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# Disability Inclusive Community Based Disaster Risk Management

## A toolkit for practice in South Asia

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Technical Resources Division  
October 2012

*Disability Inclusive Community Based Disaster Risk Management: A toolkit for practice in South Asia*

Published by Handicap International under its project 'Make CBDRM inclusive in South Asia', funded by DIPECHO.

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# Disability Inclusive Community Based Disaster Risk Management

A toolkit for practice in  
South Asia

KNOWLEDGE & PRACTICES GATHERED FROM  
AFGHANISTAN, BANGLADESH, INDIA,  
NEPAL & SRI LANKA

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## About Handicap International



Handicap International (HI) is an independent international aid organisation working in situations of poverty and exclusion, conflict and disaster. Working alongside people with disabilities and vulnerable populations, Handicap International takes action and raises awareness in order to respond to their essential needs, improve their living conditions and promote respect for their dignity and fundamental rights.

Since its creation in 1982, Handicap International has put in place development programmes in over 60 countries, and intervened in numerous emergency situations. The network of 8 national associations (Belgium, Canada, France, Germany, Luxembourg, Switzerland, UK and U.S.A.) work together to raise funds, manage projects and spread the principles and actions of the organisation. As one of the six founding organisations of the International Campaign to Ban Landmines (ICBL), Handicap International is co-laureate of the 1997 Nobel Peace Prize. The organisation is also laureate of the 2011 Conrad N. Hilton Humanitarian Prize.

## About the European Commission's Humanitarian Aid and Civil Protection department (ECHO)

ECHO funds relief operations for victims of natural disasters and conflicts outside the European Union. Aid is channelled impartially, straight to people in need, regardless of their race, ethnic group, religion, gender, age, nationality or political affiliation.

ECHO's Disaster Preparedness Programme supports a combination of community-based projects and projects at national or regional level that strive to increase resilience in the event of natural hazards. Projects are implemented through a wide range of partners, including local organisations that provide access to the most marginalized and vulnerable people.



Humanitarian Aid  
and Civil Protection

## About the Project



Handicap International's project 'Make Community-based Disaster Risk Management Inclusive in South Asia' is being implemented in five countries across South Asia: Afghanistan, Bangladesh, India, Nepal and Sri Lanka. Working at community, state/province, national and regional levels the project aims to enable persons with disabilities and other vulnerable groups to be better included in the Disaster Risk Management (DRM) process.

At the heart of the project is local-level implementation where the project teams work with communities to reduce the risk of future disasters to their lives and livelihoods. Specific attention is given to promoting the participation of persons with disabilities and other vulnerable groups who are often excluded from such initiatives. The project builds on previous DRM experiences in India, Bangladesh and Nepal where Handicap International teams have demonstrated a range of practical and effective ways of ensuring inclusion by adapting existing techniques and raising awareness of the issues.

# Preface

Welcome to Handicap International's Disability Inclusive Community Based Disaster Risk Management: a toolkit for practice in South Asia. This Toolkit has been designed for use by disaster risk management practitioners and policy makers who wish to understand more about how to make community based disaster risk management (CBDRM) inclusive of persons with disabilities.

Its content is based on practices developed through Handicap International's work in Bangladesh, India and Nepal since 2004, as well as more recent learning from Sri Lanka and Afghanistan. It combines content from pre-existing, well-tested toolkits from each of these countries to create an up-to-date guide that reflects learning from across the region.

The Toolkit establishes the rationale for inclusion, the challenges and opportunities which exist in implementation and provides technical advice and tools for putting theory into practice. It aims to be a point of reference to be used during policy and project development, as well as a tool to support good practice in implementation. It is not expected that users will have prior knowledge of disability, although familiarity with disaster risk management at community level is necessary as the document does not seek to repeat information about CBDRM found elsewhere.<sup>1</sup>

## Part One: Background to disability inclusive CBDRM

The first part establishes the rationale for taking an inclusive approach, firmly establishing the links between disability and disasters and the need for action on inclusion. It provides an introduction to the terminology and conceptual frameworks that support later practical advice in Part Two, and acts as a reference for training on disability and inclusion.

## Part Two: Disability Inclusive CBDRM in practice

Part Two provides practical guidance on how to make core CBDRM activities inclusive. Separated into eight individual booklets, it takes each activity in turn and highlights what needs to be taken into account both in planning and in implementation. Case-studies from across the region are used throughout to bring the subject matter to life and reveal the positive impact that taking an inclusive approach has on the lives of persons with disabilities, their families and their communities.

## Part Three: Toolbox

The Toolbox contains a number of tools to complement the advice given in Part Two and support good practice in implementation. These tools can be taken and used as provided or adapted for use as necessary. Soft copies of the tools are on the accompanying CD-Rom.

An online version of the Toolkit is also available at [www.disabilityindrr.org](http://www.disabilityindrr.org) where all the sections and tools are available for download.

<sup>1</sup> For a full introduction to CBDRM visit the Preventionweb website which has links to a range of resources [www.preventionweb.net](http://www.preventionweb.net)

# Acronyms

<b>CBDRM</b>	Community Based Disaster Risk Management
<b>CBO</b>	Community Based Organisation
<b>CDMC</b>	Community Disaster Management Committee
<b>CRA (Bangladesh)</b>	Community Risk Assessment
<b>CSMMC (India)</b>	Community Shelter Maintenance and Management Committee
<b>DCP</b>	Disability Creation Process
<b>DMC</b>	Disaster Management Committee
<b>DPO</b>	Disabled People's Organisation
<b>DRM</b>	Disaster Risk Management
<b>DRR</b>	Disaster Risk Reduction
<b>ECHO</b>	European Commission Humanitarian Aid and Civil Protection
<b>EWS</b>	Early Warning System
<b>HI</b>	Handicap International
<b>IEC</b>	Information, Education and Communication
<b>INGO</b>	International Non-Government Organisation
<b>NGO(s)</b>	Non-Government Organisation(s)
<b>NNSWA</b>	Nepal National Social Welfare Association
<b>OSDMA</b>	Odisha State Disaster Management Authority
<b>SMC</b>	Shelter Management Committee
<b>UDMC</b>	Union Disaster Management Committee
<b>UNCPRD</b>	UN Convention on the Rights of Persons with Disabilities
<b>UNDP</b>	United Nations Development Programme
<b>UNISDR</b>	United Nations International Strategy for Disaster Reduction
<b>VCA</b>	Vulnerability and Capacity Assessment
<b>WHO</b>	World Health Organization
<b>YPSA</b>	Young People in Social Action

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# Acknowledgements

This Toolkit was developed as part of Handicap International's regional project 'Make community-based disaster risk management inclusive in South Asia.'

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Handicap International would also like to express its appreciation to all those who gave their feedback and encouragement when an outline of the Toolkit was presented at the South Asia International Workshop on "Strengthening advocacy for disability inclusive disaster risk management," held in Colombo on 9-10 May, 2012.

Finally, but foremost, Handicap International would also like to express its gratitude to the large number of Governmental authorities, non-Governmental and community-based organisations, extended network of partners and communities across South Asia for their role in making inclusive disaster risk management possible and providing the basis of all the information presented here in the Toolkit.

# Introduction

More than 226 million people are affected by disasters every year, the majority living in developing countries. Asia is the most affected continent, accounting for more than 60% of deaths and nearly 90% of the total affected people.<sup>1</sup> This number is expected to rise as the impacts of climate change increase the number and frequency of hazards that can cause disasters.<sup>2</sup>

Disasters have profound impacts on development outcomes and levels of poverty for individuals, communities and countries. It has been repeatedly demonstrated that the most vulnerable in society, those living in poverty, in poor housing conditions, with minimal access to services, and who face social and political discrimination are at greatest risk of suffering from the impacts of disasters.<sup>3</sup>

The World Health Organization (WHO) estimates that 15% of the world's population, or 1 billion people, have a disability. Persons with disabilities are disproportionately represented amongst societies' poorest, with reduced income earning opportunities and poorer access to services.<sup>4</sup> In the event of a disaster they are amongst the most vulnerable members of society.

Disasters are also a cause of disability. Injuries sustained during a disaster, as well as lack of medical aid, mobility aids and preventative care can lead to a wave of new impairments. After the Asian Tsunami, it was estimated that there was a 20% increase in the number of persons with disabilities in the affected areas.<sup>5</sup> The Haiti earthquake in 2010 left 300,000 injured and resulted in between 4-6,000 amputations in the immediate aftermath.<sup>6</sup>

National and international laws and conventions recognise the equal rights of persons with disability in disasters. Article 11 of the UN Convention on the Rights of Persons with Disabilities (UNCRPD) states the right to protection and safety in the event of a disaster. In addition the Hyogo Framework for Action (HFA) on disaster risk reduction identifies persons with disabilities as a priority group for support, as do the Sphere Standards which identify minimum standards for good practice in disaster response.<sup>7</sup>

Despite these international mandates, disaster response rarely meets the needs and rights of persons with disabilities. Handicap International, through its work in disaster situations has found that shelters and camps and other vital services such as water and sanitation and food distribution are often inaccessible, and that weak protection systems leave persons with disabilities at risk of physical, mental and sexual abuse. It has also observed that persons with disabilities are frequently less informed about the situation and the resources available and their specific needs overlooked.

As well as not having their needs met, persons with disabilities also face being identified solely as passive victims, their capacities overlooked and their right to participate in decision making ignored.

An inclusive approach to CBDRM help to address these issues, ensuring that services and systems are adapted to meet the diverse needs of community members, and that all individuals are empowered to take action to reduce their own risk.

1 United Nations International Strategy for Disaster Reduction UNISDR, 2011. *Disasters through a different lens: Behind every effect, there is a cause*. [pdf] available at: <http://www.unisdr.org/we/inform/publications/20108>

2 World Bank, 2010). *Natural Hazards, Unnatural Disasters*. Washington, The World Bank

3 UNISDR, 2011. *Disasters through a different lens: Behind every effect, there is a cause*

4 WHO 2011. *World report on Disability*. Geneva, WHO

5 Oosters, B., 2005. *Looking with a disability lens at the disaster caused by the Tsunami in South-East Asia*. CBM International

6 Inter-Agency Standing Committee, 2010. *Response to the Humanitarian Crisis in Haiti: Achievements, Challenges and Lessons to be Learned*. IASC [pdf] available at: <http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-news-newsdetails&newsid=143>

7 The HFA is an internationally agreed set of priorities for disaster risk reduction. Community action on disaster risk reduction is considered a cross-cutting theme of the HFA. For more information see [www.preventionweb.net](http://www.preventionweb.net). The Sphere Standards are made up of a humanitarian charter and set of minimum working standards for life-saving areas of humanitarian response, see [www.sphereproject.org](http://www.sphereproject.org)

# Definitions and Terminology

**Coping Capacity:** “The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters” (UNISDR)

**Community Based Disaster Risk Management:**

“A process where at-risk communities are actively engaged in all stages of DRM, in order to reduce their vulnerabilities and enhance their capacities. This means that people are at the heart of decision making and implementation of disaster risk reduction activities, including those who are the most vulnerable” (UNISDR)

**Contingency planning:** “A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations” (UNISDR)

**Disability:** There is no fixed definition of disability however the (UNCPRD) UN Convention on the Rights of Persons with Disabilities states that “persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others”

**Disaster:** “A serious disruption to the functioning of a community or society causing widespread human, material, economic or environmental losses which the affected community cannot cope with using its own resources” (UNISDR)

**Disaster risk:** “The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period” (UNISDR)

**Disaster Risk Management:** “The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster” (UNISDR)

**Hazard:** “A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage” (UNISDR)

**Impairment:** “Impairment: In the context of health experience, an impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function” (WHO)

**Mitigation:** The lessening or limitation of the adverse impacts of hazards and related disasters (UNISDR)

**Preparedness:** The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions” (UNISDR)

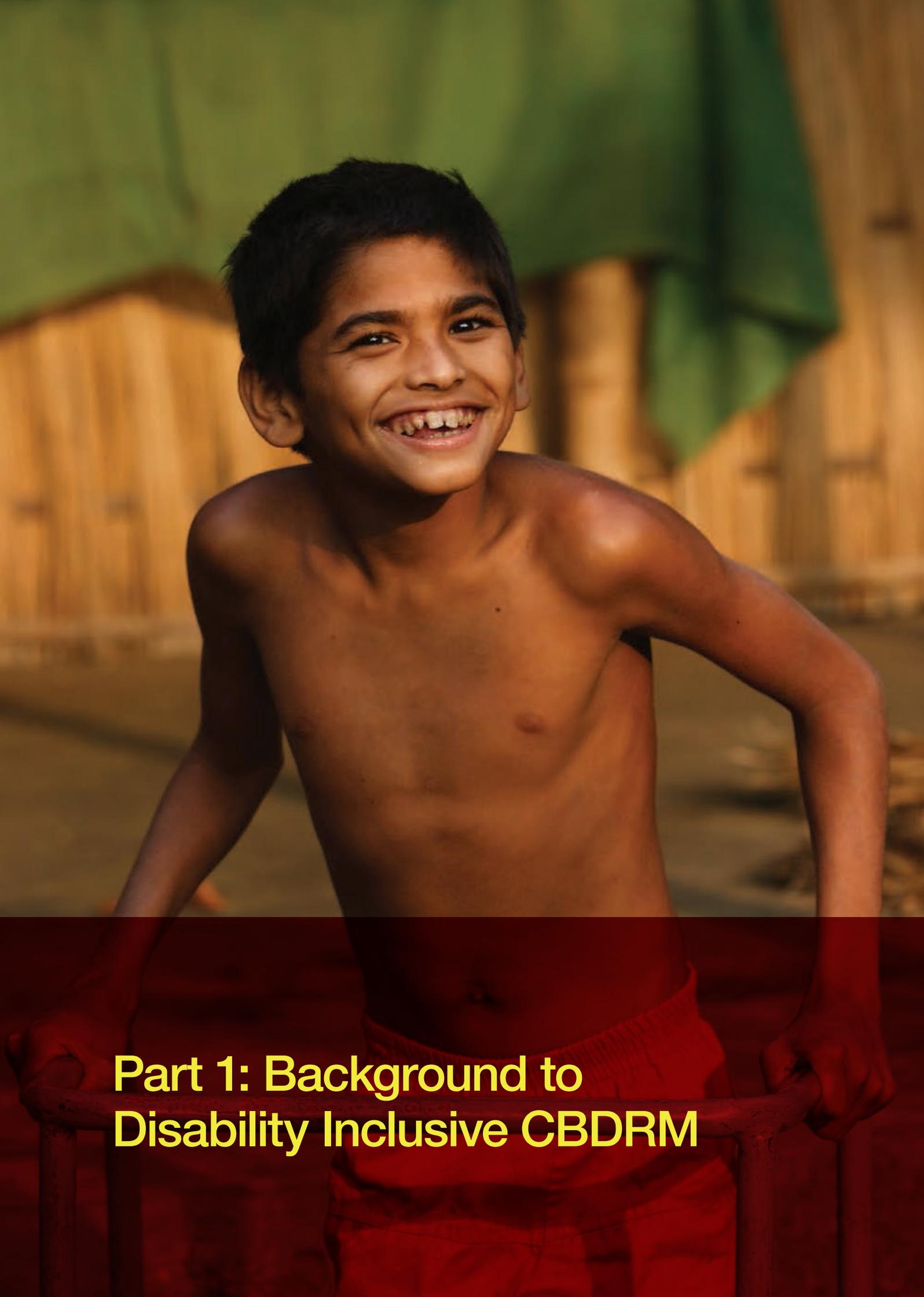
**Prevention:** “The outright avoidance of adverse impacts of hazards and related disasters” (UNISDR)

**Resilience:** “The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions” (UNISDR)

**Response:** “The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected” (UNISDR)

**Risk:** “The combination of the probability of an event and its negative consequences” (UNISDR)

**Vulnerability:** “The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard” (UNISDR)



**Part 1: Background to  
Disability Inclusive CBDRM**





Courtyard awareness raising session for women in Sitakunda, Bangladesh.

# 1 Part One: Background to Disability Inclusive CBDRM

**Disability Inclusive Community Based Disaster Risk Management**

A toolkit for practice in South Asia

Knowledge & practices gathered from Afghanistan, Bangladesh, India, Nepal & Sri Lanka

[www.disabilityindrr.org](http://www.disabilityindrr.org)



# Section One: Introduction to Disability: Key Terminology and Concepts

## Defining disability

Article 1 of The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) states that:

“Persons with disabilities include those who have **long-term physical, mental, intellectual or sensory impairments** (includes visual, speech and hearing impairments), which **in interaction with various barriers** may **hinder their full and effective participation in society** on an equal basis with others.”

The key aspects of this statement to note are that:

1. Disability involves a long-term impairment; a person with a temporary injury or impairment is therefore not considered to have a disability
2. Persons with disabilities can present with different types of impairments - physical, mental, intellectual and sensory
3. Disability is experienced when a person cannot fully participate in society on an equal basis as someone with no impairment. There are therefore two aspects of disability which interact to make this the case – impairment and barriers to participation.

Definitions of disability vary according to regions, countries and context and as a result there is no overall agreed definition.

## Types of impairment

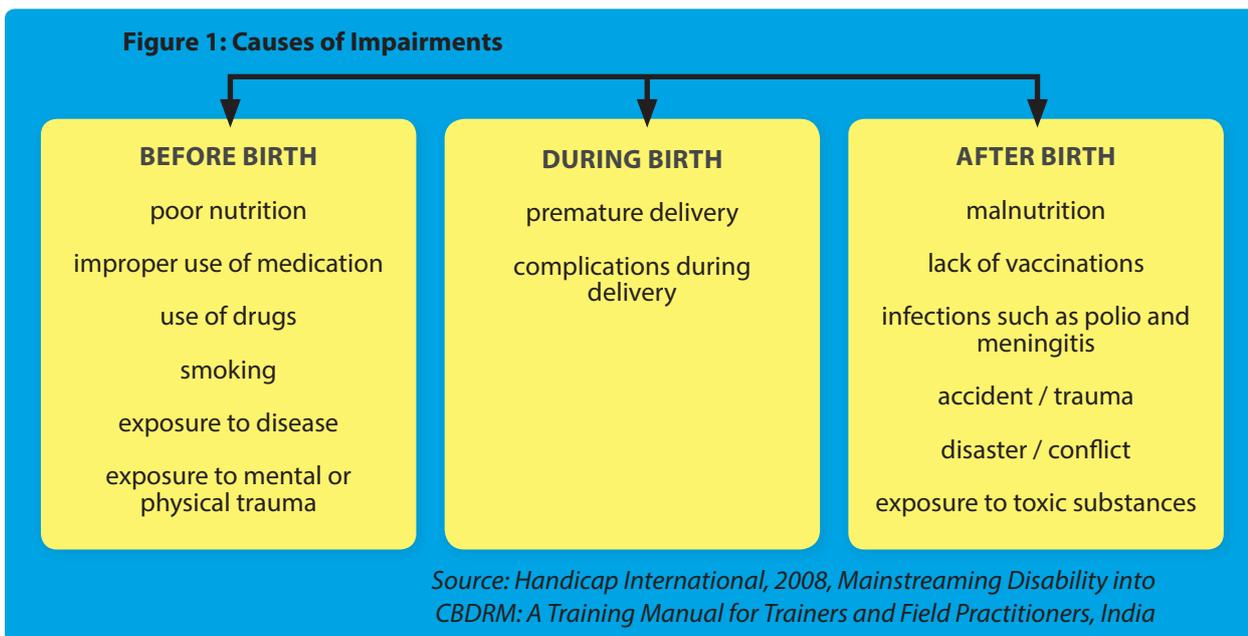
The four types of impairments as identified above are physical, sensorial, mental and intellectual. Within this toolkit impairments are grouped by functional needs (see table below). People in these groups may have different medical conditions but they have common functional needs.

<p><b>Physical Impairments</b></p> <p>Difficulty in moving around or doing some activities</p>	<p><b>Visual Impairments</b></p> <p>Difficulty in seeing and moving around</p>
<p><b>Hearing &amp; Speech Impairments</b></p> <p>Difficulty in hearing and speaking</p>	<p><b>Intellectual and Mental Impairments</b></p> <p>Difficulty in understanding and behaving appropriately</p>

In later sections, advice for inclusion may vary according to the type of impairment and associated functional needs. Persons with multiple impairments may also have multiple functional needs, all of which should be taken into account to support their inclusion.

## Causes of impairments

Causes of impairments can take place before, during and after birth. Primary causes are poor nutrition, dangerous working and living conditions, limited access to vaccination programs and health care, poor maternal care, poor hygiene and sanitation and inadequate information about prevention. Further causes include war, conflict and disasters.<sup>1</sup> Figure 1 below gives an overview of some main causes and when they occur, many of which are preventable.



## Barriers to inclusion

Barriers refer to physical or invisible obstacles that prevent a person with disability from accessing or fully participating in 'life activities'. There are a number of different types of barriers which affect a person's ability to take full part in normal daily life activities. Some are visible and can be addressed through physical action e.g. building a ramp or removing an obstacle, others which are less obvious can require a more long-term approach to removing them, and involve the change of attitudes, beliefs and expectations.

**Physical barriers:** this refers to barriers preventing access to the built and physical environment within which we live. For example, schools, cyclone shelters, public toilets, health centres, as well as public transport and other forms of infrastructure, that are made inaccessible due to issues such as high steps without rails, narrow entrances or slippery floors.

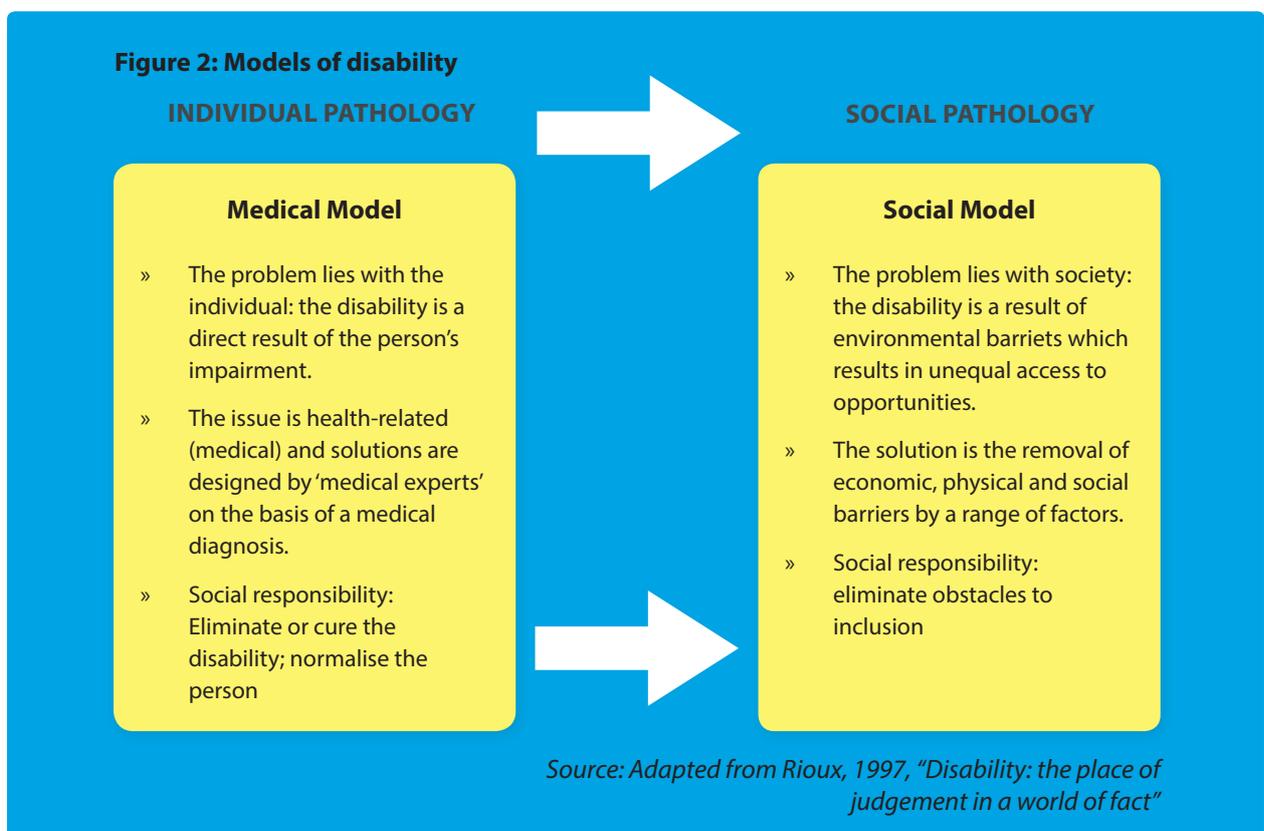
**Social and cultural barriers:** these barriers include negative behaviours such as prejudice, pity, over protection and stigma. They can come from family members, the community, local authorities, the media, etc. and lead to exclusion, discrimination and lack of opportunities for persons with disabilities to realise their potential. Social exclusion resulting from these barriers is often associated with feelings of shame, fear and rejection.

**Institutional barriers:** this refers to policies, legislation and institutions which do not adequately support the rights of everyone in the community or which actively work to discriminate against persons with disabilities. Poor implementation of international and national legislation supposed to promote the rights of people with disabilities is also an institutional barrier. Other forms of institutional barriers include disability being addressed as a 'welfare' or 'specialist' issue and lack of consultation with persons with disabilities and their representative groups.

## Conceptualising disability

### Models for Addressing Disability

Over time thinking has evolved regarding disability and approaches to addressing issues concerning persons with disability in policy and practice. Different models have emerged which vary according to whether the focus is more on the individual or more on society. The figure below highlights two such models; the medical and the social which help illustrate the key differences in thinking.



It is important to highlight that these models, even though different in many aspects, are not in opposition to each other. HI's experience has found that successful inclusion of persons with disabilities is rarely achieved by taking either a social or medical approach, as disability results from the interaction between personal and environmental factors.

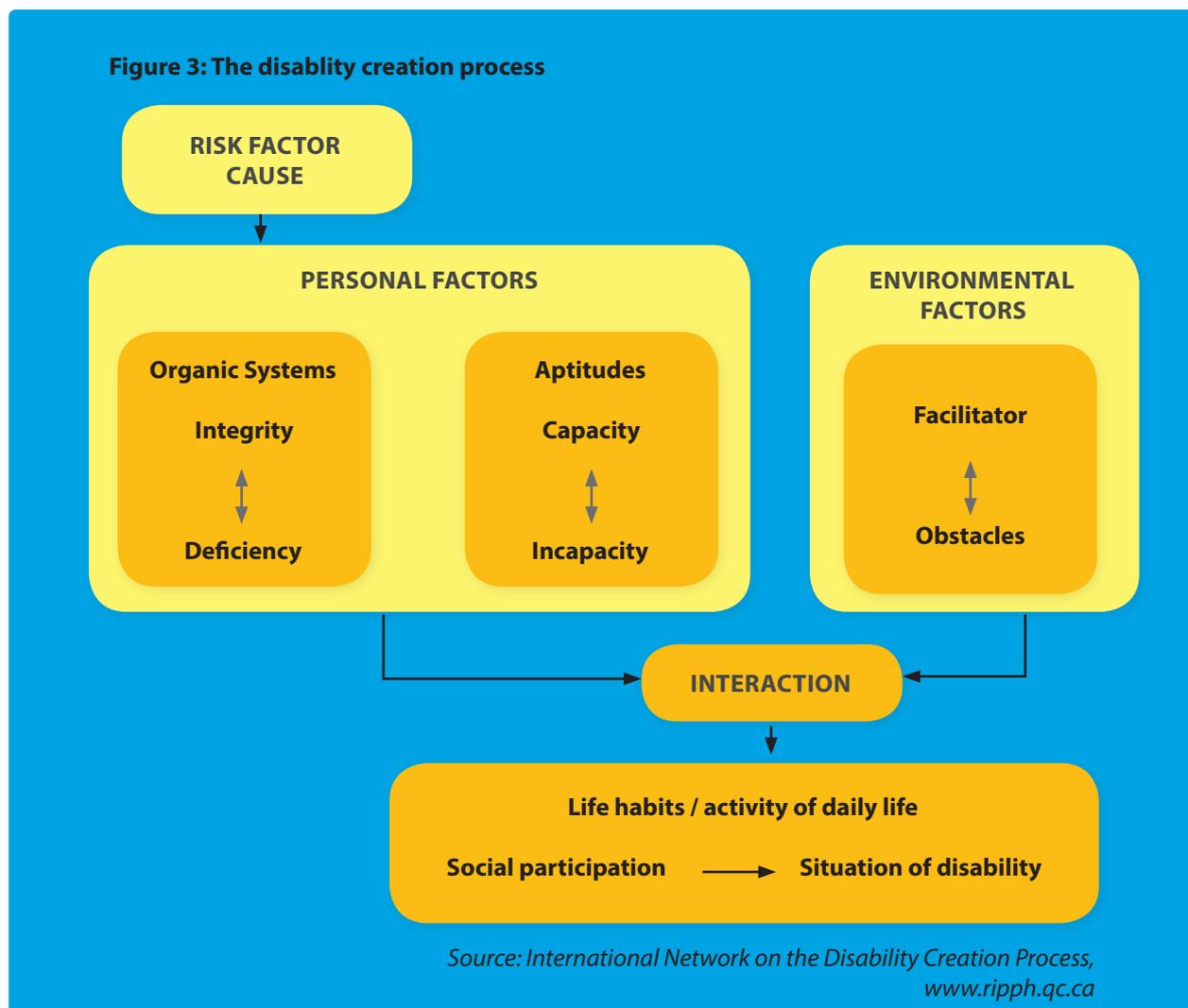
A further development of the social model has been the integration of a rights-based approach, looking not just at environmental barriers but socio-political ones as well. By recognising the legal rights of persons with disability the basis for advocating for allocation of resources and inclusive services is greatly strengthened. It also puts greater emphasis on the decision making role and autonomy that persons with disabilities should have over their lives.<sup>2</sup>

## The Disability Creation Process

The Disability Creation Process (DCP) is a model for analysis that reconciles the individual and social approaches to understanding disability, helps to identify and analyse the various factors and processes that are involved in creating situations of disability.<sup>3</sup>

According to the DCP, disability is a relative situation resulting from the interaction between personal factors (impairments and restricted capacities) and environmental factors (barriers), understood in relation to the performance of a life habit, social role and/or activity of daily living. For example, for a child to attend school (life habit), the extent of disability is understood by considering his/her personal factors (capacity to concentrate, communicate with other children, to sit on a chair in the classroom, etc.) in combination with the environmental factors (other children's acceptance, teacher's capacity to adapt his or her teaching methods, access to transportation to get to school, etc.). The combined influences of these two sets of factors on his/her ability to attend school establishes the extent of the situation of disability.

The diagram below illustrates the logic of the DCP. Under personal and environmental factors it considers positive and negative elements—capacities as well as incapacities, factors which facilitate participation as well as create obstacles. It looks both at what increases the situation of disability as well as what works to reduce it to, making it possible to identify a range of effective strategies for intervention.



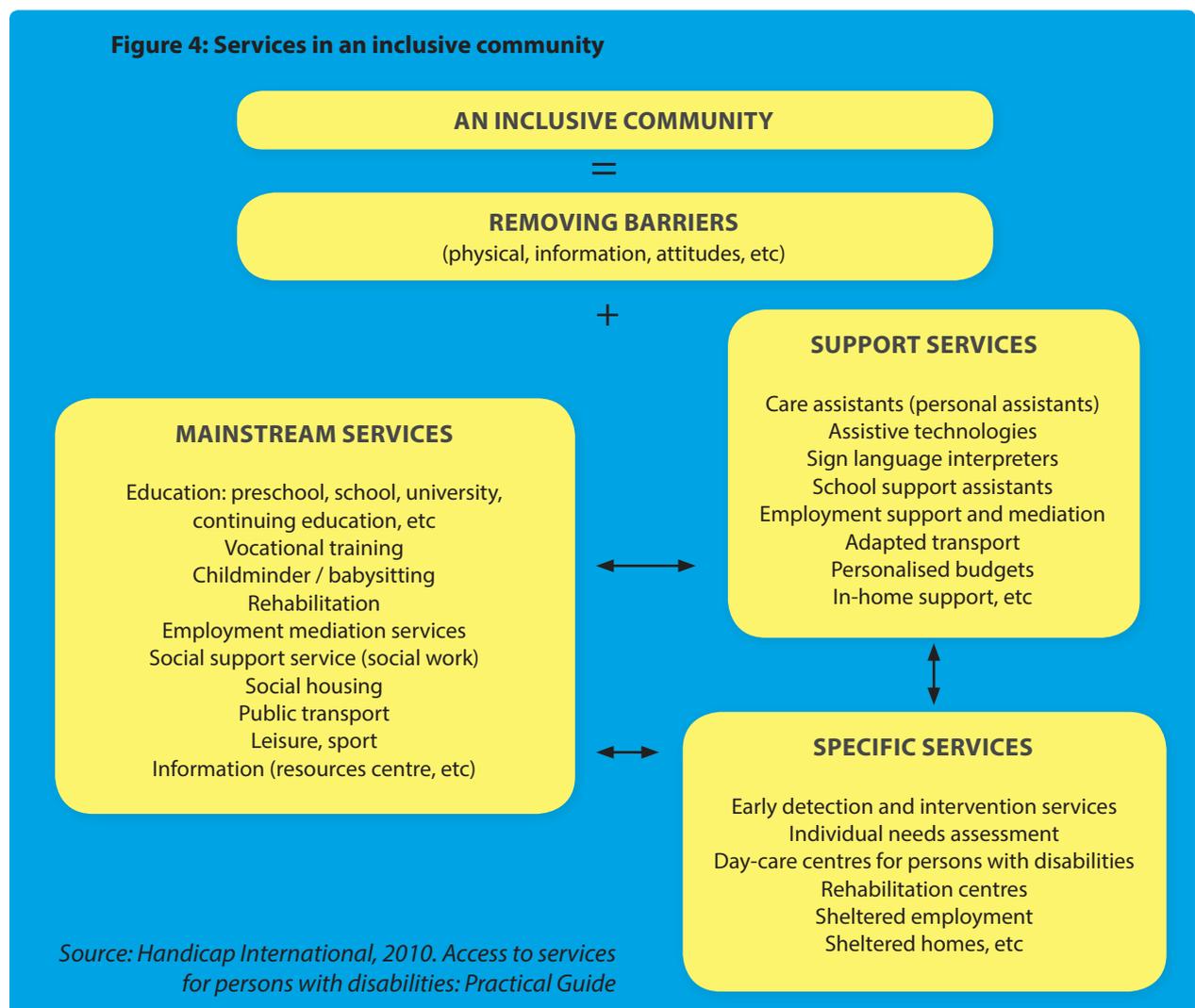
## Section Two: Approaches to Disability Inclusion

Full and effective inclusion in society is one of the seven guiding principles of the UNCRPD. Inclusion means respecting the full human rights of all persons, acknowledging diversity and ensuring that everyone people can actively participate in development processes and activities, regardless of age, gender, disability, state of health, ethnic origin or any other characteristics. Inclusion is not just about “involvement” or “integration” but about upholding rights through recognising specific needs and barriers to inclusion, and taking active steps to address these issues.

### Access to services

For a society to be inclusive, it must ensure that its citizens have access to general /mainstream services as well as specific services. Mainstream services are those services that are required by everyone in order to meet basic needs and participate in society. Specific services address additional needs not covered by mainstream services. A third category, ‘support services’ increase access to mainstream and specific services by providing necessary assistance to reach, understand and utilise the services available.

The availability of these three types of services, in addition to the removal of barriers which block access to them leads to an inclusive community.<sup>4</sup>



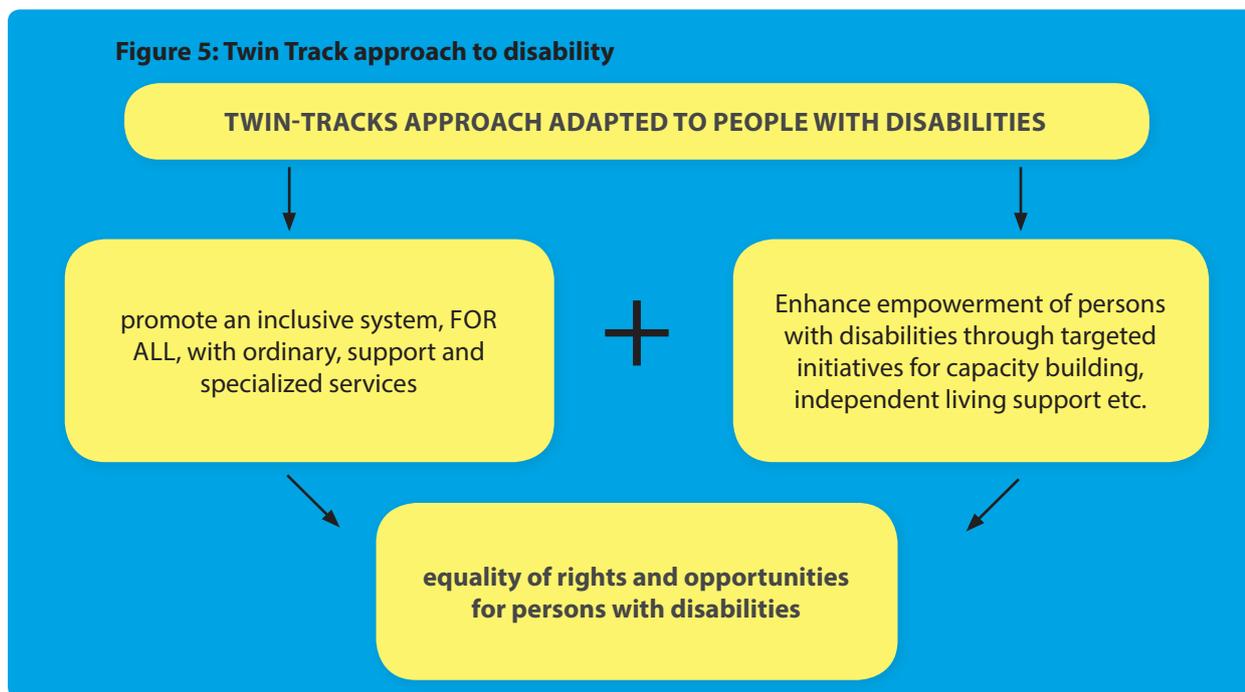
In the event of disaster priority is for services which help meet people’s basic needs (food, clean water, sanitation, shelter). The logic of the diagram above however remains the same. In order to meet the basic needs of persons with disabilities there needs to be consideration of mainstream, specific and support services as well as removal of barriers to achieve this.

Barriers to inclusion exist at different levels. In the previous section many of these barriers were highlighted, as was the fact that barriers can lie within society at a systemic level, as well as at an individual level. Efforts to support inclusion must therefore address individual and systemic factors, and involve a range of actors; decision makers, service providers and the service users.

All too often, inclusion is undertaken in a minimal capacity; tokenistic efforts are made to incorporate excluded groups which do not create meaningful change. In order to avoid this HI advocates for a twin-track approach to inclusion outlined below, which recognises the need for intervention on systemic and individual levels.

## Twin-track approach

The ‘twin track’ approach, developed originally by the Department for International Development UK (DfID) for the full participation of women in development, has been adapted to address disability and help ensure persons with disabilities have full participation community life as well as greater independence and self-determination. The approach looks to address the needs and rights of persons with disabilities in mainstream development as well as providing more focused activities aimed specifically at empowering persons with disabilities to participate.<sup>5</sup>



The above figure illustrates these two lines of action. On the left-hand side, focus is on making general or ordinary services accessible to all by removing barriers, putting support mechanisms in place, and at the same time providing specialised services that address specific needs that ensure equality of opportunity. On the right-hand side, emphasis is on the empowerment of individuals to support independent living, greater self-determination and more involvement in decision making.

This approach recognises that effective inclusion of disability in mainstream services does not replace the need for targeted, disability specific policies and practices.

## Section Three: Disability and Disasters

Having looked at some of the different ways of understanding disability and inclusion, this section explores how these issues interact with the specific context of disasters and why it is essential that persons with disability are included within planning for and responding to such events.

### The right to equal support

Persons with disabilities have a fundamental right to the same kind of support and services that anyone else in the community has. This extends to emergency situations. Article 11 of the UNCRPD states that....

*“States Parties shall take all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including humanitarian emergencies and the occurrence of natural disasters” (UNCRPD: Article 11)*

The right to protection and assistance in the event of an emergency and to live with dignity is also reiterated in Sphere Standards Humanitarian Charter and the International Red Cross and Red Crescent Movement Code of Conduct.<sup>6</sup>

In order to meet these standards it is essential

that the experiences of persons with disability are taken into account, and that persons with disabilities are included in the planning processes that work to minimise the impacts of disasters through mitigation and effective response strategies.

The UN International Strategy for Disaster Reduction: Hyogo Framework for Action (2005–2015) identifies persons with disability as a key group to address through disaster risk reduction activities. In Asia and the Pacific Region, the Biwako Millennium Framework (2002) recognised in its mid-term review that an explicit strategy for disability-inclusive disaster management must be implemented.<sup>7</sup> This includes the integration of Universal Design into infrastructure development for disaster preparedness.

### Vulnerability to Disasters

Persons with disabilities are among the most vulnerable of groups in society. They are especially at risk when disasters strike. Pre-existing health problems may mean they suffer sooner from reduced or poor food rations, or may be more at risk of contracting a disease as a result of poor hygiene and sanitation. Environmental changes as a result of a disaster may introduce multiple new physical and social barriers or intensify existing challenges. Listed below are a number of ways that persons with disability may face exclusion or receive inadequate support in the event of a disaster.

- » Persons with visual or hearing impairments may not receive early warning messages which rely on these senses and persons with intellectual or mental impairments may not understand what warning messages mean or how to react to them appropriately
- » Persons with disabilities may not be able to evacuate quickly enough, or without assistance. They may be over-looked or ignored by search and rescue teams
- » Inappropriate carrying techniques during rescue may cause additional injury or make existing impairments worse
- » Shelters and essential facilities (such as water and sanitation) may be inaccessible
- » Systems for providing relief items may be inaccessible due to distance, queues and insufficient communication and relief items may not meet the specific nutritional or health needs

- » Persons with disability may not be adequately protected from physical and sexual abuse
- » Opportunities for rehabilitation support may not be communicated and they may lack influence to ensure their entitlements are met
- » Persons with disabilities may lack resources and assets to recover from disaster and face greater vulnerability to future shocks and disasters as a result

Disasters are also a significant cause of new impairments, stemming from injury, malnutrition or disease. By taking disability into account when training Search and Rescue and First Aid Teams, or planning response services etc. it may be possible to reduce the severity and number of new impairments created in the event of a disaster.

Disability affects more than those with the impairment. Families which have one or more member with a disability will all be more vulnerable. Children who have a parent with a disability may have trouble accessing available resources or have to take on additional responsibilities in looking after them. For those who provide care for persons with disabilities it may be difficult to leave to collect relief materials or attend meetings where information is being provided. In cases where it is not possible to move someone to safety, a carer may need to stay behind to look after them, also putting their health and safety at risk.

## What does a disability inclusive approach to disaster risk management look like?

1. General DRM systems and services such as early warning systems, community shelters or search and rescue services are accessible to all without barriers and specific services are developed to address the additional needs of persons with disabilities in the event of a disaster
2. Persons with disabilities are empowered to participate in all disaster risk management activities and decision making. Their capacity to participate and act effectively in the event of a disaster has been built through targeted training and skills building, provision of assistive devices, rehabilitation and other relevant measures.

This twin-track vision is achieved by addressing systems and individuals.

### At systemic level

- » Implications for persons with disabilities of planned activities are assessed, whether programmatic, legislative or policy related.
- » Action is taken to adapt and modify plans to ensure inclusion and to prevent inequality being continued or increased.

### At an individual level

- » Targeted support required by persons with disabilities to be involved in the project is identified
- » Action is taken to address these needs, directly or through referral, and empower individuals to participate

For non-disability specific organisations it may not be possible to provide specialised services, or individual support that goes beyond the area of expertise of the organisation, such as for rehabilitation or medical support. One key way to address this gap is through networking and/or partnering with organisations who do have the relevant expertise to provide or advise on the services and resources required. These organisations may be DPOs or general and specialist service providers. Identifying and involving relevant disability stakeholders during the planning stages of the project can significantly strengthen efforts for inclusion.

In Part Two of the toolkit specific elements of CBDRM are broken down with more detail as to how and where persons with disability can be included in key activities and the issues that need to be considered by disability and non-disability organisations alike.

## Reducing risk by increasing independence:

### Sasmita's story

Sasmita, a shy girl of 10 years old lives in a coastal village of Orissa, India which is prone to flooding every two to three years. She lives with her parents and her five year old brother in a mud house. Her father works in the fields and her mother stays at home. Sasmita has cerebral palsy and as a result has difficulty walking and weakness in her arms. Her home has three large and uneven steps in front of it and when the project team first met her, she was unable to walk up and down these steps. She was also very dependent on her parents for completing daily activities such as washing and bathing and was carried to and from school.

As part of the disability inclusive DRM project in her community, Sasmita received individualised support to increase her independence. She and her parents were taught simple rehabilitation exercises to help strengthen her legs and arms which meant she became able to walk on her own with the help of a walking frame. Handrails made from local bamboo were also fixed by the steps to her home so she could pull herself up and down to get into the house without being carried.

The impact of this increased independence was felt by her and her family in the floods which hit her village in 2011. Her home, being made of mud was very vulnerable to the rising water. Her parents took the decision of sending Sasmita to their neighbour's house which made of concrete and was about 100 meters away. Sasmita climbed down the steps on her own, and went with her walking frame to the neighbour's place. Her parents stayed back, organizing and collecting their belongings, including food and water which needed to be carried to the school building. They also made provisions to make temporary tents from tarpaulin sheets, on the roof of the school building.

The flood water washed away portions of the mud walls and many belongings which could not be secured were either washed away or buried in the mud. The simple handrails were also washed away.

"Thankfully Sasmita was able to go on her own to the neighbour's house as my husband I were busy trying to collect some of our basic assets and take it to the school building for safe keeping. We have lost a lot of our utensils, clothes and belongings, they were washed away. If one of us had to take her to the neighbour's house we would have lost more of our



Sasmita with her mother standing next to her rebuilt handrail that helps her to get in and out of her home independently

assets. Keeping her at home would have led to a lot of apprehension on how to take her to a safer area with the rising water level.

When the flood waters receded, the family built back the house with support from a local NGO, her father also made another hand rail alongside the steps so that she would continue being independent.

"When we took shelter in the school building we had to climb up to the roof as the ground floor was also submerged. It would have been very difficult for Sasmita. Sending her to our neighbour's house meant that she was safe from the flood water."

-Sasmita's mother

# Section Four: Overview of Community Based Disaster Risk Management

## What is Community Based Disaster Risk Management (CBDRM)?

CBDRM is a bottom-up, people-centred approach to disaster risk management. It addresses disaster risk at a local-level through developing the existing capacities of communities and reducing vulnerabilities in order to prepare for and cope with the risk of disaster in their lives. It puts community members at the heart of decision making and implementation of DRM activities.<sup>8</sup>

In the event of a disaster, small or large, community members are by default the first responders to the emergency. It takes time for resources from outside to arrive, if they are able to arrive at all. To fill this gap, it is up to the community members to protect their belongings and loved ones, evacuate their homes, find shelter, access food and water, treat the injured and search for people who are missing. A community which is empowered with knowledge, skills and resources necessary to cope with the situation is much more likely to get through the disaster with minimal impact.<sup>9</sup>

CBDRM complements district, state and national level DRM structures by strengthening ground-level action. Its participative approach enables plans to be tailored to the local context and meet specific needs that may otherwise be overlooked. It is successful when all members of a community (including the most vulnerable) understand the risks they face and take action in a way that reduces these risks and their dependency on external support.

## Principles behind CBDRM

A key principle for CBDRM is recognising that disasters are not an inevitable fact of life, but are the result of a combination of hazards and vulnerability (see definitions). This logic is often presented by an equation

$$\text{Disaster risk} = (\text{vulnerability} \times \text{hazard}) / \text{capacity}$$

A hazard such as a storm or earthquake is not on its own, a disaster; it becomes a disaster if the hazard occurs in combination with a vulnerable place or population with minimal capacity to protect themselves. For example, if an earthquake occurs in an unpopulated area of land or in a place where buildings are built to withstand the shake then it is unlikely to result in disaster. If however it takes place in a heavily populated area, where buildings fall down from the shaking, then a disaster is likely to follow.

By understanding disasters in this way it is possible to identify practical ways to reduce risk. Whilst it may not be possible to prevent the hazard from occurring, it is possible to reduce people's vulnerability to that hazard and increase their capacity to cope with it. It is these areas that CBDRM focuses its attention.

## Understanding vulnerability and capacity

Vulnerability comes in a variety of forms; economic, physical and environmental, as well as socio-political.

**Economic vulnerability** relates to a person's income, financial assets (physical and savings), access to credit, livelihood options and autonomy over finances. Livelihoods and income opportunities are one of the first things to be affected by disasters; loss of livestock and crops, disrupted access to jobs and markets are all common impacts of a disaster. A person or family that has minimal savings or no alternative sources of income is going to find it more difficult to recover than a family with savings, insurance and multiple income sources. Persons with disabilities are less likely to be in employment and often have additional financial burdens associated with their disability e.g. medical and healthcare costs, greater transport costs, etc.

**Physical and environmental vulnerability** is concerned with exposure to hazards and the physical risk that these hazards pose to people's lives and assets. This can mean the location of a village, home or work environment in relation to a potential hazard, such as being close to a river or coastline, on a fault-line, near a volcano and so on. Changes to the environment such as the wide-spread cutting down of trees can increase physical vulnerability, especially if these changes create new hazards or reduce protection to existing hazards. Physical vulnerability also concerns the quality of buildings and infrastructure and their ability to withstand hazards such as floods or earthquakes. Persons with disabilities may be more likely to live in building of poor quality. They may also be isolated from the main building, staying in an out-building, or unable to leave the house without assistance, increasing their physical exposure to hazards.

**Socio-political vulnerability** refers to social structures and resources that are both tangible and intangible. It can work on an individual or community level and be affected by levels of education, quality of health and access to services, effectiveness of social support networks (formal and informal), political representation and levels of exclusion. All of these affect to what extent an individual or community can cope with the impacts of a disaster. Persons with disabilities often experience high levels of social and political exclusion and less likely to be involved in community groups and activities. They are also less likely to be educated and often have poorer health outcomes than persons without disabilities, increasing their socio-political vulnerability.

Vulnerabilities are often linked and many people, especially those living in poverty, experience multiple vulnerabilities. Vulnerability is not a constant and is not experienced in the same way by everyone. Within a household it is possible to identify varying levels of vulnerability, for example, a child or adult with a disability may be more vulnerable to a hazard because they are always indoors or are less able to respond quickly to signs of danger. Gender, age, health status, presence of an impairment, ethnicity and social status all can have an impact on levels of vulnerability.

Capacity also comes in a variety of forms, and exists at both institutional and individual levels. Capacity can help to reduce the causes of vulnerability or help to reduce the negative results of the vulnerability.



Precarious river crossing in Kanchanpur, Nepal

Capacities can be linked to a variety of areas, for example

- » **Resources:** personal and community savings, availability of response and relief equipment, protected water sources, shelters
- » **Knowledge:** understanding of hazards, awareness of warning signs, entitlements and rights
- » **Skills:** First Aid, search and rescue, construction, leadership and decision making
- » **Services:** health, education, water and sanitation
- » **Systems and networks:** early warning systems, support groups and community organisations, communication systems, family ties , communication systems, family ties

Capacity can also be found in less tangible ideas of community cohesion, levels of equality and attitudes which influence the way people respond, mobilise resources and bounce back from disasters.

CBDRM projects often work to reduce vulnerabilities through actions such as ‘livelihoods strengthening’, ‘household adaptations’, and so forth. Tackling long-term underlying vulnerabilities is one of the most effective ways of reducing risk to disasters; however this should be complemented with the capacity building and development of knowledge, skills and resources which help to offset the impacts of disasters.

## How does CBDRM fit into the disaster management cycle?

There are a number of different disaster management models, however they usually recognise two distinct periods:

- » **Pre-disaster (risk management):** where risk reduction and development activities predominantly take place
- » **Post-disaster (crisis management):** covering immediate actions to save lives, property and provide relief and the period of recovery and rehabilitation as lives return to more normal patterns

CBDRM is primarily focused on the period of time before a disaster takes place. It addresses preparation and mitigation of risk as opposed to response and rehabilitation. This is not to say that risk cannot take be addressed during the response, rehabilitation and reconstruction phases. Sometimes, looking at long-term risk reduction in the period following a disaster can be effective, as motivation for action amongst the population is high, and there are opportunities to reduce vulnerability through reconstruction and rehabilitation activities being undertaken.

In recent years the expression ‘build back better’ has become familiar; this is a call to mitigate future disasters by avoiding making the same mistakes again when reconstructing buildings, infrastructure and systems. Likewise, rehabilitation efforts which address livelihoods or social networks can look to reduce disaster vulnerability in the future by focusing on more diverse and disaster resistant livelihood strategies, supporting the inclusion of excluded groups, avoiding activities which increase disaster risk etc.

Recognition that disasters have significant impacts on development outcomes means that increasingly CBDRM activities and principles are being used to inform and strengthen development programmes. This is particularly effective in areas where multiple hazards exist and interrupt daily life so regularly that they are not seen as out-of-ordinary events but rather part of the daily challenges of life.



Project staff member meeting with community members in Sitakunda, Bangladesh

## Core CBDRM activities

Whilst all CBDRM projects are different in scope and focus, there are a number of core activities which are frequently identified within the project structure. In Part 2 each of these activities will be looked at from the perspective of how they can be made inclusive of persons with disability. Below is a brief overview of these steps. Please note that the order may vary according to the project.

**Vulnerability and capacity assessment (VCA) or Community Risk Assessment (CRA) in Bangladesh:** This activity goes under a variety of names however it is normally the first step in any CBDRM project. Its purpose is to establish the context of hazards, vulnerability and capacity in the community, so that subsequent activities, services and trainings reflect the specific needs and situation of that community.

**Risk management planning:** Again this goes by a number of names such as risk reduction planning, preparedness planning, contingency planning all of which are different in scope and emphasis, generally they are based on the findings of the VCA and agree steps to be taken that address the identified vulnerabilities and gaps in capacity. Often they include plans as to what should be done in the event of a disaster, roles and responsibilities of community members or external services etc. These plans exist at a number of administrative levels.

**Establishment of community management committees and task-forces:** This activity sometimes takes place prior to the VCAs and involves identifying individuals' within the community who will take responsibility for managing the implementation of the contingency plan or other elements of disaster management, for example managing the community shelter or providing a specific service in the event of an emergency, such as search and rescue or First Aid.

**Capacity building:** This can take many forms but often relates to increasing knowledge about hazards, their causes and what to do in the event of them occurring. It may be directed at all members of the community or specific groups such as task-force members and involve training in a specific skill such as in search and rescue, first aid or early warning.

**Mock drills and organised simulations:** These are used to demonstrate or test effectiveness of the systems in place for responding to a disaster. They can be undertaken at community, district or state level. Sometimes they focus on a specific aspect of disaster management, for example testing early warning systems or demonstrating skills in search and rescue or First Aid.

**Early warning systems:** This is about translating early warning systems which exist at national or state level into an effective people-centred system at community level. Where systems are not in place it may mean developing a new system for the community utilising local resources and monitoring systems.

**Stockpiling:** This is the action of pre-positioning essential equipment or resources that might be required in the event of a disaster, either by the community as a whole or by task-forces for specific response activities.



Tactile community mapping in Nepal

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## Part Two: Disability Inclusive CBDRM in Practice

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A man who uses a tricycle benefits from the new ramp at a cyclone shelter in Odisha, India

# 1

## Section One: Principles for Inclusion – Factors Underlying an Inclusive Approach

**Disability Inclusive Community Based Disaster Risk Management**

A toolkit for practice in South Asia

Knowledge & practices gathered from Afghanistan, Bangladesh, India, Nepal & Sri Lanka

[www.disabilityindrr.org](http://www.disabilityindrr.org)



**“Due to inclusion of persons with disabilities in Union Disaster Management Committees the needs of person with disabilities are respected and they will not be overlooked before, during or after disaster. Moreover, vulnerabilities of persons with disabilities reduced as the committee are aware of their needs and vulnerabilities and what to do if any disaster appears.”**

*Halima Khatun, member of Union Disaster Management Committee (UDMC),  
Sitakunda, Bangladesh*

**“As a member of CSMMC and being a person with physical impairment, I am taking care of my fellow persons with disabilities’ special needs and their active participation in mainstream development process as well as in the ongoing CBDRM activities. I am happy that, finally we got the recognition.”**

*Ms. Kousalya Mallick, CSMMC Member, Odisha, India*

**Nature does not discriminate based on the impairment and decide that persons with disabilities should be the first to die during disaster; rather it’s the underlying social and environmental barriers that increase our vulnerabilities and decrease our capacities to recover from disasters. Persons with disabilities; especially women, children and older people with impairments; are at the greater risk, suffer more, when disaster strikes. Disasters push further persons with disabilities into destitute, they become the most vulnerable among the vulnerable groups.”**

*Ms Sombati Rana, CDMC Chairperson and woman with a disability, Kanchanpur  
District, Nepal*



# Section One: Principles for Inclusion

## – Factors Underlying an Inclusive Approach

Over the course of the following sections, specific advice will be provided on how to make key CBDRM activities disability inclusive. Presented here are the underlying principles for inclusion that apply to all of these activities and need to be taken into consideration at the outset of project planning.

Whilst focus in this toolkit is on the inclusion of persons with disabilities, much of the advice provided here will support the inclusion of other vulnerable and marginalised groups by recognising diversity and increasing access.

### Commit to being disability inclusive

Everyone has a responsibility for supporting the inclusion of persons with disabilities. Inclusion of persons with disabilities is a matter of rights; rights that Government, Non-Governmental Organisations (NGOs), Community Based Organisations (CBOs), service providers, community and family members all have a duty to uphold. The Twin-Track approach to inclusion highlights that change must happen at a systemic as well as individual level, and provides multiple entry points for addressing inclusion, all requiring different knowledge, skills and resources. Whilst not all disability inclusion issues can or should be addressed by all actors, everyone can have a positive impact on inclusion if it is taken into account.

Inaction by any actor, not only fails to increase inclusion, it can also serve to make exclusion worse by creating systems which further marginalise and disempower persons with disabilities.

Making disability inclusion a visible goal of the project will support inclusive actions throughout. One way to sustain this commitment is by including disability related indicators into monitoring and evaluation frameworks that help track progress. Involving disability actors as project stake-holders increases capacity of the project to address and monitor disability inclusion effectively and also supports these organisations to be more effective in their work.



Assessing capacities and rehabilitation requirements of a boy with a disability in Odisha, India



Community meeting during needs assessment in Batticaloa district, Sri Lanka.

## Establish a base of information on disability in the community

In order to plan projects and implement activities which are inclusive it is necessary to understand the situation for persons with disabilities and their families at individual and systemic level. This means identifying needs related to an individual's impairment as well as analysing access to general and specialist services. This information is crucial for implementing and developing inclusive CBDRM activities and services.

Vulnerability and Capacity Assessments (VCAs), the typical assessment and analysis tool for CBDRM projects can easily be adapted to include persons with disabilities. Group discussions and household surveys complement each other in identifying individual barriers and capacities as well institutional challenges, gaps and opportunities.

It is important to emphasise that disability assessment is about more than identification of individual impairments, it is also about assessing the implications of this impairment in combination with environmental factors on the capacity of the individual to act in the

event of a disaster and the resulting risks they face. (See Part One for information on analysing disabling factors).

Information about disability issues in the community does not just come from persons with disabilities themselves. When trying to understand access to services, it is also essential to gain inputs from other key stakeholders, such as service providers (general and specialist) and civil society actors (DPOS and self-help groups) to build up a full picture of access, barriers and opportunities for change.

It is the combination of this information at individual and institutional levels which makes it possible to analyse how disaster risk management systems and resources may be better tailored to include persons with disabilities and to identify opportunities to empower individuals to also take action.

## Reduce barriers to inclusion in CBDRM activities

Part 1 highlighted that there are a range of barriers which prevent the inclusion of persons with disabilities. These need to be considered in the planning of all activities.

### Increase access to and use of venues used for CBDRM activities

The choice of venue for meetings or training sessions can make a difference to a person's ability to attend and then participate in the activity.

When planning a meeting or training session, identify a building or location that:

- » Is reachable by persons with disabilities
- » Presents the fewest obstacles for a person with mobility impairment to access it or a building that has accessibility features
- » Is well lit to help persons with low vision to see
- » Has chairs or stools for persons who can't sit on the floor easily
- » Is a place people feel comfortable visiting

Consider how people will reach the venue. It may be necessary to provide transport to ensure persons with disabilities can attend who do not live close by or who cannot walk unaided. This could be arranged through the support of a neighbour or local self-help group or directly by the hosting NGO/organisation. Discuss in advance with the family and with other involved parties, such as the village leader or disaster management committee / task force who can help arrangements to be made.

### Communicate effectively with persons with disabilities

- » In a meeting or training session use multiple communication mediums to support different functional needs
- » Ensure family members or care-givers who can support communication through informal signing or other communication system stay with the person during the discussion
- » Use visual presentations (maps, diagrams, posters) to support persons with hearing and speaking impairments
- » Make arrangements for simultaneous signing if there is

a person who understands sign language

- » Use bright and contrasting colours (light against dark) and dark large text to include persons with low vision. Good light makes it easier for people to distinguish words, shapes and figures more clearly
- » Narrate visual aspects of the discussion, for example read-aloud what is being written on posters, describe additions to maps or changes to diagrams. Keep people involved throughout don't wait until the end to describe what has been written or produced
- » Make activities tactile. Maps and diagrams can for example be made using everyday objects that can be touched by persons with visual impairments
- » Provide opportunities for input through direct questions which relate to the experiences of persons with disability and give time for answers to be given, whether verbally, written or via the care-giver

For more information see the Communication Checklist and for ideas on how to make information, education and communication (IEC) materials inclusive see the IEC tool. Both can be found in the Toolbox

### Systems for sharing information

- » Identify how persons with disabilities receive information and what are the most trusted sources of communication. Use home-visits and these trusted networks of information (e.g. DPOS, self-help groups) to publicise events and encourage attendance
- » Establish a person in the Disaster or Shelter Management Committee (DMC/SMC) who is responsible for ensuring persons with disabilities are informed about meetings and trainings, and receive relevant communication materials. This person can also be contacted to provide feedback or gain further information
- » Provide adequate notice for meetings, given that it may take longer for a person with disability to reach the venue and require special arrangements to be made in

## Tackle attitudinal barriers

Attitudes can present one of the greatest barriers to inclusion of persons with disabilities, whether held by the facilitator, the wider community, family members or by the person with disability them self.

On the part of the project staff, discriminatory views on disability or the feeling it is too difficult to include persons with disability into CBDRM activities may reduce their interest in supporting effective participation.

Provide basic training for staff, volunteers and community members in disability in order to:

- » Reduce fear or misunderstandings about impairments
- » See the person before the impairment
- » Understand the social barriers that are faced by persons with disability
- » Increase confidence to talk about disability as a priority issue

Identifying perceived challenges for inclusion of persons with disability at the outset, and making plans for how to overcome these barriers in advance will reduce concerns and increase motivation.

Increasing awareness of community members about the importance of including persons with disabilities into disaster risk management and their right to equal protection in the event of a disaster builds support for making these issues a priority.

For persons with disabilities and their family members there may be a variety of negative attitudes about participation to overcome related to bad past experiences, fear or low self-esteem. House visits by community mobilisers are helpful for reducing anxiety and reluctance to participate. A personal visit can be used to explain the process and why their participation is important, address concerns and overcome logistical or communication challenges.

Again involving DPOs and self-help groups is another positive way to encourage the participation of persons with disability, who might feel more confident if taking part within a group or in the knowledge that support will be there.

## Always aim for inclusion not tokenism

Physical presence of a person with disability at a meeting or event does not guarantee their participation, nor does it ensure that disability issues are included in discussion or reflected in the outcomes. It is not enough to have a person attend an event; their views must be heard and taken into account. Likewise it is not enough for disability issues to be discussed if persons with disabilities are not given the opportunity to participate in discussions and influence decisions.

As well as seeking inputs of persons with disabilities on specific issues it is also important that they are able to take positions of responsibility in disaster management committees, shelter management committees and task-forces.

Monitoring inclusion should be ongoing. This can be done very simply by:

- » Reviewing the meeting minutes and information that has been collected for evidence of disability issues being discussed and inclusive solutions being adopted. Quality of analysis of these issues is as important as the number of times that issues of disability are raised.
- » Observing how often persons with disabilities and the caregivers input into the discussion and how their inputs are received.
- » Tracking numbers of persons with disabilities included on decision-making panels or committees or holding positions of authority and influence.

**IN THE TOOLBOX:**  
Communication and interaction checklist  
How to make IEC materials disability inclusive

## A leader is born; overcoming the odds to protect her community



Sombati leading a discussion group with community women on disaster preparedness

Despite her physical impairment, twenty one year old Sombati Rana managed to scramble to the rooftop of her family's house just in time to avoid being swept away by the floods which hit eastern Nepal three years ago.

She lives in Jaijai, a former Kamaiya (ex- agrarian bonded labour) community in the Kanchanpur district of Nepal. Her community is surrounded by the Doda and Banara rivers which often flood during the monsoons.

"My parents have lost their home three times due to the floods," says Sombati.

Sombati has faced exclusion throughout her life. Being a woman who has a physical disability from an impoverished family, she had to give up her education in favour of her brothers.

"When parents are not in a position to afford education, boys are preferred over girls. Girls are treated as objects to be handed over to someone else", says Sombati.

Community members frequently taunted her because of her impairment. A particular incident involving

her teacher during a musical chair game continued tormenting her for days.

"My teacher came, laughed at me and told me how could I be a winner? Everyone started laughing. I left the game and cried throughout the night"- says Sombati.

### Disaster preparedness for people with disabilities

Through the inclusive CBDRM project in Jaijai, Sombati was identified as a person who had the abilities of a leader. She received empowerment trainings and encouragement from the project staff and was elected as chairperson of Community Disaster Management Committee (CDMC) by her community. Now that she leads the CDMC, some of the uncertainties of her earlier life have left.

"I am loved and respected by the community members in ways that I had never imagined before. I am glad to be a leader of the community" says Sombati.

As part of the CDMC, she informs her community about the importance of preparedness and mitigation activities to help build a disaster resilient community. She has played a central role in helping her community to enter into dialogue on inclusive CBDRM and collaborate with local government to create sustainability beyond the end of the project

She also supports persons with disabilities to receive citizenship cards, disability identity cards, referrals to rehabilitation centres, to help reduce their vulnerability in the event of future floods.

"I am committed to reducing the threats to my community from disasters and am able to amplify the voices of persons with disabilities against the discrimination based on their impairments."

-Sombati Rana, Jarjai, Kanchanpur, Nepal

## Further reading

For more information about the rights of persons with disabilities visit UN Enable [www.un.org/disabilities](http://www.un.org/disabilities)



Examining a vulnerability map in Sitakunda, Bangladesh.

# 2

## Section Two: Vulnerability and Capacity Assessments

**Disability Inclusive Community Based Disaster Risk Management**

A toolkit for practice in South Asia

Knowledge & practices gathered from Afghanistan, Bangladesh, India, Nepal & Sri Lanka

[www.disabilityindrr.org](http://www.disabilityindrr.org)



**“The VCA exercise was not just an information gathering exercise but also served the purpose of motivating the vulnerable people including persons with disabilities for their effective participation. Persons with disabilities emphatically stressed that people taking care of their need based on their inputs, and moreover their views have been grossly attained which remained unattained since time immemorial.”**

*Mr. Saroj Kumar Das, Odisha, India*

**“We never thought we will be able to conduct CRA, but we did it and included persons with disabilities and this gave us confidence and now our community is resilient to disaster.”**

*Mominul Islam Mamun Vuia, member of UDMC, Sitakunda, Bangladesh*

**“I realised my capacity after being a part of VCA process. Communities gathering including person with disability helped us to visualize the community problems collectively, realise our vulnerabilities and capacities by ourselves together with other community members. This helped us to mobilise external resources which were beyond our capacity before-to cope with flood during monsoon season.”**

*Ms Nemmati Rana, woman with disability, Kanchanpur, Nepal*



## Section Two: Vulnerability and Capacity Assessments

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VCAs, or CRAs in Bangladesh, are the foundation of any community based disaster risk management project. They can be conducted at different administrative levels however the focus here is on community-level VCAs. The purpose of a VCA is to identify essential facts about a community's exposure to hazards, the scale and range of their vulnerabilities, coping capacities that exist and by this establish the level of risk the community faces. Analysis of risk in a VCA is based on the theoretical relationship between vulnerabilities, hazards and capacities presented in Part 1.

$$\text{Disaster risk} = (\text{vulnerability} \times \text{hazard}) / \text{capacity}$$

Findings from VCAs provide the basis for decisions on preparedness planning (see next section) and build interest, awareness, knowledge and skills within the community on disaster management issues.

The VCA process is participatory in nature, engaging community members and other stakeholders in the systematic collection and analysis of data. They are a central component of empowering communities to take ownership over the disaster risk management process.

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### Why take a disability-inclusive approach to VCA?

#### Support the right to participation

Persons with disability are often invisible in VCAs, missing from the findings, but above all missing as a voice and presence in the process. Communication barriers, lack of physical access to venues where discussions take place, low awareness or skills on the part of facilitators as to how to support their inclusion and negative attitudes to their participation can all work to exclude them from the process.

The VCA process is designed to empower community members to take greater ownership over risk management and decision making. Persons with disabilities should also be able to gain from participating in this process and by including them from this initial stage there is much greater likelihood of their taking on roles and responsibilities in task forces and following activities.

#### Address the vulnerabilities and capacities of persons with disabilities

As identified in Part One, vulnerability and capacity are not constants. They are linked to socio-political, economic and physical conditions which vary between households and even within them. They can also be influenced by seasons and other external factors. A key outcome of VCAs is the identification of particularly vulnerable households and individuals, high risk times of year, as well as the capacities that exist in the community which increase people's ability to cope with disasters.

Persons with disabilities face multiple-barriers to accessing information, services and support, frequently experience greater levels of isolation and poverty, and are often less able to respond independently in the event of a disaster. Disability therefore strongly influences vulnerability, shaping a person and household's ability to survive and cope with a disaster.

Persons with disabilities also have capacities (knowledge, skills and assets) that can be built on and utilised in the event of a disaster. To focus only on vulnerabilities reduces opportunities for persons with disabilities to participate, undermines their autonomy and doesn't capture the overall capacity of the community.

### Represent the whole community

The VCA should be representative of the whole community, which means all groups should be taken into account. As will be demonstrated in all following sections, complete and accurate information about the vulnerabilities and capacities of persons with disabilities is crucial for making risk management actions work for all members of the community. If information about disability and other vulnerable groups is missing from the VCA then it can't be translated into effective early warning systems, appropriate evacuation plans, relevant training and so forth.



Community volunteers being trained in inclusive facilitation techniques for VCA data collection in Nepal

## how to How to make VCAs disability inclusive

Practical challenges to including persons with disability in VCAs can be easily addressed through proactive planning and willingness to adjust facilitation techniques to support participation.

### Plan to be inclusive

An inclusive VCA process begins in the planning. If the VCA is being conducted by a group of community volunteers or by the community disaster or shelter management committee then it is important to ensure persons with disabilities are represented in this group and supported to participate.

Include disability as a consideration during initial discussions with the community on the VCA process and include disability issues into training for volunteers and staff. This will ensure disability is on the agenda in later discussions and make a clear commitment to including persons with disabilities.

Include local DPOs and self-help groups as stakeholders in the VCA process and ask them for their support. They may be able to help inform and

encourage participation of persons with disabilities as well as provide support and valuable inputs for the data collection process.

Follow advice in 'Principles of Inclusion' on accessibility when identifying locations for VCA activities.

Many of the adaptations for persons with disability will also have benefits for the inclusion of other vulnerable members of the community such as the elderly, pregnant women, children and people unable to read.

### Adapt data collection techniques to be disability inclusive

The advice provided in Principles of Inclusion applies to all these activities so refer back for further information.

**TRANSECT WALK:** A facilitated walk through the community during which observations about the community are made.

**Purpose:** To establish an overview of the community using a systematic observation methodology in order to collect information on the following: types and conditions of buildings, roads and infrastructure; land uses and forms of employment; visible hazards; facilities and services.

**Inclusion considerations:**

- » Choose a route which can be taken by persons who use wheelchairs and tricycles, or arrange assistance
- » Assign a person (ideally family member or caregiver) to walk with persons with visual impairments who are walking on unfamiliar routes. Surroundings should be described to them so they can give their inputs
- » Ensure persons with hearing impairments walk with or near the facilitator and are accompanied by a caregiver or family member who can support their communication needs
- » Encourage persons with disabilities to share their observations which may be different to others
- » Ensure persons with intellectual or mental impairments are accompanied by a caregiver or family member who can explain the situation and support them to give their observations and views
- » Discuss how the environment might in the event of a disaster and what additional barriers this would present to persons with disabilities

**MAPPING:** participatory map-making of the community (social, hazard, etc)

**Purpose:** To establish a community layout and important features through structured discussion. Information can be collected on one or more maps and includes identification of vulnerable households; location of hazards and hazard affected areas; access routes and potential obstacles and barriers; resources and services.

**Inclusion considerations:**

- » Use brightly coloured objects to create the map so that persons with visual impairments can feel what is there. Narrate the process so they know what is being added
- » Discuss accessibility of community resources, facilities and buildings—can everyone reach and use the facilities equally

- » Identify where hazard locations overlap with location of vulnerable households
- » Consider safety and accessibility of different routes to be used for evacuation according to different functional needs

**HISTORICAL TIMELINE:** facilitated discussion looking back on past events

**Purpose:** To identify pre-existing hazards and establish trends in disaster occurrences, to establish scope and impacts of disasters (numbers of persons affected, deaths and injuries, impact on livelihoods, health, physical damage etc), to reflect on past response actions and relief received (what went well or didn't), and past coping strategies of community members.

**Inclusion considerations:**

- » Discuss and document the specific impacts on persons with disabilities and other vulnerable groups. Compare to services received by other community members
- » Follow up with semi-structured interviews or separate focus group discussions to check that information is correct for persons with disabilities or to gather more detail on their experiences

**DISASTER CALENDAR / SEASONAL ANALYSIS:** Facilitated discussion identifying recurring events

**Purpose:** To identify high risk times of year for weather related hazards as well as other events which have an impact on capacity to cope with disasters, such as planting and harvesting seasons, disease prevalence, high points of expenditures (related to festivals etc), high and low points for employment and income.

**Inclusion considerations:**

- » Consider specific implications for persons with disabilities e.g. periods of dampness which increase arthritis and reduce mobility
- » Identify times when services are more or less available, e.g. mobile rehabilitation camps, etc
- » increase arthritis and reduce mobility,
- » Identify times when services are more or less available, e.g. mobile rehabilitation camps, etc

**RISK RANKING:** participatory analysis of hazards

**Purpose:** To assess and prioritise disaster risks being faced, in order to plan accordingly. Analysis is usually based on a combination of frequency and potential

scale of impacts.

Inclusion considerations:

- » Take into account the risks for persons with disability. Some hazards may pose greater risks for persons with disabilities due to mobility restrictions or health implications

**RESOURCE AND INSTITUTION MAPPING:** Venn diagram marking out availability of services

Purpose: To identify availability, relevance, importance and access to key services and resources in and around the community and to analyse implications for vulnerability and capacity.

Inclusion considerations:

- » Include services relevant to persons with disabilities in the diagram e.g. rehabilitation providers, DPOs, therapists
- » Assess accessibility of mainstream and specific services from perspective of persons with disabilities, both in normal and disaster times.

**HOUSEHOLD SURVEYS:** data collection on household level

Purpose: To gather more detailed and quantifiable data at a household level to supplement and triangulate findings from other activities. Usually focused on socio-economic factors, although also sometimes includes information on disaster related skills and capacities amongst household members, building types and household facilities.

Inclusions considerations:

- » Provide adequate communication support for persons with disabilities to participate in survey
- » Include questions relating to persons with disabilities in the household, particular risks they face in the event of a disaster, past experiences capacities they have and level of support required by family members or care-givers to cope in the event of a disaster
- » Direct personal questions to the person with disability, involve a family member if communication support is required, but do not leave them out of the conversation

## Make disability issues visible in the VCA report

VCA report formats vary but usually contain the following elements: overview of hazards; vulnerability analysis; capacity analysis; risk statement. Findings related to persons with disabilities must be visible throughout the analysis and not just limited to statistics on numbers of persons with disabilities. Below are some of the key findings that should be included and used to inform analysis:

### INDIVIDUAL LEVEL:

- » Number of persons with disabilities in the community
- » Location of where persons with disability live, their specific impairments and capabilities
- » Specific requirements or needs of persons with disabilities (medical, dietary, mobility, communication, etc.)

- » Past experiences of persons with disability in disasters (key impacts felt, access to basic services and assistance etc identifying where this may be different to other community members)

### SYSTEMIC LEVEL:

- » Social status of persons with disability (political representation, common forms of discrimination)
- » Availability of services, existence of support organisations and level of access to these existing services (mainstream and specialised support)
- » Analysis of how disability affects access to key services in event of disaster—shelter, water, sanitation, food, medical attention

## Inclusive VCAs—an evolving approach in Odisha, India



Community volunteers start to sketch out their community on the floor of a cyclone shelter

The Indian State of Odisha sits in the Bay of Bengal and is particularly vulnerable to cyclones and floods. Following the devastating super cyclone in 1999, the Odisha State Disaster Management Authority (OSDMA) constructed multipurpose cyclone shelters across the 6 coastal districts and transferred ownership to community Cyclone Shelter Management and Maintenance Committees (CSMMCs).

The beginnings of a community based approach to disaster risk management emerged. Preparedness was however limited to infrequent events without consideration of broader institutionalisation. Persons with disabilities were not involved in the exercises which did take place; rather they stayed invisible and sidelined.

During 2008, Handicap International in partnership with United Nations Development Program (UNDP) and OSDMA completed an accessibility audit of a few of the shelters and ran a number of capacity building programmes in with these shelter communities to support collective and inclusive preparedness. A key lesson learnt was that the inclusion of persons with disabilities needs to be addressed from the very beginning of the community mobilisation process, starting with their inclusion in the VCA.

When putting this into action they found that persons with disabilities were significantly neglected in VCAs, preparedness planning and mock drills as nobody thought that they could contribute effectively. In the latest project, community mobilisation and awareness raising activities is used prior to the VCA

to build consensus for the participation of persons with disabilities. Persons with disabilities, their care-givers, family members and CSMMC members were all involved to gain their support for inclusion

In Nuagagon community in Bhadrak District a VCA was conducted in October 2011. Prior to the VCA information was shared with the CSMMC, the Community Animators informed persons with disabilities as well as their care givers and family members about the VCA and project through individual household visits. For the first time a formal invitation from the CSMMC for their participation was issued which greatly encouraged this marginalised community to join. All persons with disabilities along with 67 other community members participated in the VCA.

Inputs from persons with disabilities along with other participants were considered in VCA through various tools used during this VCA exercise. Facilitators used bright colours and objects which persons with visual impairments could see and feel, as well as loud discussions for those with hearing impairments. The community came to understand that hazards affect different vulnerable groups differently

One of the outcomes of the VCA was demonstrating that persons with disabilities were more vulnerable because a number of their specific needs are not being met. Non-participation in past programmes meant that there was much less understanding on their actual vulnerabilities, capacities and needs.

“Thanks to the VCA process, the community is more aware about their vulnerability to face the future disasters and also developed the understanding that persons with disabilities are an integral part of this disaster risk management process as well as other developmental activities.”

—Mr. Raghunath Mallick, CSMMC Secretary, Odisha, India

## For a more in-depth look at the process and methodology of VCAs see

IFRC, 2007. *VCA Toolbox with Reference Sheets*. IFRC [pdf] available at: <http://www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf>



Community members identify vulnerable households with the help of a community mobilizer in Bangladesh

# 3

## Section Three: Community Risk Management Planning

**Disability Inclusive Community Based Disaster Risk Management**

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**“I raised my voice in the CSMMC meetings to ensure the rights of persons with disabilities like me in all the community initiatives and the plans. During the inclusive VCA and development of CCP, with my committee members, I tried to ensure the participation of all vulnerable groups and this was first time happened so.”**

*Mr. Dhananjay Parida, CSMMC Member and man with disability Odisha, India*

**“Our home gets flooded during rainy season so I always had to worry how my family will be able to take Mansarobar to safe place. But after receiving the wheelchair for her and training on its use as well as stock piling of assistive devices and disaster recue materials at the community, I now feel more confident, as we can take her to safe place more easily and quickly.”**

*(As told by her mother. Mansarobar Rana is not able to communicate verbally as a result of her cognitive and physical impairment caused by Japanese Encephalitis.)*

*Ms. Mansarobar Rana, woman with multiple disabilities Kanchanpur, Nepal.*

**“Being a DMC chairperson, I am very busy in river bank protection work. We have established 230 meter long check dam on the bank of Doda River using bamboo and sand bags. This bio- engineering technology has already been proven as a cheaper and efficient technology. We feel more secure as this will protect our village.”**

*Mr. Dinesh Rana Tharu, Chairperson of District DRM and man with a disability, Kanchanpur, Nepal*



## Section 3: Community Risk Management Planning

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Following a VCA, findings are transformed into risk management action plans that identify how to increase capacity and reduce risk. This section will focus primarily on contingency and preparedness planning as opposed to longer-term risk reduction plans.

A contingency plan and supporting preparedness plan should be based on potential disaster scenarios and cover as a minimum: early warning systems, evacuation and rescue, shelter and relief management, first aid and medical support, individual and household preparedness.

These subjects are covered in detail in the subsequent sections. Here, focus is on the process of establishing a plan that ensures the needs, rights and capabilities of persons with disabilities are visible and accounted for adequately, as well as how these contingency and preparedness plans are shared and managed.

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Community disaster risk management committee share their contingency plan with project volunteers in Nepal

Three older members of the community, one with a visual impairment participate in preparedness planning meeting in Nepal



## Why take a disability inclusive approach to contingency and preparedness planning?

At times, even when the vulnerabilities and capacities of persons with disabilities are recognised in the VCA report, they are not addressed in the preparedness plan. This means the outcomes for persons with disabilities remain unchanged. For instance, where the VCA has identified households with persons with disabilities who need additional support in evacuating their homes, the corresponding evacuation plan must account for these needs and allocate responsibilities and resources accordingly.

Likewise, if the VCA process was not inclusive of persons with disabilities, the contingency plan presents a new opportunity to support their inclusion. It is never too late to increase participation and adapt activities to support inclusion.

An inclusive contingency plan ensures that the capacities of persons with disabilities are taken into account and built upon, thereby increasing overall capacity of the community.

The plan for the general community may not be suitable for persons with disabilities, for example the agreed safe shelter may be too far to reach, evacuation routes may not be appropriate, or the advice of items

to bring may not be appropriate or not possible to carry. Including alternative plans for persons with disabilities where necessary will avoid them missing out on receiving the relief and support they require.

In order for the plans to be implemented, key actions, roles and responsibilities need to be communicated effectively in the community. Plans which are long, dense documents are less likely to be read and may only be accessible to the DMC/SMC members. Without support persons with disabilities are less likely to attend a dissemination meeting or be part of the decision making process, thereby reducing their knowledge of the plan.

Mock drills and organised simulations, a common tool for testing the effectiveness of one or more parts of the contingency plan also need to involve persons with disabilities in order to build capacity, identify potential challenges for implementation and build confidence of persons with disabilities to act on the plans.

Community plans should feed up to district, regional and national plans. Inclusion of persons with disabilities is necessary at all levels of planning so that services are planned accordingly.

# how to

## How to make risk management planning disability-inclusive

### Ensure persons with disabilities have roles and responsibilities in the design and implementation of the plans

Make sure that persons with disabilities are represented in the decision making process. When assigning roles and responsibilities within the preparedness and contingency plans for task forces and committees, identify opportunities for persons with disabilities to participate and take on positions of responsibility.

Consider appointing a person within the main committee responsible for monitoring the ongoing inclusion of persons with disabilities, supporting communication and helping to address challenges as they arise.

### Ensure decisions reflect the interests of persons with disabilities

Plans should be assessed for their inclusiveness of persons with disabilities. Key questions to ask are:

- » Are persons with disabilities represented in the task-force / committees?
- » Do the plans account for the findings from the VCA regarding persons with disabilities (regarding vulnerability and capacity)?
- » Have relevant resources been identified to support plans?
- » Are there any possible negative implications for persons with disabilities as a result of the plans?

Cross-check draft plans with DPOs or self-help groups in the community who can offer feedback or provide advice on how to adapt plans to be more inclusive.

### Make contents of plans accessible to all

Plans should be understood by all, particularly the most vulnerable. Extract key messages from the plan and present in alternative formats to support multiple communication needs.

- » Illustrate evacuation routes on wall murals or place signposts around the community indicating routes to take
- » Use leaflets, posters, street theatre to communicate important messages, and raise awareness of services available

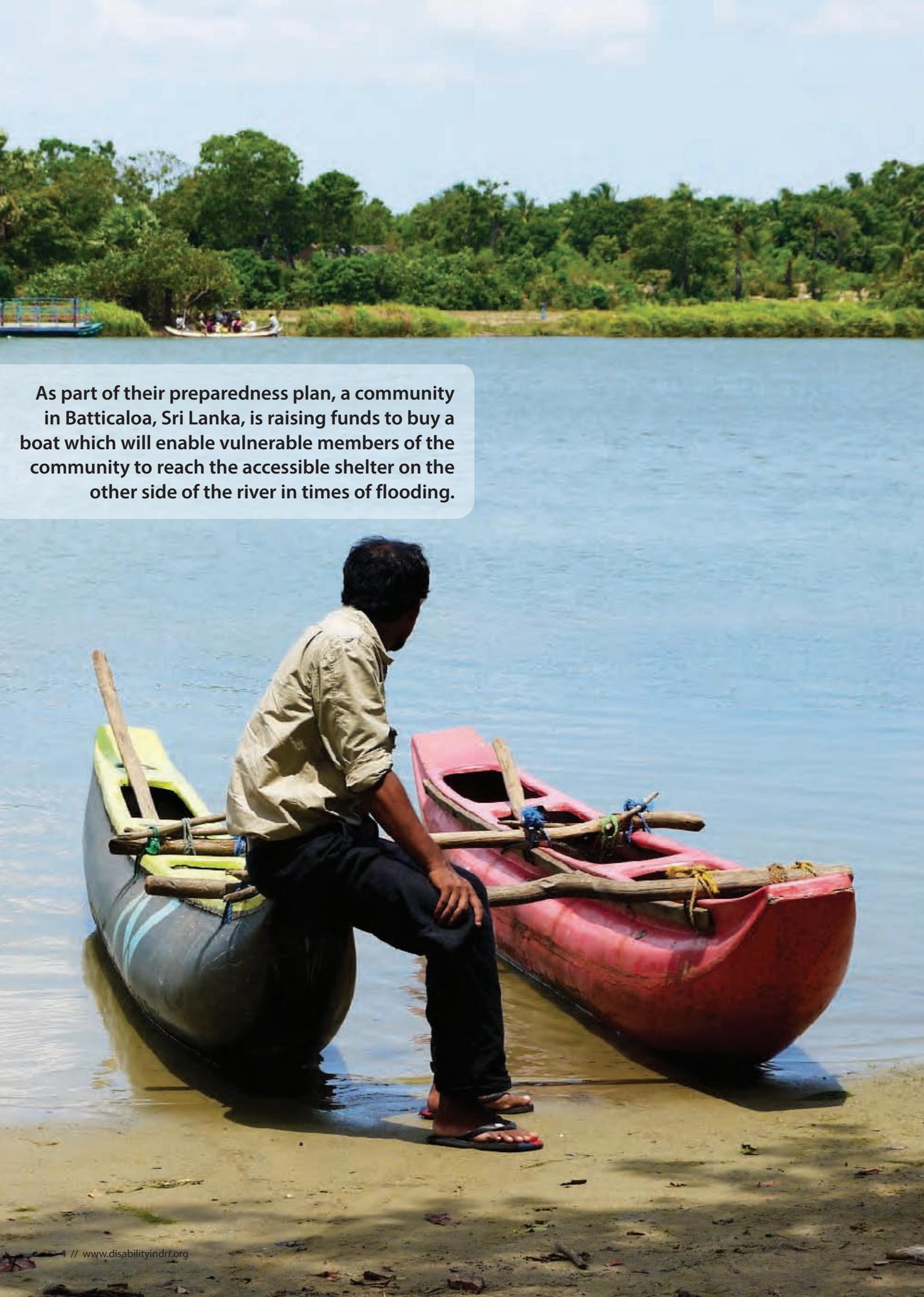
- » Put up lists and photos of people who have specific responsibilities in the event of a disaster
- » Make sure persons with disabilities and their family members are invited to information meetings about the plans

The section on household and individual preparedness goes into more detail about tailoring training and support for persons with disabilities.

### Inclusive Mock Drills

Mock drills and simulations help to raise awareness, demonstrate and test the effectiveness of preparedness and contingency plans. These events are often organised at district or state level, although sometimes managed independently by NGOs or other organisations for individual communities. In order to support inclusion of persons with disabilities consider the following:

- » Share information about the planned event with persons with disabilities in advance, address any logistical challenges to their participation and encourage them to attend.
- » Invite DPOs and self-help groups to observe / participate (as applicable).
- » Ensure that measures taken for adapting search and rescue or first aid techniques to meet the needs of persons with disabilities are demonstrated by the Task-Forces during the drill.
- » Encourage persons with disabilities who are members of relevant committees and task-forces to demonstrate their skills and roles in the process.
- » Assess levels of inclusion in the drill or simulation and hold a debrief session with persons with disabilities and DPOs / self-help groups to discuss what went well or what needs improving.
- » Ensure mock drills report includes analysis of inclusion of persons with disabilities and further capacity building and vulnerability reduction required.



As part of their preparedness plan, a community in Batticaloa, Sri Lanka, is raising funds to buy a boat which will enable vulnerable members of the community to reach the accessible shelter on the other side of the river in times of flooding.

## Contingency planning in Bangladesh

Shahjahan with his wife and daughter.



Sikakunda is a coastal upazila in the district of Chittagong. Its location on the coast and at the base of hills means it is vulnerable to cyclones and flash floods. In 1991 a super cyclone hit the area creating up to 10ft of water surge, damaging crops, home and killing livestock and taking many lives.

Contingency planning has been undertaken by HI with its implementing partner YPSA with 11 communities in this area.

HI Bangladesh Project Manager, Rashidul Islam explained:

“The session venues were held in a place preferably at the centre place of the village with well connected roads so that persons with disabilities and their care givers could participate. During the contingency planning process community members identified broad areas of responsibility during disasters and formed sub-committees for each area. These contingency plans have been developed to address issues of all the people during disaster. However special focus was given for special needs of the persons with disabilities.

The contingency plans were developed by a group of people. The plans were also shared in courtyard meetings, cyclone shelter management committee meeting, self-help group meeting and fisherman community meetings. Key features of the contingency plan, more specially the roles and responsibility of sub-committees were shared with the persons with disabilities and care givers during household follow-up visits.

The community people told us that whilst they are living with disaster for many years due to their geographical location they never heard about contingency plans before. Persons with disabilities and without disabilities feel that the contingency plan will be useful for the community. They are hoping by executing this plan in any future disaster it will help to reduce their losses and pains caused by disaster.”

Mr. Shajahan lives in East Sayedpur village and has a physical impairment. He attended the contingency planning session of their village at the ground floor of Kedarkhil school. He said “I understood the importance of contingency planning, knew the responsibilities to perform during disaster and accordingly given responsibilities to volunteers.” He added that the contingency plan will be very beneficial for the persons with disabilities as it specifies what to be done for the persons with different types of disabilities.

“We planned that people will come cyclone shelter with dry food, evacuate persons with physical disabilities by lifting, use sign language for those who can't hear.”

*-Mr. Monsur Ali, participant in contingency planning and person with visual impairment*





Inclusive early warning systems demonstration in Odisha, India.

# 4 Section Four: Inclusive Early Warning Systems

## Disability Inclusive Community Based Disaster Risk Management

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**“I have lost a lot because of disasters. I feel so much safer now with the early warning system in place and the big shelters available. I can save myself, my family and my belongings each time a disaster strikes”**

*Nargis Akhter, woman with a disability, Sitakunda,  
Bangladesh*

## Section Four: Inclusive Early Warning Systems

Effective early warning systems play a significant role in preventing loss of life and property by providing community members with advanced information about a coming hazard and the immediate measures to be undertaken before it strikes.



Alarm is sounded at the start of the community disaster simulation in Sitakunda, Bangladesh



## Why take a disability-inclusive approach to early warning systems?

Early warning is important for everyone, but for the most vulnerable advanced warning can make a crucial difference to saving lives and assets. To be effective, Early Warning Systems (EWS) rely on 4 elements being in place:

1. Knowledge of risks
2. Monitoring, analysis and forecasting of hazards
3. Communication and dissemination of alerts and messages
4. Capacity to respond to warnings

When any one of these elements are missing then the system breaks down. It is therefore essential that all these elements work equally for persons with disabilities, with particular emphasis on three and four.

A non-inclusive communication system may not address the communication needs of persons with disability and therefore fail to reach them with warning messages. Possible problems may be:

- » Dissemination system relies on one sense, auditory (sirens) or visual (lights, flags or text messages) to communicate information and therefore not received by everyone
- » Messages are complicated or not easily understandable by someone with a mental or intellectual impairment
- » Families or individuals who are socially isolated may not be integrated into the networks that pass on warning messages

Capacity of persons with disabilities to respond may not be adequately taken into account, meaning that persons with disability cannot act on the EW messages

- » It may take longer to reach a shelter, gather up essential belongings or secure homes and assets from damage
- » Additional support to complete these tasks may be required
- » Shelters need to be reached earlier to reduce accessibility barriers which are made worse by crowds

# how to

## How to make EWS disability inclusive

The suggestions below are framed around the five stages of developing a people-centred EWS.

### Preparation and planning

- » Ensure that persons with disability are included in the committee or task-force responsible for planning and managing the system
- » Refer to VCA and household survey findings on disability and use information on impairments, access to services and capacities to develop relevant plans

### Monitoring risks

- » Have persons with disabilities take positions of responsibility within the system established to monitoring hazards e.g. monitoring water-levels or rainfall, listening to radio reports, updates from regional or national meteorological hazard centres etc.

### Communication and dissemination strategy

- » Utilise multiple formats for communication to ensure persons with different impairments receive the message. Don't just rely on one form of communication; such as text messages or sirens. If multiple formats are combined then no one is excluded.
- » Review the different channels which information can be passed; phone networks, word of mouth; community meetings; posters and signs; sirens; door-to-door visits etc and analyse to what extent these channels reach persons with disabilities. Simple additions or adaptations may be enough to ensure greater inclusion.
- » Incorporate information networks that are utilised by persons with disabilities (DPOs and self-help groups for instance) into dissemination systems. Look also at how these can be strengthened.

### Preparedness

- » Ensure that persons with disabilities, their care-givers and family members are included in training on how the early warning system works, what the warning signals mean and what actions should be taken. Use mock drills to test the efficiency and effectiveness of systems

Refer to other sections in the toolkit on Search and Rescue task-forces, household preparedness, etc. for more information on how to make preparedness

actions more inclusive.

### Reviewing Effectiveness

This step comes following the development of a EWS. In the event that there is an existing EWS already in place which can be reinvigorated or strengthened then conducting a review of effectiveness can be seen as a first step. In either case this step offers a good opportunity to review levels of inclusion and identify entry points for increasing the inclusion of persons with disabilities. Further good opportunities for review come following a mock-drill or a disaster when the strengths and weaknesses of systems are exposed and fresh in people's minds.

- » Analyse effectiveness systematically from the perspective of persons with disabilities
- » Include persons with disabilities in review panels and as key informants
- » Seek input from DPOs and other disability stakeholders
- » Identify gaps and opportunities for inclusion to be increased in relation to the stages identified above

In Herat, Afghanistan villages along the road-side blend in with the hills rising up behind them. These villages regularly experience spring time flash floods, triggered by snow melt in the mountains. The fast flow of water damages buildings and cuts off roads, isolating communities even further from vital services and markets. Stories of village roads turning into rivers and children being swept away by the water are not unusual. There is no official early warning system in place for these communities.



## Part of the team: a role to play in early warning

Jharana Swain, a bright and intelligent 16 year old girl from Deulipari village in Odisha is the second daughter of Surendra Swain. As child, she suffered from polio which left her with a weak and shortened left leg. Her impairment does not stop her from walking, but long distances are difficult, and she could not manage the distance to school, which is about 2 kms away. Initially, her father or uncle would take her on their bicycle but this meant that one of them had to take time out from their work which was not possible on a regular basis. She dropped out of school and hardly left her home. Participation in community activities was difficult due to lack of access and she also anticipated negative reactions from her family and the community. She thought they would say, "You are disabled, why do you need to go out? We provide all your daily living needs. Why go out and invite ridicule?"

Through the project, Jharana was identified as someone who would benefit from receiving a mobility aid and was provided with a bicycle along with a few regular exercises to strengthen her legs. Although not a typical mobility aid, the bicycle helped her resume her study in school and join other village activities. Jharana had said "I was very happy to get the bicycle. I have started going to school and have successfully cleared my exams. I can go along with my friends and am much more independent and confident than I used to be."

When the VCA process was conducted in the village the community animators invited Jharana to join. Not understanding what it meant, but appreciating the fact that she was being specifically invited to come, she came to the shelter with her older sister. During the process, with encouragement from the facilitator and her sister, her participation was limited to just a few words. However over the course of subsequent meetings, quiet and reticent Jharana gradually became animated in her participation in the community based disaster management activities being done in the area.

Jharana then volunteered to be a member of the EWS Task Force. The VDMC and community members included her name; barely realizing that she would actually be able to contribute in a few months time.

Nine months after her Task Force training, a flood warning was issued by the Block Administration, and Jharana was called to the shelter for an



Jharana with her bicycle that enables her get to her early warning task force meetings

emergency meeting. At the meeting she was given the responsibility of sounding the siren while other team members went from house to house to disseminate the information received from the Block Administration. As a result of the warning, community members had the time to collect their valuables and essential belongings and move to safer areas.

Working as part of the team Jharana gained self-confidence and was able to demonstrate the capacity persons with disabilities have which is sometimes overlooked.

"My daughter shared the equal responsibility with her team members and alerted us for the flood coming in and this has doubled her respect inside the village and in the family. I wish she will extend her helping hand every time for the betterment of the village."

*-Jharana's father*

## References for further reading

Mercy Corps and Practical Action, 2010, *Establishing a Community Based Early Warning System: Practitioners Handbook*, Nepal. [PDF available at <http://practicalaction.org/media/view/6868>]



Man rescued from the lake as part of Search and Rescue training in Sitakunda, Bangladesh

# 5

## Section Five: Search and Rescue and First-Aid Task Forces

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**“This is the first training I received in my life and the first time I came out of my home. I tried to join with other groups but they refused and also they ask me, what you can do? But after HI’s intervention I have been included in the Disaster Management Committee. I participated in this 3 day training on First Aid and now people [Task Force members] know how to respond and to support a person with a disability in a disaster. I feel welcomed by the community! I am ready to share this knowledge with others. I am really enjoying being a member.”**

*Nimal, First Aid Task Force member and boy with a disability,  
Batticaloa, Sri Lanka*

**“Earlier I was alone and nobody thought ever that I could do anything good for me and for my community. After becoming the Task Force member, I got training on First Aid and now I am confident to extend support to my fellow villagers at the time of need. I feel self-assured and now I am living a life with dignity as my family members and villagers could recognize my potentialities.”**

*Mr. Basudev Behera, Task Force member and man with a disability,  
Odisha, India*



## Section Five: Search and Rescue and First-Aid Task Forces

Search and rescue is carried out in the primary stages of disaster response in order to find and assist persons trapped in buildings or stranded, due to disaster related damage, blocked access, injury, or disability. Provision of First Aid is also often necessary in the wake of a disaster if people sustain injuries or are suffering from shock. Depending on the severity of the disaster, communities can undertake effective search and rescue and apply First Aid if equipped with relevant materials and training. As highlighted in Part One, in many cases support from outside the community takes time to arrive especially if roads are blocked by debris or flood-water, making community-led efforts particularly important.

### Why take a disability-inclusive approach to search and rescue and first aid?

Persons with disabilities and people who are injured in the disaster are more likely to need assistance in evacuating from their homes and are therefore at greater risk of being left behind, neglected or forgotten during evacuation.

- » A person with limited mobility may not be able to move independently or quickly enough to escape from rising water and become trapped
- » Changes to the physical environment as a result of the hazard may make paths and roads inaccessible by wheelchair or tricycle and present additional challenges to someone with a visual impairment
- » A parent with a disability may not be able to carry or assist their children to evacuate and therefore opt to stay in their home. A caregiver could be injured or lost, leaving the person with disability alone and without means to escape or communicate
- » Communication challenges may prevent persons with disabilities from making their situation known to those providing assistance
- » Early warning messages may have failed to reach the person or their household and therefore no action was taken whilst there was still time to evacuate
- » Persons with hearing, visual, mental and intellectual impairments may not understand what is going on and not act quickly enough or appropriately



First Aid Task Force training in Bangladesh

For First Aid, awareness of disability prevention can help avoid temporary injuries becoming long-term impairments, through mishandling and delayed treatment. Persons with disabilities may have specific health requirements that put them at greater risk of injury or developing medical complications. Communication barriers may also mean persons with disabilities are unable to communicate their needs sufficiently or are overlooked by First Aid providers.

Persons with disabilities and their families have a range of capacities including knowledge of specific needs and how these should be addressed. Utilising their knowledge and skills will strengthen capacity of task-forces and empower the person as well.

# how to

## How to make search and rescue and first-aid task forces disability inclusive

### Encourage inclusion of persons with disabilities in task-forces

Support persons with disabilities to have roles and responsibilities in Search and Rescue and First Aid task forces.

### Planning and training

- » Plan for evacuation support and specific requirements by sharing information from the VCA and preparedness plan regarding location of persons with disability, their needs, use of assistive devices etc and capacities with the Search and Rescue and First Aid Task Forces.
- » Include stretchers, wheelchairs and crutches in equipment stocks to support Search and Rescue and First Aid efforts, and train task forces in their use (see section on Stockpiling). These items are also helpful for assisting newly injured people, elderly people and pregnant women.
- » Ensure task force members have knowledge on how to adapt Search and Rescue and First Aid techniques to suit persons with different types of impairments and have knowledge of appropriate carrying techniques that do not cause discomfort or further injury.
- » Plan for different levels of support required, distinguishing between those who can self-evacuate; those who need some assistance and those who require complete support.

This type of assessment and planning can be done in advance, but Search and Rescue and First Aid Task Forces also need to have assessment skills which enable them to make decisions on the spot. Include these issues into search and rescue training.

### Listen to advice of persons with disabilities and care-givers

In an evacuation, persons with disabilities and their family members are usually best placed to give advice on their specific needs and the most appropriate ways to assist or carry them. Ask for their advice first and listen to what they want before providing assistance. This discussion can be held both during

the preparedness phase as well as in the event of an evacuation.

Avoid separating a person from their assistive device (if they have one) and their care-giver as this may reduce their mobility, ability to communicate and increase stress and agitation.

Persons with disabilities don't necessarily need to be transferred to healthcare facilities, only if they have serious injuries or face life threatening situations. If the person is not able to communicate their medical requirements involve family member or care-giver in assessing their health needs before taking action.

### Build communication skills of task force members

Persons with disabilities may be less able to communicate their needs; this is particularly the case for those with hearing, speech, intellectual or mental impairments. Try to involve someone who knows the person with disability, or someone familiar with working with persons with disabilities in discussions.

Persons with intellectual or mental impairments may become agitated by the disaster which then makes it more difficult for them to express themselves or understand what is going on. In this situation the Search and Rescue or First Aid provider must keep calm, reassure the person and try to redirect their thoughts away from the source of worry.

Communication skills are an important for search and rescue and first aid providers and should be included in training (see section 1).

**IN THE TOOLBOX:**  
Making search and rescue training inclusive of persons with disabilities: a guide for trainers



Photos from Search and Rescue demonstration in Odisha, India.



Search and Rescue Task Forces refresh their skills through a demonstration at the local cyclone shelter.

Simulations such as this form an essential part of ongoing Task Force training and capacity building. It helps to keep Task Force members' skills fresh and builds confidence in their abilities, which is necessary for putting skills into action when under pressure.

These events also allow other community members to see how rescues can take place, become familiar with the Task Force members and raise any particular concerns or questions that they have.

**“Earlier, our fate used to get sealed in disasters as mere victims. Now, we have become first responders and equally important for all preparedness activities. Everybody is recognizing our potentialities and we too.” Ms. Urmila Majhi, Woman with a disability, Odisha, India**



## Life-saving skills for all in Nepal

Gopal in his community sharing what he learnt during his training.



Gopal Kami is 19 years old and lives in Siddhathan village in the Dadeldhura district of northwest Nepal. As part of efforts to strengthen disaster preparedness in his community, Gopal joined the First Aid Task Force. “My community is exposed to several hazards, especially floods, landslides and river cutting... so my knowledge and skills on first aid will be helpful to save the lives of my community”.

Since joining the task force he has received first aid training run in collaboration with HI’s local partner Nepal National Social Welfare Association (NNSWA) and the Nepal Red Cross Society. As part of his 3 day training, he received advice on how to adapt first aid techniques to be inclusive of persons with disabilities which covered a range of issues including communication, use of assistive devices and transportation. Describing some of the things he learnt, Gopal recalled that “For persons with hearing impairments, local sign language is to be used to help assess their situation. For persons with spinal cord injuries, handling with extra care is required; they need to be transferred on spinal board or hard board to prevent worsening of their impairment. For persons with mental or intellectual impairments it is better to provide first aid care by familiar people or in the presence of family members”, he also highlighted that

“first aid providers should not separate people from their assistive devices whilst taking them to the referral centres”.

Gopal is very aware of the responsibilities associated with being a member of the First Aid Task Force. “I am now responsible for managing first aid materials, coordinating with local health posts...using first aid materials before their expiry date... being available in disaster affected areas with the search and rescue task force for immediate first aid and sending injured persons to health centres or hospitals if required after first aid treatment”.

“Like me all training participants gained the knowledge and skills on the concept of first aid, its importance during disaster and providing first aid services to persons with disabilities and other vulnerable members of the communities”.

*-Gopal Kami*





Cyclone and flood shelter before accessibility features were added in Chittagong district, Bangladesh.

# 6

## Section Six: Shelters

### **Disability Inclusive Community Based Disaster Risk Management**

A toolkit for practice in South Asia

Knowledge & practices gathered from Afghanistan, Bangladesh, India, Nepal & Sri Lanka

[www.disabilityindrr.org](http://www.disabilityindrr.org)

*“Structural limitations were there always outside and inside the shelter for persons with disabilities and other vulnerable groups like elderly, pregnant ladies, sick persons etc. With the modifications made in both the floors increased the accessibility for all during emergencies and at normal time, which again boosted the active participation of these people in disaster risk management process.”*

*Mr. Ramesh Behera, CSMMC Secretary, Odisha, India*

**“I am happy to participate in constructing an accessible raised water taps in the middle my village. When flood hit us four years ago, we did not get safe drinking water for 3 day. The hand pump was submerged in floods. Now, even if there is flood, I can drink safe water.”**

**“The raised hand pump is made accessible with ramps hence all people including people with disability will be able to use it.”**

*Mr. Kailash Rana Tharu, man with disability,  
Kanchanpur, Nepal*

## Section Six: Shelters

Shelters are an important means of protection in event of a disaster and are a significant asset for communities. They come in many forms; in some communities they are purpose built structures designed to withstand specific hazards such as cyclones; in others, they are schools or community centres temporarily converted into a shelter in the event of a disaster. For many people a shelter is simply the nearest safe space, a neighbour's home, or even a temporary structure away from danger. For the purposes of this toolkit, the focus is on permanent structures for use by the whole community which are purpose built or multi-function buildings.

### Why take a disability inclusive approach to designing and managing disaster shelters?

A community disaster or emergency shelter and the facilities it provides are for everyone. Access to shelter is about more than being able to physically enter the building; it is also about to what extent it can be moved around and whether its facilities and services can be used. Inaccessible shelters put people's rights to protection, dignity and assistance at risk.

Poor design can reduce persons with disabilities ability to act autonomously, move around freely and safely and make use of facilities for example:

- » Lack of ramps, high and uneven steps to enter the building, absence of handrails, narrow doors and corridors can prevent persons with mobility impairments to enter and move around building independently
- » Low light, lack of signs, low hanging objects, debris and objects stored or left in corridors, present risks to persons with low or no vision
- » Sanitation facilities located outside, up a series of steps and without handrails prevent safe and easy use by persons with a range of impairments

Disaster situations, where family and social norms are disrupted can increase risks to individual security. A shelter which lacks security, splits up families, does not separate men and women, is over-crowded and with weak management of resources is likely to leave vulnerable people, particularly persons with disabilities at greater risk of physical and verbal abuse, discrimination and neglect.

For persons with intellectual or mental impairments a shelter which is over-crowded and noisy may be

Water-pumps with long handles make it easier to use by persons with physical impairments



distressing to stay in and cause further agitation. In addition if persons with disabilities and their families are not made to feel welcome they may be too embarrassed to go for fear of how others might behave towards them, in turn further missing out on resources only available through the shelter.

Shelters often serve as a central point for food preparation and distribution. Persons with disabilities are more susceptible to malnutrition in emergency situations due to a number of factors including:

- » Pre-existing poor nutrition
- » Food distribution points and cooking facilities cannot be accessed
- » Assistance with chewing and swallowing is not available
- » Underlying health problems means inadequate food or poor nutrition leads more quickly to health problems

Shelter facilities for food preparation and/or distribution need to ensure that everyone's basic needs regarding nutrition are met and additional support provided where necessary.

A shelter made inclusive for persons with disability will also benefit other vulnerable groups such as pregnant women, the elderly as well as people who are sick or have temporary injuries caused by the disaster.

Community centre that serves as a shelter with new ramp access in Batticaloa, Sri Lanka



## how to How to make shelters disability inclusive

### Make the shelter accessible to all

The application of Universal Design Principles in the design of shelters ensures that everyone is able to access the building make safe use of the facilities. Plan accessibility features into the design of the shelter or building to incur minimal costs (adding them later can be expensive and more complicated to achieve).

Where it is not possible to include or add permanent accessibility features to the building, consider use of temporary measures put place in the event of a disaster. Ensure that shelter management committee members understand the principles of accessibility and have these incorporated into shelter management plans.

Below are some ideas about improving physical accessibility, technical specifications can be found in the tools section. Please note this is not an exhaustive list.

### Visual impairments

- » Mark the front edge of steps with a contrasting strip so that it can be easily recognised
- » Ensure all areas are well lit
- » Make signs clear, use large letters, put them at eye level and preferably with raised letters which can be felt
- » If signs stick out from the wall then make sure they are above head height to avoid potential collisions
- » Ensure pathways, corridors and common areas are kept clear of objects and debris. For objects that can't be moved, paint in a bright colour
- » Mark the top and bottom of stairs / ramps with tactile ground surface. Bright colours indicate changes in pathways, dotted tiles say 'stop' or 'turn' and lined tiles so 'go' forward

### Hearing or speech impairments

- » Provide clear and visible signs identifying the location of facilities
- » Provide written information about services, access to relief, situation updates, etc.
- » Ensure areas are well lit to aid lip-reading, ability to read signs and other forms of written communication

### Intellectual or mental impairments

- » Provide clear, visible and frequent signage to direct people around the environment and to increase independence

### Physical impairments

- » Provide ramps to enter buildings
- » Make sure ramps, verandas, doorways and corridors are wide enough to allow a wheelchair or tricycle to move around
- » Place fittings and furniture (wash basins, tables, benches) at heights that can be reached from a sitting position and have enough space under them that a chair can be wheeled right up to them
- » Make seats and benches available so persons with physical impairments can rest
- » Fix handrails to assist walking up and down slopes, steps and stairs
- » Use levers rather than round knobs for door handles and taps
- » Extend the length of water-pump handles to make pump action easier

- » Locate toilets and washing facilities in an accessible location, without steps to access
- » Keep areas around water sources clean and ensure there is drainage to reduce potential of slipping and falling on wet surfaces
- » Provide temporary mobility aids such as crutches or wheelchairs to aid movement around the shelter (see section on stockpiling for further details)

Prior familiarity with the shelter can help increase mobility. Organise visits for persons with disabilities and their families during the preparedness phase, so they can become familiar with its layout and the locations of key facilities. This is a useful exercise for all community members to ensure people are comfortable going to the shelter and should be repeated regularly so any newcomers to the community have the chance to visit.

Support access to information through planning for information points in the shelter, where all information updates can be posted and advice obtained. This will make it easier for persons with disabilities and all shelter users to know where to get the most up to date information.

### Ensure, safety, protection from abuse and right to dignity of all shelter users

During preparedness and training

- » Orientate relief staff and volunteers about risk of abuse, discrimination, loss of dignity and ways to minimise such abuses
- » Recruit female volunteers/women task force members to support women with disabilities
- » Organize awareness sessions for general population about disability (this can also be done during disaster response)
- » Talk to persons with disabilities and their families about the potential risks and strategies to reduce them

During disaster

- » Avoid separating persons who have disabilities from their caregivers or relatives during their stay in the shelter
- » If care-giver or family members are not available, try to ensure there are adequate numbers of volunteers/staff in camps or shelters
- » Promote interactive discussions with persons who have disabilities to decrease tension and stress of the overall

situation

- » Create private spaces for persons with disabilities to change clothes, wash and eat to help maintain their dignity, reduce distress and agitation
- » To reduce potential for accidents and injuries in the shelter, fence off unsafe areas, open holes, rubble and so forth

### Ensure basic needs are met (water and sanitation and food security)

Guidance on accessibility of water and sanitation is included in the above points on accessibility and in the tools section. Further actions to take include:

- » Appoint assistants to help persons with disabilities use pumps and carry water
- » Create separate queues and places to sit down whilst waiting can make it easier for persons with disabilities to access the facilities

Include persons with disabilities and their families in hygiene training and take their communication needs taken into account when producing awareness-raising literature, etc. (see Principles of Inclusion)

- » Plan for food rations that meet specific nutritional requirements of persons with disabilities
- » Ensure that persons with disabilities are included in distribution registers and monitor access to rations
- » Organise separate queues for persons with disabilities with seating facilities for those that can't stand for a long time in a queue
- » Deliver food directly to houses for those who could not or chose not to go to the shelter
- » If possible, have a person with disability in charge of food distribution points
- » Create space for eating in privacy
- » Make kitchen facilities physically accessible with surfaces and stoves at sitting height (see tool on specifications for accessibility)

Cyclone shelter management committee training session conducted by Young Power in Social Action volunteer in Chittagong district, Bangladesh.



**IN THE TOOLBOX:**  
Guidelines for physical accessibility for shelters

## A shelter fit for all



Tajul Islam with his granddaughter who now feels able to help her grandfather go to the shelter.

In 1991, 120 people, including 10 persons with disabilities were killed by a cyclone which hit the village of Alekdia situated on the Bay of Bengal on the Bangladesh coast

After the cyclone, a two-storey shelter was constructed in the village.

HI helped conduct an accessibility audit for Alekdia cyclone shelter in 2011, the findings of which showed that the shelter was not currently accessible for persons with disabilities. Project Engineer Narayan Dey described the findings. “The external environment of the cyclone shelter especially the pathways were difficult to use. The area in front of the cyclone shelter was muddy and the threshold to the site had obstructions for persons with wheelchairs. Inside was also a problem. There was no ramp or hand rail to reach the raised ground floor of the building. There was also no ramp between the ground and first floor of the building. Doors to the toilets were too narrow for wheel-chair users and all the toilets were flat commodes, with no grab bars. There was no signage system to help direct users around and electric switches were also fixed to high from floor level to be reached by a person in a wheel-chair.”

Based on these findings Handicap International and its partner Young Power in Social Action (YPSA) renovated the main gate and removed obstructions to the entrance. They constructed a ramp up to the ground floor with hand rails. The pathways to the bathroom and toilets were widened and given a rough surface to reduce slippage. Doors were widened, and the flat commodes replaced with high commodes, grab bars, and accessible water flushing systems. Electric switches were also brought down so that persons in a wheelchair can reach them.

“These accessibility works did not happen in isolation,” explained Project Manager Rashidul Islam. “The Cyclone Shelter Management Committee, which includes persons with disabilities, helped decide what was to be done and local masons were trained to do the accessibility works which means the skills stay in the community.” He went on to add that “Mock drills conducted at the shelter and visits by persons with disabilities to shelter to see the changes, have helped increase awareness of the improvements and build confidence in using the shelter in the event of a disaster.”

In 2012 the Government of Bangladesh approved a new cyclone shelter management and maintenance policy which makes it mandatory for all new cyclone shelter to incorporate a ramp.

Md. Tajul Islam is 70 years old and had a stroke 5 years back which left part of his body paralysed. His wife died two years ago and he is looked after by his daughter in law, Royeka and son, Saifuddin. During the super cyclone SIDR 2007, Saifuddin heard the warning signal over the radio and carried Tajul and his wife (also paralysed) to the cyclone shelter. His daughter-in-law said, “Taking them to the cyclone shelter was very difficult as there was no ramp in the cyclone shelter. Pathways inside the shelter were also broken.” Looking after them inside the cyclone shelter was also very challenging. “Toilets were with flat without any water supply. We had to hold them on the toilet commode.” Because of these uncomfortable situations Saifuddin and Royeka chose to take them to the cyclone shelter only at the last moment.

“I have seen the work done in the Alekdia cyclone shelter. It will be much easier to take him to the cyclone shelter with the wheel chair and take care of him there. I will not wait till the last moment now as the ramp, comfortable toilets, water, and stretcher blankets are available in the cyclone shelter.”

*-Rokeya Islam, daughter-in-law*

## Further Reading

Guidance provided here has been largely based on: Prof. (Dr.) Asha Hans et al., 2005 Training Manual for Inclusion of Disability in Disaster Response. India, Shanta Memorial Rehabilitation Centre (SMRC) For more information on Universal Design see [www.universaldesign.com](http://www.universaldesign.com)



Household savings reduce vulnerability by helping families to meet unexpected expenses as a result of disasters

# 7

## Section Seven: Household and Self-Preparedness

**Disability Inclusive Community Based Disaster Risk Management**

A toolkit for practice in South Asia

Knowledge & practices gathered from Afghanistan, Bangladesh, India, Nepal & Sri Lanka



## Section Seven: Household and Self-Preparedness

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Household or self-preparedness is about addressing disaster risk management at the level of individuals and families. It is an essential aspect of community-based disaster risk management programmes as it provides most direct opportunity to capitalise on capacities and address vulnerabilities specific to households.

This means ensuring individuals have the relevant knowledge about the risks that they face to make good decisions and take appropriate actions in the event of a disaster. It means addressing attitudes or beliefs that might be harmful or unhelpful responding appropriately to a disaster.

Finally, it means making plans and taking practical actions that build on capacities and reduce vulnerabilities (for example finding safe places to store valuables, removing accessibility obstacles, planning for evacuation, preparing items to take, etc.)

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Skills training in subjects such as health and hygiene can help build households' capacities to cope in the event of a disaster

Project staff conduct a household accessibility assessment with a man who uses a tricycle, as part of support for household preparedness, Odisha India



## Why take a disability inclusive approach to household preparedness?

Households where there are persons with disabilities have capacities and coping strategies which can be utilised both for their own and others' benefit. An inclusive approach to household preparedness is an effective way to build on existing capacities and develop new skills and knowledge that empower individuals and households to manage risk and take action independently. However, where these households have particular vulnerabilities that affect their ability to respond effectively and cope with the impacts of disasters, tailored strategies can help to reduce risk.

General measures to address household preparedness may not reach persons with disabilities and their families.

- » Lower levels of participation in community activities means they may have less access to information being given through meetings about risks, hazards and services available in the event of a disaster.
- » They may not receive or understand literature or other awareness-raising materials that are circulated.
- » Community volunteers may not take time to ensure that persons with disabilities and their families understand the messages and can act on them.
- » General advice being provided to households may not be relevant to their situation, or it may be more difficult to translate this into practical action at home without additional and tailored support.

# how to

## How to make household preparedness disability inclusive

### Make education and awareness-raising activities inclusive

Education and awareness-raising sessions on hazards and disaster response are often undertaken in group settings. If this is the case then follow the points set out in the section Principles of Inclusion to support inclusion. Consider adding follow-up sessions with particularly vulnerable households to check that all members understand the key points raised and have the opportunity to discuss specific issues and concerns.

Take into account the communication advice given in earlier sections when producing leaflets, posters or other visual educational information.

### Include disability issues in individual household assessment and preparedness planning

- » Include accessibility as a risk factor in household-level hazard assessments, and as a potential focus for small-scale mitigation interventions (building of hand rails, ramps or evening steps)
- » Consider ability of family members to evacuate unaided and potential obstacles that reduce accessibility
- » Look for alternative ways to increase mobility such as provision of mobility aids
- » Discuss past experiences and actions the household took during previous disasters, focus on capacities as well as barriers in accessing existing or newly planned systems and services (EWS, shelters, search and rescue, relief supplies)
- » Consider other barriers to accessing disaster relief services, for example, identification, disability cards etc required to receive relief entitlements
- » Discuss the community contingency plan and to what extent they feel able to follow the advice it contains. If alternative plans are necessary, make sure that these are fed back into the community preparedness plan.
- » Discuss if there any areas they feel able to contribute and feed this back to the relevant committees or Task Forces
- » Assist the household to make a personalised contingency plan for evacuation and protecting assets. Focus on capacities of households, and empowering them to act as independently as possible. Include plans for protecting assistive devices and livelihoods assets, especially if it is not possible for these to be taken with the person when evacuating.

- » Assist them to assess gaps in capacity and how these might be gained through training or other measures
- » If providing emergency kits, or supporting households to create their own, then take into account specific requirements based on their needs (for example regular medication)

### Address underlying causes of vulnerability

Many of the causes of vulnerability are related to underlying factors of social exclusion and poverty. Building a person with disability's confidence and social networks through supporting their engagement in community activities, school attendance, participation in a self-help group and so forth has a significant impact on their capacity to act in a disaster.

### Tailor plans to meet specific needs

Be aware that one plan does not suit everyone and collaboration in developing tailored plans is essential. Even if the community contingency plan recommends all community-members should evacuate to the shelter, it may be that this is just not realistic for some or all household members.

If alternative plans are made then make sure this is fed back to community disaster management committees and relevant task forces.

**IN THE TOOLBOX:**  
Household preparedness pocket guide for field staff



Working directly with vulnerable households to address specific risks can make a significant difference to their levels of preparedness. Persons with disabilities and their household members are less likely to participate in community training events and often require additional support in adapting plans to suit their specific needs. A participatory approach which involves discussion and joint action planning helps to build capacity and confidence for preparing for disasters.

## Putting the plan into action

Fields, houses and roads underwater during 2011 floods in Odisha, India



“As the flood water started increasing in nearby paddy field, my sons began to construct a makeshift structure on the higher ground of the road and my family members started to move valuables and cattle to that place. Finally, when water reached at our door step, we all took shelter there at early morning,” said Bishnu Swain, an 80-year-old villager of Subala in Kendrapara district, Odisha.

On 11th September at midnight, after receiving the early warning of flood water approaching Early Warning Task Force members disseminated the message to all 189 families in the village and started evacuation. Within 2 hours, water had reached the village and by morning the entire village was submerged except one road and a mound. The approach road to the multipurpose Cyclone Shelter had also become submerged so no family could take shelter there.

As part of Bishnu’s family’s preparations for such an event, they had made a storage facility to save food

grains and a few belongings. “With our previous experiences we made our storage 6 feet higher than my homestead land,” this pre-planning meant it remained dry even when the entire village was under the flood water.

“Water everywhere and my sons started swimming from make shift tent to submerged house and vice versa to save valuables. The Household Disaster Preparedness Plan, which was developed last year in support of Handicap International helped us a lot to evacuate and save our belongings systematically.”

*-Kaikei Swain, wife of Bishnu*





Stockpiled auxiliary crutches in a cyclone shelter in Odisha, India

# 8

## Section Eight: Stockpiling

**Disability Inclusive Community Based Disaster Risk Management**

A toolkit for practice in South Asia

Knowledge & practices gathered from Afghanistan, Bangladesh, India, Nepal & Sri Lanka

**“I got the opportunity to participate in the orientation of stocked piled items; assistive devices and disaster rescue kits. As a person with disability I always had a fear and anxiety what if we lose our devices during flood but I now feel safer and level of fear and anxiety has decreased due to stock piling of devices.”**

*Ms. Sombati Chaudhary, woman with disability,  
Kanchanpur, Nepal*

## Section Eight: Stockpiling

Stockpiling is the process of pre-positioning equipment and supplies in strategic locations for use in emergency situations. Its purpose is to speed up access to essential resources necessary for saving lives and meeting people's basic needs during and following a disaster. The focus in this section is on small community-level initiatives for stockpiling, as opposed to stockpiling by NGOs or Government bodies.

### Why take a disability inclusive approach to stockpiling?

Stockpiled goods such as First Aid and Search and Rescue equipment, or food and non-food items all apply to persons with disabilities as much as anyone else; however as highlighted earlier, persons with disabilities may require additional support to access basic, relief services and ensure their basic needs are met.

Assistive devices such as wheelchairs, crutches, hearing aids, white canes can help a person reach food distribution points, use available services, move around independently and receive and understand vital information about the situation.

- » Assistive devices are often lost or left behind in the event of a disaster or be damaged
- » Mobility devices may also be of use to persons with physical impairments and injured people as a result of the disaster.
- » Assistive devices such as portable toilet seats can make inaccessible squat toilets usable by someone with impaired mobility.

Pre-existing health conditions may become serious or even life-threatening if access to medicine or other services is disrupted. It is unlikely that standard medical kits will meet these needs.

Involvement of persons with disabilities and their care-givers in management committees of stockpiled goods both utilises their capacities for the benefit of the community and increases the likelihood that other persons with disabilities are aware of the resources and feel confident in accessing them in the event of a disaster.

Cyclone shelter management and maintenance committee receive assistive devices for stockpiling.



## How to make stockpiling inclusive of persons with disabilities

### **Include disability actors in planning and management of stockpiled goods**

- » Include persons with disabilities in the stockpiling process as key-informants, decision makers and managers of stockpiled goods
- » Seek input from DPOs, rehabilitation and health providers to ensure that the most relevant items are obtained and appropriate advice about their use given
- » Maintain up to date lists of equipment and condition, including details of who has used in the past
- » Store devices in secure place, free from damp or other factors which may damage items
- » Perform maintenance checks on bi-annual basis or prior to high risk seasons
- » Plan for potential repairs or replacement items

### **Identify appropriate resources and equipment for persons with disabilities**

For evacuation, search and rescue take into account existing and potential future needs in the community. As well as standard equipment such as ropes, megaphones, and so forth consider including:

- » Stretchers: these can be used to help evacuate and carry persons with severe mobility restrictions or people injured in the disaster
- » Wheelchairs, crutches and walking frames: these can be used to support self-evacuation by persons with mobility impairments and for people who have been injured

For use in and around shelters, take into account accessibility factors discussed in previous sections. People may have to leave their mobility device behind or it might be damaged so having access to a temporary device whilst at the shelter can be of great service.

- » Stockpile assistive devices at the shelter for use whilst staying at the shelter, e.g. wheelchairs, crutches, walking frames, white canes, portable toilet seats (see tool for illustrated list of equipment)
- » Store tools/materials for basic maintenance and repairs to assistive devices, e.g. rubber grips for crutches, hearing aid batteries

Specific dietary or health requirements should also be taken into account in first aid and food provisions.

Storage of food and medicine requires strict management controls and stocks not used within their shelf-life would be thrown away. Specific food and medical provisions may be more effectively managed through household preparedness.

The above scenarios focus on stockpiling for temporary use of devices in controlled environments. HI recommends that stockpiling for replacement assistive devices should only be undertaken in partnership with an actor (rehabilitation centre or health provider) which can provide professional advice in assessment, fitting and training in the use of the device. Devices fitted or used incorrectly in the long term can lead to increased impairment.

### **Train management committee and users in distribution and maintenance**

Training in the use, adjustment and maintenance of devices must be included in the process of stockpiling. This should be undertaken wherever possible with support of a rehabilitation or health provider that can provide professional advice.

- » Train Search and Rescue and First Aid task force members, health workers and shelter volunteers (as appropriate) in the setting up and use of assistive devices
- » Identify skills in the community for repairing items and train them in maintenance and typical repairs

### **Ensure access to and awareness of equipment availability**

- » Make equipment easily available in the event of a disaster; keep materials in accessible locations that are most relevant to the intended user group
- » Develop clear terms of reference or standard operating procedures for what they are to be used for and when
- » Inform persons with disabilities in advance about what there is, where it is, who is responsible for it and how they can access it in the event of a disaster
- » List stockpiled goods on the wall of a shelter to increase awareness
- » Ensure more than one person has access to stored items



**Mobility devices such as crutches can help people to move about independently if they have an impairment or if they are injured. Stockpiling such items for use by Search and Rescue teams and in the community shelter can help people to remain independent in the event of a disaster.**

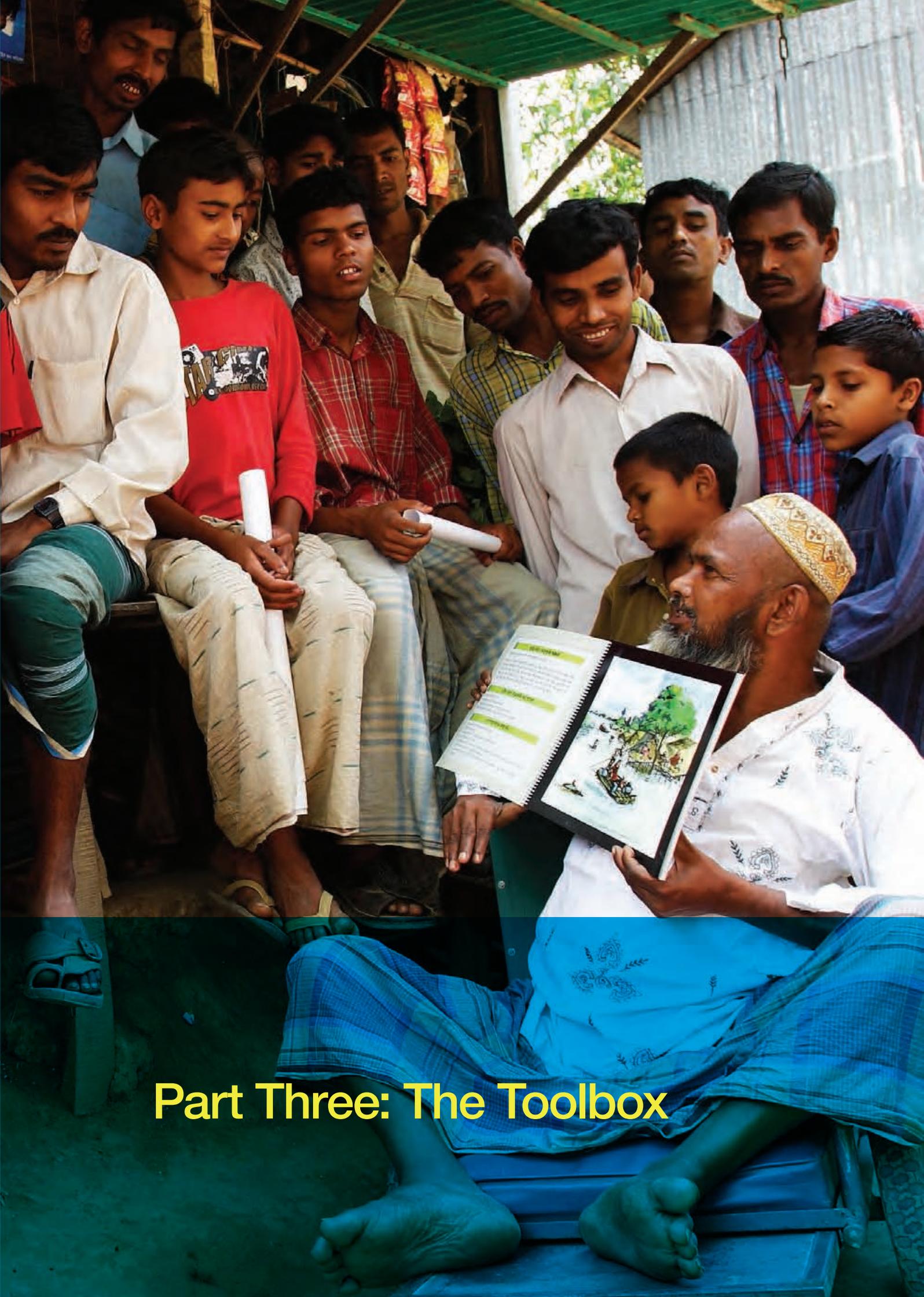


Training in the setting up and use of assistive devices must form part of stockpiling plans. Here the assembling of a toilet chair is being demonstrated. This particular item can be placed over an existing squat toilet to increase ease of use for people who have difficulty squatting. The chair can also be taken to the person and used with an attached bucket, making it particularly useful where access to toilet facilities is poor. This is a recommended item for shelters to stockpile for use in emergencies.

# List of Potential Devices for Stockpiling

-  **WHEELCHAIR**  
To support mobility. For use by persons who have physical impairments, who are sick or injured, women who have just delivered a baby and the elderly.
-  **WHITE CANE**  
To support mobility. For persons with total or almost total visual impairments
-  **AUXILIARY CRUTCHES (ADJUSTABLE / VARIOUS SIZES)**  
To support mobility. For use by persons with physical impairments or temporary injuries which limit mobility
-  **ELBOW CRUTCHES**  
To support mobility. For use by persons with physical impairments or temporary injuries which limit mobility
-  **WALKING FRAME**  
To support mobility. For use by persons with physical impairments
-  **TOILET CHAIR**  
To support sanitation. For use by persons with physical impairments where accessible toilet facilities are not available. To be used in toilets or other private spaces with access to water and sanitary disposal
-  **BED PAN**  
To support sanitation. For persons with severe physical disabilities or injuries that mean they must stay lying down.
-  **URINAL**  
To support sanitation
-  **RECHARGEABLE BATTERIES (FOR HEARING AIDS) WITH SOLAR CHARGER**  
To support communication. To replace batteries to hearing aids
-  **RED AND WHITE SPRAY**  
To support mobility. Used to highlight evacuation paths, entrances, exits and steps.



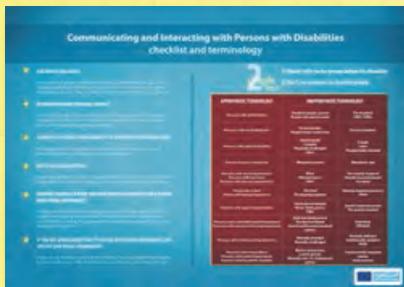


## Part Three: The Toolbox



# Toolbox Contents

The tools contained here are designed to complement the information in Parts One and Two of the Toolkit and support making CBDRM more inclusive. Below is a list of the tools with a brief introduction to them and their purpose.



## Tool 1. Communicating and interacting with persons with disabilities—a checklist

**Brief Description:** Poster with check-lists of appropriate terminology and interaction etiquette for referring to or talking with persons with disabilities.

**Target user and purpose:** This tool is aimed at helping project staff, particularly those who work with or come into contact with persons with disabilities to communicate effectively and appropriately.

### Tips for use

- » Use the checklist as the starting point for a discussion with staff on appropriate and respectful language about and with persons with disabilities
- » Post the checklist up on a wall in a visible place or keep it in a handy to check on when necessary.
- » Use it as reference material in trainings on disability.



## Tool 2. Making Information, Education and Communication (IEC) Materials Inclusive

**Brief Description:** Poster with key points to consider when designing inclusive IEC materials

**Target user and purpose:** This tool is for project and communication staff responsible for developing IEC materials. Its purpose is to provide some simple pointers that will make your materials disability inclusive.

### Tips for use

- » Pin up on a wall or keep somewhere handy and refer to when planning for or reviewing IEC materials.



### Tool 3. Making Search and Rescue Training Inclusive of Persons with Disabilities: A Guide for Trainers



**Brief Description:** Booklet addressing suitability of using common Search and Rescue techniques for persons with disabilities and notes on how to adapt them to be more appropriate

**Target user and purpose:** This tool is primarily aimed at Search and Rescue Training Providers to help them to adapt their training to be inclusive of persons with disabilities. Its purpose is to supplement existing training materials with information necessary to be more sensitive to persons with disabilities.

#### Tips for use

- » Share this tool with the identified training provider and discuss how Task Force training can be adapted accordingly
- » Use the tool to cross-check training materials on search and rescue and identify where additional guidance regarding inclusion of persons with disabilities can be included or

### Tool 4. Guidelines for Physical Accessibility for Shelters



**Brief Description:** Illustrated booklet introducing basic principles and specifications for designing an accessible shelter or community building

**Target user and purpose:** This booklet is aimed at project staff, engineers or architects as a reference for designing accessible buildings. Its purpose is to draw attention to the key aspects of design that need to be considered when making a building accessible and provide specifications for these.

#### Tips for use

- » Provide the leaflet as a reference to architects or engineers designing shelters or other community buildings in projects
- » Refer the leaflet when reviewing technical plans to check that accessibility has been addressed
- » Use features identified in the leaflet to compare with existing buildings to ascertain level of accessibility and opportunities for improvement

### Tool 5. Household Preparedness Pocket Guide for Field Staff



**Brief Description:** A pocket guide containing points for discussion and actions to take with vulnerable households to strengthen preparedness

**Target user and purpose:** Targeted at field staff this notebook covers the key issues relating to disaster preparedness that should be addressed with members of vulnerable households. Its purpose is to help discussions between staff and community members be systematic, participative and inclusive of all household members.

#### Tips for use

- » Translate into the local language and encourage field staff to use checklist to keep track of issues that have been addressed through group or individual discussions with households
- » Use as a reference for developing training or IEC materials on the theme of household preparedness
- » Use to help establish benchmarks for household knowledge and practices for monitoring purposes



## **Disability Inclusive Community Based Disaster Risk Management**

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This practical guide has been designed for use by disaster risk management practitioners and policy makers who wish to understand more about how to make community based disaster risk management (CBDRM) inclusive of persons with disabilities.

Its content is based on practices developed through Handicap International's work in Bangladesh, India and Nepal since 2004, as well as more recent learning from Sri Lanka and Afghanistan. It combines content from pre-existing, well-tested toolkits from each of these countries to create an up-to-date guide that reflects learning from across the region.

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