the specific needs of the types of disabilities to be used as a training and reference manual for disaster/relief personnel.
- **♦** Trainings in facilities that are physically accessible.
- People with auditory disabilities to be trained to become volunteers, so they can help other persons with hearing impairment



Lack of Warning Causes High Mortality and Morbidity, (Graphic Source: SMRC)

#### Developmental

- They would not understand the implication of warning.
- They will not be able to read/ see the warning signals.
- They may be inside the houses and rarely or may never go out.
- Bright flags.
- Announcements and home visit by volunteers.
- Involving parents/other caretakers.
- Repeated warning announcements.
- > Auditory signals.
- Posters using large characters and bright colours.

#### **RESCUE AND EVACUATION**

People with disabilities are often less visible or appropriate measures are not planned for their evacuation during disasters, thus reducing their chances of survival. The aim should be to rescue persons with disabilities (the most vulnerable groups) first. Hence, it is vital that during the planning and preparedness phases, persons with disabilities are identified and measures planned for their evacuation.

#### **Key Issues**

- Inability to move independently to safer locations.
- Death of personal care providers further enhances the risk as others may not be aware of their special vulnerabilities.



Rescue adopting correct methodology, (Photo: SMRC)

#### **ROLE OF FAMILY & COMMUNITY**

The family plays a very crucial role in the life of a Person with Disability. Equal opportunities start at the level of the family. It is the family which is the first and most important responder to the needs of persons with disabilities.

#### **Box-11: National Trust**

The government recognizes the role of the family in case of children with 'Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities'. To provide support to such children it has set up The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999.No. 44 of 1999 (30th December 1999).

In relation to the family, the objectives of the Trust are:

- To strengthen facilities to provide support to Persons with Disability to live within their own families;
- ◆ To extend support to registered organization to provide need based services during the period of crises in the family of Persons with Disability;
- ◆ To deal with problems of Persons with Disability who do not have family support;
- ◆ To promote measures for the care and protection of Persons with Disability in the event of death of their parent or guardian;
- ◆ To evolve procedure for the appointment of guardians and trustees for Persons with Disability requiring such protection;

In disaster management programs, communities are emerging as the most important responders. CBDRM must be inclusive and sensitive to the needs of persons with disabilities. DPOs and CBOs can play an important role in inclusion, awareness raising, advocacy and in all steps of DM process.



# SECTION 4 BASIC NECESSITIES

Right to Life and Security becomes absolute and comprehensive when basic necessities are met. It must be ensured therefore that Persons with Disabilities have access to these needs. This becomes possible when disaster managers and volunteers understand what is essential and appropriate.

#### **RELIEF ACCESSIBILITY**

As many Persons with Disabilities are not identified when relief is being provided, it is not surprising that they do not access it.

If Persons with Disabilities are provided support and assistance immediately after the occurrence of a disaster, they can regain their lost capabilities. They may need special programs such as services of physiotherapists and special equipments such as soft mattresses etc., even at the early response stage to regain their earlier functional capability.



Inaccessible Shelter, (Photo: SMRC)

#### **Key Issues**

Persons with Disabilities face barriers, both social and structural:

#### 1. Structural barriers:

- Greater risk of injuring themselves due to difficulty in seeing, moving or hearing.
- Some of the other identified barriers include:
  - i. Lack of physical access to buildings and inability to move freely within them.
  - ii. Lack of accessible bathrooms/ toilets.
  - iii. Lack of appropriate sleeping equipment especially for persons with trauma.
  - iv. Lack of access to food and healthcare needs.
  - v. Loss of contact with the rest of the family.

#### 2. Social barriers:

Persons with Disabilities and other vulnerable groups are often more susceptible to physical, sexual and emotional abuse when staying in shelters or camps due to their reduced ability to protect themselves or understand the situation.

#### **Actions**

- Train professional local builders and architects in Universal Design norms.
- Fence the shelter compound or areas that are unsafe (open manholes, piles of rubble, etc).
- Ensure sufficient lighting, in shelter areas/camps, so obstacles can be easily seen by those with low vision.
- Install handrails for stairs, and ramps for buildings.
- ldentify family or neighbors of Persons with Disabilities and provide space to them in the same shelter.
- Protection measures be put in place with assistance of families, community and local administration.

#### HOUSING AND PUBLIC BUILDINGS

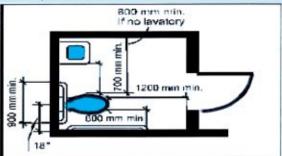
Possessing disability friendly house and accessing public buildings is a key human right, which should be integrated into housing/public building design. Such changes would assist not only Persons with Disabilities, but also the elderly and any persons with a newly acquired disability.

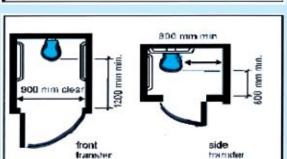


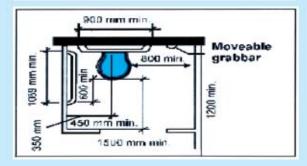
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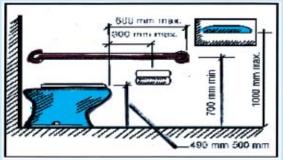
#### **TOILET SPECIFICATIONS**

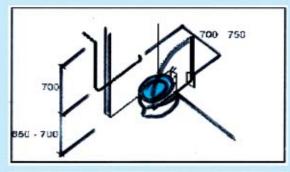
- Toilet floor shall have a non-slip surface without any level difference.
- Light-weight PVC door shutter should be provided as a sliding door.
- Provision of vertical and horizontal rail as 40 mm C.P. Steel Pipe.
- Guiding block near the entry should have a textural difference, (e.g. Diamond Tiles, Prima Regina Tiles, Undressed Granite)

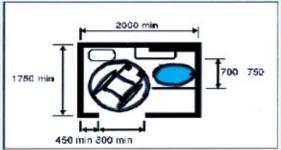


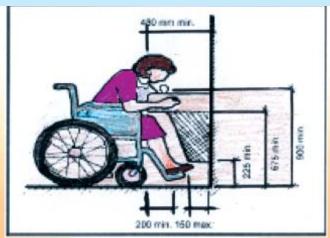












Source: RCI, Access for all

#### **HEALTH SERVICES**

#### I. IMMEDIATE HEALTH CARE

Healthcare provisions are difficult to access immediately after a disaster and this can affect Persons with Disabilities. It might mean an increase in disability or a temporary disability becoming permanent. Persons with Disabilities may also face nutritional risk due to an inability to chew/swallow/ eat food by themselves if paralyzed, or may need special mechanism / aids for eating or require energy dense food. Recurrent diarrhoea and vitamin A deficiency may lead to blindness.

#### **Box-12: Lack of health care leading to blindness**

Haseena Begum, 13-year-old daughter of a daily labourer, lived in Doi Khaoa village of Hatibandha Upazilla of Lalmonirhat District in Bangladesh. When she was aged two, there was a huge flood and their home was washed away. Her father did not have enough food to feed her even once a day. Haseena suffered from serious diarrhea and dehydration. Though she drank saline water it was not enough. Then she began to get pain in her eyes and soon found it difficult to see. Her father could not take her to hospital and instead took her to a quack. She was not provided Vitamin A supplement and her condition deteriorated and she became blind.

Source: Munim Hossain Khandker, 2008.

Immediate health care needs are related to critial care, food, drinking water, and carer assistance. Preventive steps would assist in the reduction of disaster-related disability. Early identification and care can limit the extent of disability arising from injuries following disasters. Adequate manpower training, planned response, referral and prompt medical care can significantly reduce or prevent disabilities from occurring.

#### **Key Issues**

- Limited and sub-standard medical care due to non-availability of properly trained professional staff.
- Interrupted health services and an unhealthy environment following disasters.
- Lack of nutrition and appropriate food. Persons with Disabilities might face nutritional risks due to their existing health problems such as malnutrition, Vitamin A or D deficiency, pressure sores, difficulties in eating, diabetes and low immunity levels.
- Persons with Disabilities might be in need of protection as there may be a situation of violence which they cannot combat or extra social prejudices where they would need special intervention.
- In extreme cases where there is food shortage there are concerns of security as persons with disabilities may be attacked to take the food away from them by force.

#### **Actions**

- Train volunteers to recognize and handle trauma. This will enable them to recognize the severity of trauma, limit impairment and assist in shifting to the right medical facility and on time.
- Provide proper food to Persons with Disabilities in order to avoid nutritional deficiency.
- Include in the relief package, additional clothes for people with incontinence and uncontrolled bowel movement.
- Provide Vitamin A to children, where necessary.

#### **Actions**

- Train relief workers to assist with:
  - i. Repairs of assistive devices.
  - ii. Determining the need of assistive devices.
  - iii. Finding out how many Persons with Disabilities are eligible to get assistive devices free of cost or at subsidized cost.
- Include the above in the tasks of relief workers
- Contact the concerned Government departments (Social Welfare, ALIMCO, DRCs /other) or NGOs in order to provide assistive devices.
- Organize screening, fitment and distribution camps.

#### **Box-13: Assistive Devices**

In India some assistive devices such as wheelchairs, hearing aids, white canes are provided by the Government on a subsidised rate based on the income of the person with disabilities but the replacement period is specified within which if a device is lost or broken it will not replaced before that. In disaster situations this policy acts as an obstacle and would require modification.

#### **WATER AND SANITATION (WATSAN)**

Lack of appropriate and adequate water and sanitation facilities affect Persons with Disabilities the most and so their inputs on such facilities must be obtained and incorporated in the planning process.

#### **Key Issues**

- Persons with Disabilities may not be able to stand in long queues to access water and sanitation facilities. They might not be able to walk long distances to fetch water.
- The shelters may be accessible but not the toilets. Technical support for modification of toilets may not be available.
- Water sources are on elevated grounds to prevent submergence during floods, with no alternative arrangements for the Persons with Disabilities.



Inaccessible water source



#### **Actions**

- List persons who should receive compensation and ensure that they receive it.
- Check if Persons with Disabilities who are below the poverty line are included in the list.
- Cash compensation to persons after a disaster will serve as a temporary assistance to avoid a debt trap.
- Include Persons with Disabilities in insurance schemes.
- Include Persons with Disabilities in micro-credit/micro-finance schemes.
- Prepare and use guidelines to monitor any discriminatory practices.

#### **REHABILITATION SERVICES**

Rehabilitation is a broad concept that includes many activities that improve the autonomy and independence of Persons with Disabilities to help them actively participate in society.

#### **Box-15: Rehabilitation Measures**

Rehabilitation Measures as per the National Policy for Persons with Disabilities, 2006 is classified into three distinct groups (1) physical rehabilitation, which includes early detection, and intervention, counselling and medical interventions and provisions of assistive devices, (ii) educational rehabilitation including vocational training and (iii) economic rehabilitation for a dignified life in society (India, National Policy for Persons with Disabilities, 2006 SectionII.10).

### **Key issues**

- Rehabilitation services are usually available only in major towns and most often, not enough to address the needs.
- Specific needs of Persons with Disabilities are known only to personal care assistants.
- Little knowledge among decision-makers on the services available.
- Lack of community based disability rehabilitation services.

#### **Actions**

- Provisions for physiotherapy to improve the ability of a person with physical impairment to move (exercise, positioning, strengthening, etc).
- Occupational therapy/ADL to help a Person with Disability learn new ways to complete daily activities (dressing, eating, using implements etc.).
- Identification of vocational training skills and provision of training through VRCHs or DPOs.
- Prepare training manuals for workers who will assist in repairing assistive devices.



#### **Key Issues**

- The needs and problems of Persons with Disabilities are different, as they might not be able to access all options. Restoration programs may not address their issues adequately.
- There may be physical inaccessibility to the buildings or Persons with Disabilities may not be able to use the equipment such as computers, machines etc., without adaptation.
- Persons with Disabilities are not aware of government schemes and opportunities available to them.
- There are DPOs with expertise in training/ income generation programs, which can be made use of, but DM practitioners do not know about them.
- Persons with Disabilities, especially women, face the specter of violence and sexual harassment at work place and within the household.

#### **Actions**

- There is a list of various support schemes (e.g. loans), special concessions and reservation (e.g. in bus travel) provided for Persons with Disabilities. Inform and assist those who are eligible to access the schemes. Functionaries who are assisting in livelihood restoration must have knowledge of these schemes.
- Assist in accession to exclusive support facilities of skill up-gradation training and technical support to begin income-generating activities.
- Make the work place accessible by creating changes such as lowering the height of a worktable, changing the design of a machine so that it can be used with one or no hand, use audio signals/ instructions for persons with visual conditions.

#### Box-17: Important Concessions for Person with Disabilities notified by Government of India

- **♦** Travel concession for Persons with Disabilities and their escort.
- Postal concession for Blind literature and packages.
- Customs concessions: Import of special learning and mobility aids.
- Income Tax concessions for Persons with Disabilities and parents.

# Table-6: Government schemes For Economic Empowerment for Persons with Disability

Specific Schemes	Schemes with quota	General Schemes
NHFDC – National Yojana Handicapped Finance & Development Corporation	SGSY – Swarna Jayanti Gram Swarozgar Yojana (3%)	PMRY – Prime Minister Rozgar Yojana
MSES- Mini self employment Scheme	SJSRY – Swarna Jayanti Shahari Rozgar Yojana (3%)	KVIC - Khadi & Village Industries Commission
	Allotment of Petroleum Products Dealership (7.5%)	DRI – Differential Rate of Interest
	Allotment of STD/PCOs (5%)	NSTFDC – National Scheduled Tribes Finance & Development Corporation
	SGRY – Sampoorn Grameen Rozgar Yojana (Not less then 3%)	NSFDC – National Scheduled Caste Finance & Development Corporation
		NSKFDC – National Safai Karmcharis Finance & Development Corporation

# SECTION 6 ADMINISTRATIVE & CIVIL PROCESSES

Specific standards, knowledgeable stakeholders, and adequate financial support are necessary to turn policies into reality. Administrative and civil processes as part of DM are integral to mainstreaming the concerns of Persons with Disabilities. Important civil processes include the local governance system and media.

#### **DATA COLLECTION**

In the process of disaster management, Persons with Disabilities might continue to be excluded. Hence, it is vital to identify and learn through use of data a more effective response, as most information available on disability in disasters has been anecdotal.

#### **Key Issues**

◆ Though many documents include the word disability, very little seems to have been done in regard to these even during the Tsunami, Katrina and other disasters (IDRM, 2005; Ketts, 2005; Renee, 2006).

#### **Actions**

- Include Persons with Disabilities in all Data Bases/ Surveys prepared for DM.
- Prepare specific data bases of Persons with Disabilities when general databases do not include their needs.

#### **ADMINISTRATIVE MECHANISM**

The existing administrative mechanism of disaster management requires a new strategy to build within it a culture of inclusion. This is possible if there is systematic incorporation of the issues of disability in the Disaster Management structures and the implementation process.

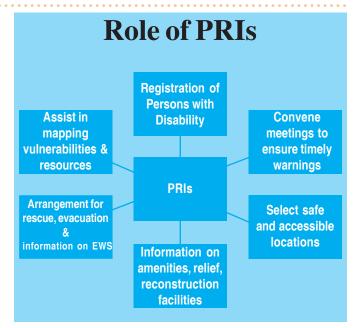
In India, there are certain methods where inclusion can take place in administration, as there is already a system for Disaster Management in place. For instance, in the Ministries identified for various categories of

#### **Key Issues**

- ◆ In the Gram Sabha meetings Persons with Disabilities might not be consulted.
- The funds utilized by Panchayats may not have a disability component.
- Panchayat members may not be sensitive to disability needs.

#### **Actions**

- Sensitize Panchayat members on the needs of Persons with Disabilities in disasters and the rights and dignity of Persons with Disabilities in DM.
- Ensure that the disability needs are included in the CBDRM process at the Panchayat level.



#### **ROLE OF MEDIA**

The role of media has increased dramatically in everyday life and is being used to draw attention to disability issues. The Tsunami brought home the visuals and learning on what went wrong while the portrayal of an empty wheel chair during Katrina brought home the plight of Persons with Disabilities during disasters.

#### Box-18: Role of Media

Media through its wide reach and impact can be a constructive instrument of social change. Media can be harnessed to sensitize the issues and needs of the vulnerable especially the disabled during disasters so that they are addressed by all stake holders.

#### **Key Issues**

- Media rarely pays attention to issues of disability during disasters or provides it a low profile.
- ♦ Its representation is not always sensitive.

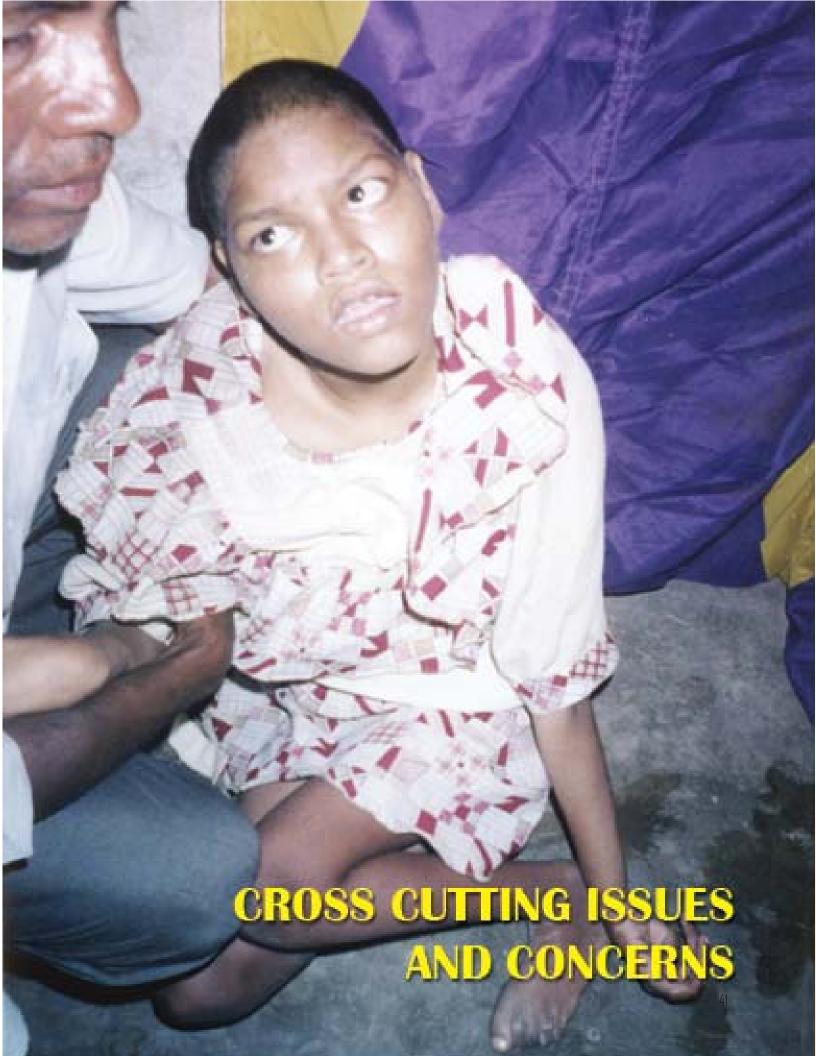
#### **Actions**

- Sensitize Media on the issues of Persons with Disabilities in disasters and how they could be addressed. Ensure that it does not use stereotypical images and discriminatory language (such as crippled).
- During early warning, instruct media to provide information that can be accessed and understood by Persons with Disabilities.

#### **Box-19: Sensitivity of Media**

Crucially, what Persons with Disability want is an acknowledgement of the fact that disability is a part of daily life and for the media to reflect that reality, removing the insulting label of 'disabled' and making it ordinary.

Source: Ross, 1997: 676



#### **Actions**

- Include the needs of children with disabilities (existing and newly created)
- Following disasters, make a rapid assessment of children with disabilities who have been dropped out of schools and those who need education in existing inclusive schools. The Sarva Shiksha Abhiyan of the Government provides an important intervention on inclusive education. Use these schools to introduce the issue of disability in disaster management.
- Facilitate to ensure that Special Educators are available for children with disabilities in camps.
- Encourage inclusion of topics related to disaster management (search and rescue, first aid etc.) in special schools.
- Prepare guidelines to protect children who may be subjected to violence inside and outside the family.
- Provide care to children with disabilities falling under the National Trust guidelines.
- Provide protection to orphans with disabilities.
- Provide counselling to children who face psychological trauma.



Physical therapy of children, Photo: SMRC

#### **INCLUSION OF WOMEN**

Restricted to their homes by inaccessible environments, lack of mobility aids or transportation or restrictions by family and shame caused by cultural biases, women with disabilities are often isolated and unaware of either rights or options. Gender is an important issue to be addressed in DM and more importantly in addressing needs of disabled women.



Distressed woman, Drawing: SMRC

- Provide sanitary wear for use during menstruation.
- Educate health service personnel in provision of sensitive services and of the needs of girls and women with disabilities.
- Train government and non-governmental organizations in prioritization of issues of women with disabilities in development efforts.



Economic empowerment, Photo: SMRC

## **Box-23: Privacy and Security of Women with Disabilities**

"Privacy and security are a high priority for many people when using the toilet or bathing, especially for women. Lack of security can lead to anxiety about latrine use. This may lead to urine retention, and subsequently to medical problems."

This problem becomes more difficult for women with disabilities as they may be using a wheel chair or not able to see. The issue affects not only health but women may be targets of sexual violence while fetching water or using a toilet facility.

Source: Hazel Jones and Bob Reed, 2005





WAY FORWARD

◆ In October 2005, the World Bank approved a grant of \$5 million to Pakistan, to enable the country to include persons with disabilities in its rehabilitation process following the Kashmir earthquake. The aim of the project is to both enhance direct service provision to persons with disabilities, as well as mainstream disability concerns into the development activities of agencies working on recovery and reconstruction. (World Bank, 2006).

#### **Healthcare**

Bangladesh Cyclone 2007: Handicap International provided crucial aid to the most affected areas of Bangladesh, after Cyclone Sidr struck the country on November 15, 2007. After providing initial emergency relief, Handicap International, Bangladesh carried out a formal assessment of the needs facing the injured and persons with disabilities in Patuakhali and Burgana, two of the most badly affected regions. The assessment focused on the medical needs of persons with disabilities, and those who sustained physical injuries, and supporting local institutions providing medical care and rehabilitation. An emergency response team was also sent to assess the long-term role of Handicap International in helping to make sure the needs of persons with disabilities are a key part of relief efforts (Handicap International, 2007).

#### **Women with Disabilities**

Women are marginalized and women with disabilities more so (Agnihotri, 2007). In the aftermath of the Orissa 1999 Super Cyclone in India, SMRC, a DPO, mainstreamed women in all their post disaster programs. Women were provided comprehensive and specific assistance in relief, housing, health care and livelihood. During the period 1999 to 2002, more than 1500 women were provided services ranging from referral to health care to livelihood options.

## **Learning from Experience**

Lex Freiden, past President of Rehabilitation International (RI) was witness to floods in Texas on June 8, 2001. When people were evacuating their homes, Lex, who is a quadriplegic (Paralyzed in all four limbs), was at home with his personal assistant. Water started pouring into their home and Lex sitting in his wheelchair saw water coming up to his knees and waist. A neighbor and his assistant brought him to one of the highest locations in his home, and it was a long time before he was rescued. Lex came to play an important role in Katrina Hurricane (2005) operations where he assisted operators in New Orleans with guidance and advice on rehabilitation and assistive technology. (Narrated by Tomas Lagerwal, Secretary General, RI at a meeting on Inclusion of Disability in Disaster Conference held in Bhubaneswar India 27-28 January 2008).



Rath Santosh and Asha Hans, 2005. "Disability and Donor Response during Disasters Disability and Disaster Paper Presented at Forum X Cairo.

RCI, 2005. Access for All: Training Manual to promote "Barrier Free Environment' Rehabilitation Council of India. New Delhi. http://www.rehabcouncil.nic.in/programmes/access\_all.html.

Renee, John. 2006. "Evacuation and Equity. A post-Katrina New Orleans diary". Planning. Issue May. http://www.planning.org/planning/member/2006may/evacuation.htm

Ross, Karen. 1997. Where's Me In It? Media Culture and Society. Vol. 19 pp. 669-677.

Singh P. 2007. Impact of South Asian Earthquake on Disabled People in the State of Jammu and Kashmir. http://wecando.wordpress.com/2007/10/27/paper-impact-of-south-asian-earthquake-on-disabled-people/

SMRC. 2005. Manual on Psychological Care during Disasters: Manual Bhubaneswar.

Spinal Injuries Association, People with spinal Injuries. London. nd.

Torchia Christopher. 2005. Sambodhi shelter - Disabled lay in their beds as waters engulfed them Canadian Press January 2.

United Nations. 2000. "Further actions and initiatives to implement the Beijing Declaration and Platform for Action", General Assembly Resolution S23/3 of 10 June 2000, annex, paragraph 63)

United Nations Enable. 2007. United Nations Convention on the Rights of Persons with Disabilities. http://www.un.org/esa/socdev/enable/documents/tccconve.pdf

United Nations, 2007: Statistical Commission 38<sup>th</sup> Session, Item 3 (c) of Provisional agenda items for discussion and decision: Disability Measurement, Addendum to the Report of the Washington Group on Disability Statistics. (http://unstats.un.org/unsd/statcom/doc07/BG-Disability.pdf)

United Nations, General Assembly the Standard Rules on the Equalization of Opportunities for Persons with Disabilities, 1993. Forty-eighth session, resolution 48/96, annex, of 20 December

United Nations, International Strategy for Disaster Reduction Terminology of Disaster Risk Reduction. http://www.unisdr.org/eng/library/lib-terminology-eng%20home.htm

World Bank Disability & Development Team (Human Development Network), 2006. Report of the Online Forum on Disabled and other Vulnerable People in Natural Disasters. Washington D.C

Yodmani S. 2001. Disaster Preparedness and Management pp. 481-502, http://www.adb.org/Documents/Books/Social Protection/chapter 13.pdf.

#### **Section 5**

- Department For International Development (DFID) 2000. Disability, Poverty and Development Department for International Development (DFID): London, 17 p. http://www.dfid.gov.uk/pubs/files/disability.pdf.
- ◆ ILO.2002: Managing Disability in the Workplace: Code of practice, disabled workers, rights of the disabled, human resources management. ILO Code practice. http://www.ilo.org/public/english/employment/skills/disability/download/codeeng.pdf.
- Ram Kishore Sharma. 2007. dis\_abled: Employment, Vocational Evaluation and Vocational Training.
   Development Solutions. Bhubaneswar. Orissa
- U.Gauthamadas ed. 2005. Disaster Psychosocial Response: Handbook for Community Counselor Trainers Academy for Disaster Management, Education, Planning and Training. Chennai Adept Publication 2005. Web page: www.disaster-management.info
- World Bank, Disability and Development Team, 2004. Poverty Reduction Strategies: Their importance for disability. http://siteresources.worldbank.org/DISABILITY/Resources/280658-1172608138489/ PovertyReductionBonnel.pdf

#### **Section 6**

- Disability India Network, Government Rehabilitation Services http://www.disabilityindia.org/ govtrehab.cfm
- Disability India Network: Facilities & Benefits http://www.disabilityindia.org/benefits.cfm
- National Centre on Disability and Journalism. Tips for Journalists: Interviewing People with Disabilities: http://www.ncdj.org/interviewing.html
- Planning Commission: A Handbook Schemes For Children With Disabilities: Role Of The Panchayati Raj Institutions: http://planningcommission.nic.in/reports/sereport/ser/stdy\_dsbty.pdf

#### **Section 7**

- Agnihotri S.B., Asha Hans and Amrita Patel. 2007. A Multi State Socio Economic Study of Women with Disabilities in India. Draft Report for UNDP India. New Delhi.
- Help Age International 2007. Older people's associations in community disaster risk reduction: A Resource Book on good practices. www.helpage.org.
- Swedish Agency for International Development Cooperation (SIDA).2005 Ed Children and adults with disabilities Stockholm, Sweden: SIDA, December, 32 p.
- Sue Stubbs, 2002. The Atlas Alliance: Inclusive Education Where there are few resources. Norwegian
  Association of the Disabled and the Atlas Alliance. email: atlas@atlas-alliansen.no www.atlasalliansen.no.

3.7	Have schemes and institutes providing assistive devices been listed in the exercise?		
3.8	Is a listing of therapists/Professionals (audiologist, speech therapists, occupational therapists, psychotherapist, sign language interpreter, mobility instructors, counselors, etc.) been done?		
3.9	Have schemes which provide support to Persons with Disabilities for treatment, education, training, economic empowerment, social integration, transport, etc. been included?		
3.10	Are there special provisions for Persons with disabilities provided in disaster management documents (Disaster Act, Code, Policy )?		
3.11	Has the process for inclusion been initiated?		
3.12	Have Parents Association/Federations of Persons with Disabilities listed as a resource?		
4. Co	ping Mechanisms		
4.1	Have the needs of Persons with Disabilities been identified?		
5. Ca	pacity Building and Training		
5.1	Have tools/ manuals for training volunteers/ staff on addressing disability in disaster management been prepared?		
5.2	Have manuals been used for training on management of disability during disasters?		
5.3	Have the staff been sensitized on disability issues?		
5.4	Does monitoring and evaluation include assessment of inclusion of Persons with Disabilities in training programs on disaster management?		
5.5	Has the training place been assessed for accessibility?		
5.6	Have professionals, physiotherapists, occupational therapists, and special educator's etc., been included in the training programs?		
6. Ear	ly Warning Systems and Role of Communication		
6.1	Have disability friendly early warning communications systems been designed and installed?		
7. Re	scue & Evacuation		
7.1	Have the Persons with Disabilities been informed about evacuation strategies?		
7.2	Have volunteers been trained in the evacuation of Persons with Disabilities?		

12A.3 Has initial treatment been provided?	
12A.4 Have volunteers been provided training to recognize injury and methods of rescue and preliminary care and shifting?	
12A.5 Are the food security needs of Persons with Disabilities addressed?	
12A.6 Are they receiving adequate quantity and quality of food?	
12A.7 Are there deficiency diseases among Persons with Disabilities?	
12A.8 Has Vitamin A been provided to children with disabilities?	
12A.9 Has IEC material on health care of disabled been prepared?	
12B. Continuing Health Services	
<ul><li>12B.1 Do you have the list of common disabilities in the region (from Social Welfare/ICDS/PRIs/other source)?</li><li>12B.2 Can the health facilities in the region provide</li></ul>	
services to the Persons with Disabilities (new and existing impairments) during disasters?	
12B.3 Are they accessible to Persons with Disabilities?	
12B.4 Are specific health facilities in the region equipped to address the health care needs of Persons with Disabilities during disasters? (e.g. spinal injury, head trauma, visual and hearing impairment, especially new)	
13. Assistive Devices	
13.1 Has a listing of assistive devices required in case of a disaster been prepared?	
13.2 Have replacement strategies been worked out?	
13.3 Have fitment camps been organized?	
14. Water and Sanitation (WATSAN)	
14.1 Does shelter equipment contain essentials for Persons with Disabilities?	
14.2 Are additional measures required to improve availability of water for Persons with Disabilities, been assessed?	
14.3 Have the Persons with Disabilities been consulted?	
14.4 Have strategies for equal access to water for vulnerable worked out?	
14.5 Are toilets accessible? Are they safe?	
14.6 Are hygienic conditions maintained?	

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19. D	Oata Collection			
19.1	Have Persons with Disabilities been included in the data base / surveys conducted for the DM planning?			
19.2	Are there sex desegregated data on Persons with Disabilities in the DM Plan?			
20. A	dministrative Mechanism			
20.1	Is the DSWO part of the DM programmes ?			
20.2	Has there been convergence of officers incharge of disabilities with those handling DM process at national/state/district level.			
21. R	ole of Local Governance: Panchayati Raj Institutions			
21.1	Have Panchayati Raj Institutions been sensitised on disability issues in DM?			
21.2	Has an assessment of the awareness of the PRI functionaries on the rights of Persons with Disabilities been carried out?			
21.3	Have steps been taken to include Persons with Disabilities in Panchayat programmes on disaster management?			
22. N	1edia			
22.1	Does the media kit contain disability issues?			
22.2	Has the media been sensitised on disability concerns?			
23. N	Nonitoring & Evaluation			
23.1	Are existing monitoring and evaluation systems based on participatory methods?			
23.2	Does a reporting system exist to protect the disability concerns?			
23.3	Are regular evaluations addressing disability in DM processes carried out ?			
24. N	leeds of Children			
24.1	Has an assessment of existing educational opportunities for children with disabilities been carried out ?			
24.2	Has a survey on the number of school going children with disabilities and out of school children been carried out?			
24.3	Has the reason being out of school been assessed ?			
24.4	What is the distance and transport available for school ?			
24.5	Are special teachers and facilities available?			

### **FORMATS**

# 1. REGISTRATION FORM

Village:	Block:
GP:	District:

SI.	Name of	me of Address of	ress of Type of *Extent of	Age Sex	Marital	Present Work	Edu-	Income	Ne	eeds		
No.	Persons with Disabilities	the Parents/ Carer	Type of Disability 1,2,3,4,5	Disability			Status M/U	Status Employed (E)/ Unemployed(U)	cation	APL (A) BPL (B)	Med- ical	Non medi cal

<sup>\*</sup> as mentioned in the disability certificate

<sup>1.</sup> Physical Impairment, 2. Speech and Hearing Impairment, 3. Visual Impairment,

<sup>4.</sup> Developmental Impairment, 5. Multiple Impairments

#### 3. SUMMARY CHECKLIST FOR A INDIVIDUAL DISASTER PREPARATION PLAN

There are many parts to a personal disaster plan. Fortunately, they do not have to be completed all at once. The Person with Disability has to finish each part of the preparation, noting the date. This plan has to be reviewed and updated regularly.

Make an emergency information list.

#### Include:

- Medical and emergency contact information.
- Names and numbers of the nearest NGO/ CBO/ DPO
- Name and number of a relative or friend whom lives more than 50 kms away from you.

If you have a communication disability, make sure your emergency information list notes the best way to communicate with you.

Fill out a medical information list.

Include information about:

- Medical providers.
- Medications you use.
- Adaptive equipment and/or body system support equipment you use.
- Allergies and sensitivities.
- Communication or cognitive difficulties.

Attach copies of health needs and related information to your medical information list.

Keep at least a seven-day supply of essential medications with you at all times.

Have extra copies of prescriptions.

Talk with your doctor or pharmacist about what you should do if you do not have enough medicine after a disaster. Also, find out the shelf life of your medication and the storage temperature it needs.

Identify safe places to go to during a/an:

- Flood
- Earthquake
- Cyclone
- Tornado
- Fire

Identify as many exits as possible (but at least two if available) from each room and from the building you are in.

Practice using different ways out of a building, especially if you are above the first floor in a building with many stories.

Decide what type of equipment you will need for assistance during an evacuation.

Be ready to give brief, clear, specific instructions and directions to rescue personnel.

Ask your local emergency management office if transportation services are available to Persons with your Disability during an emergency evacuation. Find out how to arrange to get this service.

Become familiar with the emergency or disaster evacuation plan for your office, school, or any other location where you spend a lot of time.

Choose an alternate place to stay.

Source: Adapted from American Red Cross

# 5. POST DISTRIBUTION MONITORING FORM FOR ASSISTIVE DEVICES

No.	Items	Received	Numbers	Remarks
1	Wheel chair			
2	Hearing Aid			
3	White Cane			
4	Battery for Hearing Aid			
5	Crutches			
6	Walking Stick			
7	Walking Frame			
8	Rotator			
9	Footwear			
10	MCR Slipper			
11	Tricycle (motorized/non-motorized)			
12	Arithmetic frame			
13	Braille Dot system			
14	Dictaphone			
15	Tape Recorder			
16	Braille writing equipment			
17	Magnifier			
18	Speech synthesizer			
19	Braille soft ware			
20	Educational Kit for Hearing Impaired			
21	Alarm devices (telephone/TV/time alarm) etc.			
22	Portable speech synthesizer			

Note: The list is not exhaustive

# 7. GENDER BASED VIOLENCE REPORTING FORM

Date of report:	
Date of incident:	
Nature of Incident:	
<ul> <li>Abandonment</li> <li>Attempted rape</li> <li>Child sexual abuse</li> <li>Confinement</li> <li>Denial of education for girls</li> <li>Early marriage</li> <li>Economic abuse</li> <li>Forced marriage</li> <li>Forced prostitution</li> <li>Incest</li> <li>Infanticide and/or neglect</li> <li>Physical assault/abuse</li> <li>Rape</li> <li>Sexual assault</li> <li>Sexual harassment</li> <li>Forced sterilization/hyster ectomy</li> <li>Structural discrimination</li> </ul>	
Additional details about the incident:	

- right to work
- right to an adequate standard of living
- right to participate in cultural life

Question: What are the policies and laws meant for persons with disabilities in India which could be used in disaster management?

#### **Answer:**

- 1. Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
- 2. National Policy for Persons with Disabilities Act, 2006
- The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999
   No. 44 of 1999 (30th December 1999)

#### **Question: What is a barrier free environment?**

**Answer:** Accessible or barrier free environment means people with disabilities are able to move about safely and freely, and use the facilities within the built environment. The goal of barrier free environment is to support the independent functioning of individuals so that they can participate without assistance, in every day activities. To achieve this goal a Universal Design Concept has been established.

#### Question: What does Universal Design mean?

**Answer:** Universal Design means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. "Universal design" shall not exclude assistive devices for particular groups of persons with disabilities where this is needed (United Nations Convention on Persons with Disabilities).

Applicability of the concept must be adhered to during the disaster management process for instance in shelters, housing, public buildings, work places and schools.

#### Question: Where should signage be used?

**Answer:** Signage should be used for instance to locate toilets, lifts, directions, ramps, slopes, telephones, entrances and exits.

Question: What are the essential components for barrier free access in transport, shelter, and housing? Answer:

Transport : Buses, trains, Airlines

Shelter : Main entrance, walkways, waiting and rest rooms, toilets, water

taps/ fountains, audio-visual announcements, and independent

boarding and sitting facilities.

Housing and Public Buildings : Main entrances, toilets, walkways, parking places, ramps, slopes,

pathways.