Training Module

Disability Inclusive Disaster Risk Management

GUJARAT INSTITUTE OF DISASTER MANAGEMENT

BUILDING RESILIENCE

Training Module

Disability Inclusive Disaster Risk Management

Gujaraat Institue of Disaster Management
Gandhinagar

Training Module on
Disability Inclusive Disaster Risk Management

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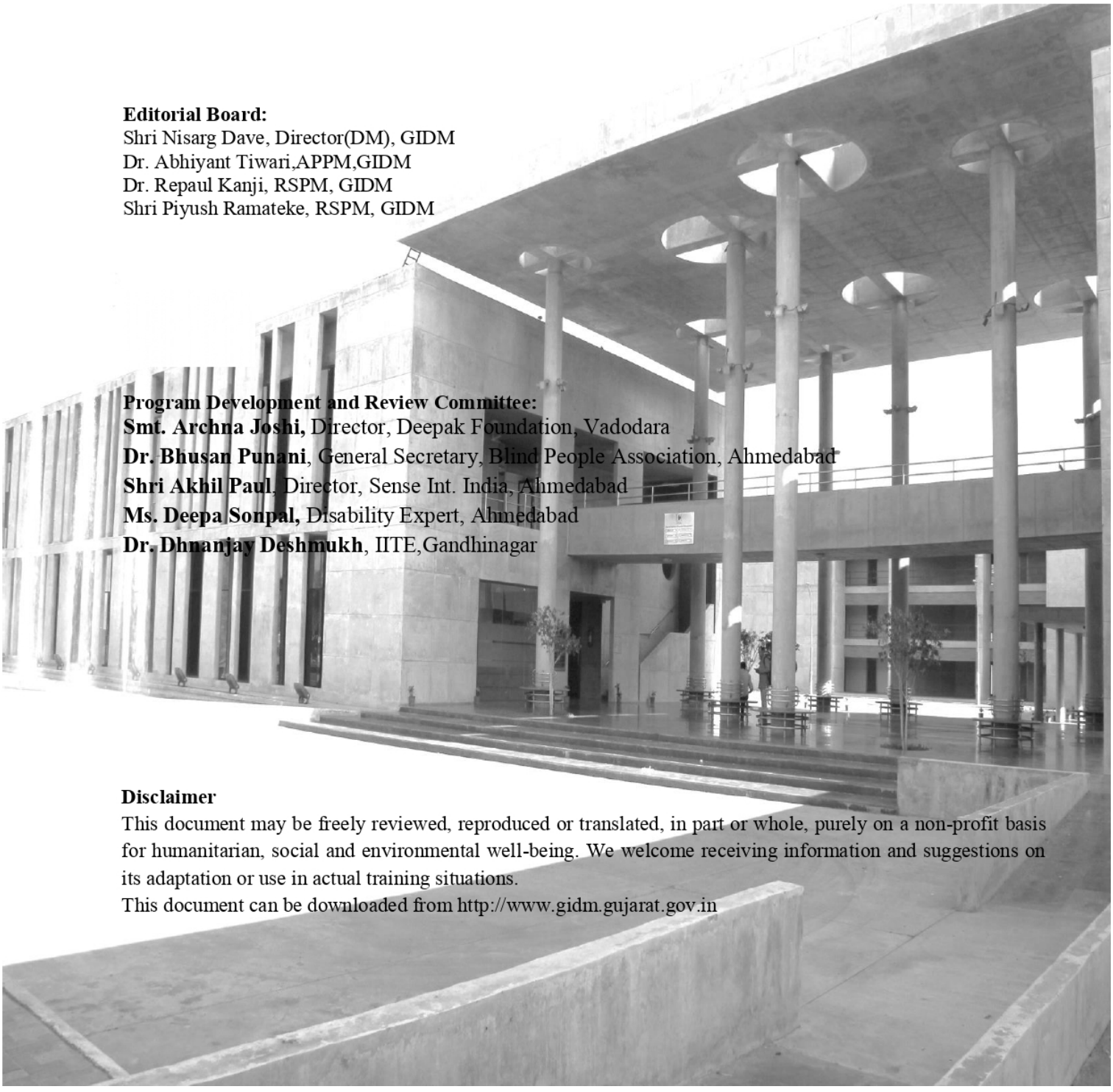


Message

We are all aware that people with disability are more adversely impacted than the general population because their condition exposes them to various additional risks. Further, they rely on different levels and types of function-based support every day. Access to these supports can be compromised during and after a disaster. The capacity of people with disability, increases their risk and decelerate their recovery. Accordingly there is a need for conscious attention and concerted efforts for improved participation of Persons with Disabilities (PwDs).

Considering the same, this training module is developed to raise awareness about Disability inclusive Disaster Risk Reduction (DiDRR) as a cross-sector responsibility and enabling inclusive community engagement to ensure active participation of people with disability.

I am happy to acknowledge the support and co-operation extended by Shri B.G. Nainwale, Dy Commissioner of Disability, G.N. Nachiya, Director, Social Defense, Dr. Bhusan Punani General Secretary, BPA, Ahmedabad, Shri Akhil Paul, Director Sense Int. India, Ahmedabad, Dr. Archana Joshi, Director, Deepak foundation, Vadodara, Dr. Dhnanjay Deshmukh, Asst. Prof. IITE, Gnr, Ms. Deepa Sonpal & Ms. Neeta Panchal experts on disability issues, for their contribution in drafting/patiently reading the various drafts, and offering constructive criticism, guidance and suggestions.

The efforts made by GIDM team especially, Dr. Sandeep Pandey for coming up with this training module and Dr. Shilpa Boricha for designing the module are highly appreciated. I hope this module will benefit the all stakeholders immensely. Further, I am sure concerted efforts in this direction would help in building and creating a culture of DiDRR which in turn would lead to a resilient society and nation.

September, 2022
Gandhinagar

[P.K. Taneja]
Director General

Abbreviations

CRPD	Convention on the Rights of Persons with Disabilities
DiDRM	Disability-Inclusive Disaster Risk Management
DPOs	Disabled People's Organizations
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
EWS	Early Warning System
ICT	Information and Communication Technology
INGO	International Non-Governmental Organization
MHA	Ministry of Home Affairs
NDMA	National Disaster Management Authority
NGO	Non-Government Organization
RPWDA	Rights of Persons with Disabilities Act
SDMA	State Disaster Management Authority
SDFRR	Sendai Framework for Disaster Risk Reduction
SDG	Sustainable Development Goals
SER	Search, Rescue, and Evacuation
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNDP	United Nations Development Program
UNDRR	United Nations office for DRR

Content

A. About the Training Module:

The training module Disability Inclusive DRM focuses on various aspects of Disability Inclusive Disaster Risk Management. Considering the types of disability and their associated dispropotionated risks; it is pertinent to cater proper knowledge, skill sets, well-trained human resources, and most important co-ordination among various departments/sectors/NGOs.

This training module lays the concept & understanding of disaster risk management and how disability Inclusion is possible and in what ways., the said process involved the infrastructure/human resource development and overall stakeholder capacity building. In residential training mode, trainees will be oriented towards the major facets of disability inclusions in DRM.

1. Who shall use the Training Module?

Social Security Officer, Planning Officer, Program Officer, Inspector, CRC Coordinators. Medical Officer, District Coordinator, Class Teacher of Sarva Sikhsha Abhiyan, and NGO representatives. Officers from all Dept. who are directly and indirectly involved in preparing a disaster management plan, and all the people seeking knowledge on disability inclusion.

2. How to use the Training Module?

The module has been prepared in a self-study format to enable the readers for a step-by-step process of learning on disability inclusion in DRM. The first chapter provides insights about disaster risk management and hence makes the participants aware about the basics of DRM, DM Cycle, various terminologies used in DRM, International-National Frameworks, and National-State Level Disaster Management Plans relevant to the subject.

The chapters thereafter, explain the participants about the significance of Disability Inclusive DRM, the course of action required, and the capacity development needs. The module design gives the reader/trainer an overview of the entire process, including the aim and objectives of training, target participants' profile, session design, methodology, time allocation, training aids, etc. The module retains a degree of flexibility in the sense that the trainer can innovate on the methodology or activities according to the profile and needs of participants.

3. Trainers' Guide:

The training module has been designed keeping a participatory framework in mind. The trainer may consider the following guidelines to make the program interactive, comprehensive and interesting so that inputs are remembered by trainees after the conclusion of the program:

- After finalizing the participants' list, write a welcome note to the prospective participants about the location of the institute, how to reach the venue, the reporting time for training, prevailing either and type of clothing recommended and welcome to the institute;
- The participants should be asked to fill out an online registration form with details of name, address, contact numbers, etc;
- While they wait for the program to begin, an introductory AVF about the institute/ organization can be shown to give them an idea of the institution they are training in;
- The participants' list with contact details should be circulated after the commencement of the training for any corrections before finalizing it;
- An ice-breaker session that involves all participants should be organized to initiate interaction;
- Energizers, especially in the post-lunch session should be organized (not more than 5-10 min duration) every day;
- As far as possible, change the groups for group work every day to ensure better peer-to-peer interaction and sharing.

B. Training Module Design Brief:

1. Context/ Background:

India has been traditionally vulnerable to natural as well as man-made hazards on account of its unique geo-climatic and socio-economic conditions. Floods, Droughts, Cyclones, Earthquakes and Tsunamis, Climate-induced Extreme events, Industrial-Chemical-Biological emergencies have been recurrent phenomena. About 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares are prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought. In the decade 1990-2000, an average of about 4344 people lost their lives and about 30 million people were affected by disasters every year. (Source: https://www.in.undp.org), and the loss in terms of private, community, and public assets has been astronomical.

Disabled persons suffer disproportionately during disasters. Disasters not only create impairment, but they also further discrimination against already disabled people, compromising the determinants of their health and creating conditions for the worsening of their overall health and well-being. They perpetuate a cycle of poverty and isolation that is heightened during disasters.

Understanding these issues is tricky as there is inadequate documentation to improving the health and well-being of people with disabilities, in general, and during disasters in particular. This Training module would be helpful to understand the same issue.

The module is a reference and guidance for officers of Social Justice and Empowerment Department, Health & Family Welfare Dept., and other aligned Govt. Departments, NGOs working in the field of disability across the state. The knowledge, expertise, and practices explained in this module will provide useful guidance in understanding the basics of DRM, related skills and shall also help in building the capacity of the Social Justice and Empowerment department officers, NGOs officials, Health & Family Welfare Dept., all Govt. Departments, NGOs working in the field of disability across the state w.r.f. Disability Inclusive DRM.

This module has been developed jointly by GIDM and experts having experience in the field of disability inclusion i.e. IITE, CRCs, PDRC members by compiling, documenting, and providing information on strategies, policies and best practices related to DRM for effective disability inclusions. The module also discusses the existing challenges and gaps for undertaking research and development activities. The module comprises of six technical sessions.

2 Entry Behavior:

Level of participants: In-service officers, in senior and middle-level positions, NGOs representatives, District Co-ordinators (SSA) and CRC members and all other departments officers involved in DRM plan preparation and updation.

Age Group: Less than 55 years

Educational Qualification: Graduation, preferably with professional qualifications and/or experience

Disaster Experience: Desirable

3 Key Constraints:

Disabilities are treated as ignominy; and disaster risk management as a business of specialized person/department, while both have a practicing need; people in general aware of the associated needs but systematic and co-practicing in always constraints.

4 Objective of the Program:

This training aims to identify existing knowledge about DRM, Disabilities, Inclusions skills gaps, etc, to lay the ground for the long term capacity development plan, in the context of Gujarat State.

Following specific objectives will be pursued -

- ***Identification of stakeholders*** for Disability Inclusive DRM with their respective roles at policy and planning, supervisory/middle and operational level;
- ***Identification of the key issues*** related to Disability Inclusion in the State;
- ***Analysis of the institutional set up*** for DRM within the State - the roles and functions of stakeholders at various levels and look at the required competencies for each (as per the Disaster Management Act 2005, National/International Guidelines, as applicable for Indian Context);
- ***Identification of gaps*** *in terms of knowledg*e, skills, and aptitude, and needs of key sectors for Disability Inclusion in DRM sector;
- Provision of recommendations on ***how to address the capacity gaps*** (human, financial, and others) that will inform the preparation of a Capacity Development Plan in the State.

5 Learning Objectives:

At the end of the training, participants will be able to:

- Understand the Disaster Management Cycle with emphasis on Disaster Risk Management;
- Understand the significance of DRM for and importance of Disability Inclusion;
- Understand the steps involved/course of action in Inclusions.

6 Methodology:

The training will be conducted in an interactive mode with a judicious (need to specify at this level) mixture of lectures, discussions, demonstrations, experience sharing for understanding the important issues on the subject.

7 Teaching Aids:

Training will have to be conducted with the help of the following:

- Compendium of background reading materials;
- Handouts of presentations or supportive reading material;
- Scenarios for exercises;
- Information/Data Sharing: The advance material to be given at the time of closure of the program which includes PowerPoint presentations, group exercises, photographs, contact numbers of trainers, and co-participants for subsequent updation and networking.

8 Training Materials and Equipment Required:

The training is designed to be classroom-based, with discussions/ group activities/ audio-visuals/ presentations; requiring classroom teaching aids *viz.* Computers, LCD projectors, flip charts, markers, etc.

9 Seating Arrangements:

The seating arrangements should preferably be four or five circular tables to facilitate group work and allow the trainer to move around the class for interaction.

10 Medium of Instruction:

The medium of instruction will be English, Hindi, and Gujarati.

11 Trainers/ Facilitators/ Resource Persons Required:

Disability inclusion in DRM is a multi-disciplinary subject, which requires resource person/experts from Disaster Risk Management, Disabled Person's Organization (DPOs) experts, Social Justice and Empowerment Department Experts, Health and Family Welfare Dept., NGOs and other independent charity actors.

12. Expected Outcome:

Trainees will be acquainted about:

- Basics of DRM and Terminologies used in DRM;
- International, National and State Frameworks for DRR such as SFDRR, SDGs, CoP21, PM 10 Point Agenda;
- Role of officers of Social Justice and Empowerment Dept., NGOs, DPOs, Health & Family Welfare Dept., CRCs at each stage of disabled person inclusion in Disaster Management Cycle.
- Skills related to planning and implementation of capacity development for Disability Inclusion of DRM at state and local levels.

13. Evaluation & Validation

The course will be evaluated in terms of summing up the day's inputs by the coordinator, discussing issues raised by participants, and connecting the knowledge inputs with participants' own experiences. At the end of the course, a formal evaluation is carried out by participants based on content, objectives, utility, and facilities provided in the program.

According to the feedback and coordinator's impressions, future programs wiil be designed and conducted.

Trainers will also receive important notes on key issues related to training from the participants based on their personal field-level experiences.

These notes will be considered to be incorporated in future training for continuous experience-based improvements in the program.

Technical Session 1: Introduction, Overview and Perspectives

The need for the session:

The participant should have a basic idea of disaster risks; one must have a very clear idea of its constituent parameters, i.e. Hazard, Vulnerability, Exposure, and Coping Capacity.

A hazard is not a disaster and yet we use these terms interchangeably very often and this is where we commit the first mistake.

We, in general, tend to link everything with a buzzword, and the current catch-phrase being climate change, there is a trend of relating every phenomenon to climate change, global warming, and such apocalyptic events.

We simply ignore the science behind the genesis of hazards and go on to link it with bigger events. This is where we commit the second mistake. Ignorance is off-course bliss but in disaster risk reduction and disaster preparedness, ignorance is a bane. This is where this unit comes in to bridge the gap.

Units of the session:

Unit1: Understanding Disaster Risk

Unit 2: Disability and DRR Approach

Objectives of the session:

The primary objectives of this unit would be to:

- Explain to the participants what Hazard, Vulnerability, Exposure, and Coping Capacity is exemplifying how the scope of managing risks is broadening.

Duration :

75 minutes (45 + 30) minutes for each technical session and 15 minutes spill over time from each session.

Methodology:

The methodology of this session is no different from the overall methodology of the training program. Every lesson or every unit must start with a question to intrigue the participants and foster discussion. Building upon such discussions, the trainer must start his presentation or lecture.

Training aids:

Power-point presentation, Flip-charts, Markers, etc.

Learning Unit 1.1: Understanding Disaster Risk

Note for the trainer

Hazard is to be explained ***without using any standard definitions***. Examples are to be given from real-life so that participants can relate to it.

The flow of the session:

The trainer may begin by narrating a small story or incident and asking the participant to identify the hazard in it.

"A Deaf lady just came out of her house for office work around 9:45 AM on 20th March, 2020, Monday morning. Road is full of traffic, everyone rushing, she approached zebra crossing, waiting for the signal to cross the road. After a while, she got a green signal and on her few steps she senses some speedy motor vehicle. She stopped, instantly she fell on the road with fractured leg".

The trainer will now have to instigate the participants to share their views on what the hazard in this particular example is. Interestingly enough, this particular example has two hazards; while one is evident the other one may not be so evident. A car driver, which moved car without a signal is itself a hazard and may be easily identifiable while the fact that the motor car just strikes on the few steps of the leady on zebra crossing is also a hazard. In fact, to understand the later proposition the trainer might have to explain that this would have been a hazard even if it was just a few steps out on the right signal there on the road or due to some reason motorists crossed the signal and stroke to the leady.

Similar examples can be discussed to understand that hazard is anything that may have an adverse effect and the effects can be an injury, health impact, damage to property, disruptions of any form, and even loss of life.

Hazard should also be understood in terms of the probability of happening. In light of the above

example, the crossing signal is life-threatening, but its **probability of actually being a cause of an accident is a hazard**. To understand this, one must consider a similar scenario in a empty road, although it is still a hazard, it is not contributing to anything dangerous. This perception of hazard is more meaningful in the context of disaster risk management and disaster risk reduction.

At the end of this lesson, the participants must have a clear idea of the two ways hazard is perceived; one, the causal agent of something nasty, and two, the probability of being the causal agent of something nasty.

The lesson should be concluded with a debate on whether the car driver rushes driving at the last moment of the signal is a hazard or not?, the advanced steps in hassle is a source of hazard or not?

Types of Hazard:

UNDRR has published on comprehensive Document on hazards in the name of Hazard report.
In this document clusters of hazards notified as under:

1. Meteorological and hydrological hazards
2. Extraterrestrial hazards
3. Geo-hazards
4. Environmental hazards
5. Chemical hazards
6. Biological hazards
7. Technological hazards
8. Societal hazards

To end this lesson, the trainer may urge the participants/groups to take a piece of paper and write down the hazards, not necessarily the ones mentioned in the national plan but any sort of hazard, that is predominant in their area and correctly classify it.

Case in point: Gujarat

Earthquake: As per Indian Seismic Zone Map, the Gujarat region lies in three zones- Zone III, IV, and V. Kachchh region (about 300km x 300km) lies in zone V where earthquakes of magnitude 8 can be expected. A belt of about 60-70km width around this zone covering areas of North Saurashtra and areas bordering Eastern part of Kachchh lie in zone IV where intensity VIII can be expected mainly due to earthquakes in Kachchh and some local earthquakes along North Kathiawar Fault in

Northern Saurashtra. The rest of Gujarat lies in zone III where intensity VII earthquakes can be expected due to moderate local earthquakes or strong Kachchh earthquakes.

Drought: Gujarat is one of the chronic drought-prone states of India, with an average annual rainfall of about 816 mm with more than half of the Talukas of Gujarat receiving rainfall within the range of 200-400 mm. Substantial portions of the State are arid to semiarid. With large parts of North Gujarat and Saurashtra having no source of alternate irrigation, groundwater exploitation is leading to increased threats of droughts. Falling water tables have added stress on crops and water supplies.

Cyclone: Gujarat falls in the region of a tropical cyclone. With the longest coastline of 1600 km in the country, it is highly vulnerable to a cyclone and its associated hazards such as floods, storm surges, etc. Two cyclonic storm seasons are experienced in Gujarat: May to June (advancing southwest monsoon) and September to November (retreating monsoon).

Flood*:* The majority of the area of Gujarat is flood-prone, irrespective of the size of the catchment. The flood risk in Saurashtra is lower than that of the South Gujarat plains. The relatively flat plains in the lower basic areas with hilly catchments in upper parts of South Gujarat accentuate flood risks. Few villages in North Gujarat are flood-prone too.

Tsunami: Gujarat is prone to tsunami risk due to its long coastline and probability of occurrence of near and offshore submarine earthquakes in the Arabian Sea. Makran Sub-duction Zone (MSZ) - South West of Karach is an active fault area that may cause a high magnitude earthquake under the sea leading to a tsunami.

Fire, Industrial & Chemical, Accidents, Heatwave, Epidemic, Stampede, etc. are also frequent in Gujarat.

Epidemic: An epidemic disease is one "affecting many persons at the same time, and spreading from person to person in a locality where the disease is not permanently prevalent." Gujarat government has issued a notification declaring *coronavirus as an epidemic disease* under the Indian Epidemic Act, 1897. The notification called Gujarat Epidemic Diseases, COVID-19 Regulations, 2020 will remain in force for one year from the date of notification.

Vulnerability:

To understand risk or disaster risk, one must have a very clear idea of its constituent parameters, which are hazard, vulnerability, exposure, and coping capacity. While coping capacity and vulnerability are intertwined and are complementary to each other, the other three parameters (hazard, vulnerability, and exposure) are primarily; what defines disaster risk. It is expected that a

fair amount of understanding of hazards would have been developed. Hazard is not a disaster in itself but a phenomenon or an event that may cause some damage and it is the vulnerability of the individual or community or the system in consideration that defines the risk a hazard pose. It is to be noted that the word system to be used hereafter can refer to an individual, a community, an administrative unit, a production house, or even a nation depending on the context.

The vulnerable word suggests an inability to do something or, at worst, helplessness. It has negative connotations. From a disability perspective, the term vulnerable draws similarities with the outdated charity model of disability. Using the term vulnerable for particular groups of people underestimates, or does not recognize, the contributions, or agency, of those people. Changing vulnerability to at-risk was an attempt to better acknowledge these contributions and to present a more positive image and understanding. In disability-inclusive DRR, the terms 'more at-risk' or 'highly at-risk' groups or individuals are increasingly preferred. Not vulnerable. SFDRR is the recognition of the contributions of persons with disabilities to DRR.

The trainer may begin by reminiscing the example cited in the first unit.

"A lady with low hearing has just come out of her house for office work around 9:45 AM on 20th March, 2020, Monday morning. Road is full of traffic, everyone rushing, she approached zebra crossing, waiting for the signal to cross the road. After a while, she got a green signal and on her few steps she senses some speedy motor sound. She stopped instantly she fell on the road with leg fractured".

The hazards in this example have already been discussed and now the trainer should probe the participants to state the vulnerabilities in the given scenario with a prior understanding that vulnerability is the potential of any event or phenomenon to cause damage. Similar examples can also be cited to involve the participants. The following questions can be posed by the trainer to instigate the participants:

a. Was the low vision a vulnerability?

b. Was the aggression/fast movement a vulnerability?

c. Depending on the experience, one can comment on the vulnerability?

The trainer should understand that each of these questions affects the vulnerability of the leady and each of these questions reflects parameters from different dimensions of vulnerability. Thus, it is the

responsibility of the trainer to steer the participants into asking how these above-mentioned facts are vulnerabilities.

The concept of vulnerability is a degree or extent of the impact is also to be illustrated here. To understand this, one must consider different simulations of the same example. If the leady had not shown hassle, would his vulnerability be lessened? Even if his leg broke down if there was a hospital nearby so that she could just approach to the hospital or be carried by someone passing by vehicle, would her vulnerability be lessened? These questions, targeted at the participants, would give them a feel that vulnerability has so many aspects.

At the 6th Asian Ministerial Conference on DRR (AMCDRR) hosted by the government of Thailand, 2014 a step forward was made concerning the term vulnerability. The outcome document, the Bangkok Declaration, like the Yogyakarta Declaration before it, included reference to 'vulnerable groups', including persons with disabilities. The difference in the Bangkok Declaration was the word vulnerable was not used in this context. Instead, the term 'at-risk' groups were used. 1.

At the end of this lesson, the participants must have a clear idea of how the vulnerability is the extent of damage an event is caused and how broad its scope is. The lesson should be concluded with a debate on whether the low hearing/ disability or hassle made is a vulnerability or not? This question should spark a debate.

Exposure:

"As in the above example the walking through zebra crossing was exposure and all the persons came in contact of the leady were exposed"

Exposure is, perhaps, the most important parameter; when it comes to determining disaster risk. One needs to understand that hazard, which is an event or a phenomenon, will always be there and most of the time we can do very little to prevent it, but if we are exposed to it, it will surely impact us and then it is only our vulnerability which decides whether we would be severely, moderately or mildly impacted.

To start with, the scope of exposure is anything tangible that may be susceptible to the impact of a hazard. It can be human life, property, farms, production houses, etc.

This is what the basis of exposure is, however, one needs to delve into depths to understand the true bearings of exposure. When considering human life, one needs to consider the demographics of the

community or the area. Different age groups or different disabilities would have different levels of vulnerability to the hazard. Imagine a small town that has been set up by the coast just for the old and disabled people so that they can relax and enjoy their life after retirement. A cyclone hits this town. The loss would have been much lesser; had this town been filled with youngsters because the old-aged and disabled population is more vulnerable. This is how demographics change the scenario. Even if it had been a disabled's school or CRC filled with children, the exposure of the school would be much more devastating than an office being exposed as the disabled one and those who came for rehabilitation may not know how to act and react.

The trainer must be able to explain that exposure must account for the demographic divisions because vulnerability is ultimately decided by the demographics. The next step would be to explain that it is the exposure that contributes to the calculation of losses.

If a farm is exposed to a hazard like a flood, then the per hectare yield of the farm multiplied by the area of the farm exposed would be the resultant loss. Similarly, if an industry is exposed, then the worth of all of its processes, would be realized as the loss. However unethical it is, if a value can be assigned to human life, the numerical value of the population exposed to a hazard multiplied by the value of life would amount to the loss.

The last statement is indeed disturbing and the trainer must take care of whether to go with that or not. The basic idea is to explain that it is the exposure that contributes toward the calculation of losses.

Coping Capacity:

Coping capacity is ideally the capacity of a system (the connotation of the system is the same as used during the illustration of vulnerability) to deal with a given risk. The system can be an individual, can be a community, or even an organization, institute, or authority for that matter. It is obvious that when the capacity of the system is not enough to handle the risk, the consequences of the event are grave.

Coping capacity can be understood under similar heads as illustrated for vulnerability; i.e. physical, social, and institutional. The ideology of vulnerability is counter-intuitive. If a particular system is vulnerable concerning a particular parameter, the coping capacity of the system regarding that parameter is low. For example, while talking about structural vulnerability within the physical dimension of vulnerability, if a building in zone 5 is not built according to the relevant building code

and standards, structural vulnerability is prominent, and hence coping capacity of the system is also questionable. However, if an important building in zone 4 is built according to the standards and regulations of zone 5, structural vulnerability is negligible and it can be said that the building can cope with an earthquake of a certain intensity of an earthquake. Not only for the physical dimension, but the same analogies can also be drawn in other dimensions as well.

If a flood-prone community with agriculture as its main source of income has invested in crop-insurance or the residents have enrolled in some sort of micro-insurance scheme, the financial burden on the community after an event would be very less. Thus, it can be said that the *community has the financial capacity to cope with the economic fallout of the event*, i.e., flood in this case.

For the above example leady with impaired hearing can have knowledge experience, risk transfer mechanism like insurance, medical-claim policy or she may be aware of the possible COVID-19 infection chances and had shared that with the caretakers, doctors and all those who had helped, that may be in the form of coping capacity.

The trainer can carry forward the session by giving several other examples to the participants to clarify the concept of coping capacity and its inverse relationship with vulnerability. The trainer can even perform a verbal exercise with the participants; the trainer can point out a very particular aspect in one of the dimensions of vulnerability and ask the participants to illustrate an example of how that aspect can contribute to vulnerability and how taking care of that aspect can increase the capacity. For example, the trainer can ask the participants to mention one aspect of the socio-cultural dimension, the lack of which contributes to vulnerability, and addressing it leads to improved capacity.

When the impending risk is beyond the coping capacity of the system, the consequences are grave. When the risk exceeds the coping capacity, the event is regarded as a disaster provided there are human, material, economic and environmental losses, and impacts.

Thus, to put it mathematically for understanding, a disaster risk will remain a risk if the coping capacity of the system under consideration is substantially high, but, if the coping capacity is not up to the mark, the disaster risk would eventually become a disaster or a massacre.

Understanding of disaster is often left to perception. One may even identify a small event as a disaster like fire in an apartment; such an event may be a disaster for the affected family but on a larger perspective, it cannot be termed as a disaster. Thus, it would not be incorrect to suggest that the understanding of disaster is dependent on the scope of the system under consideration. Usually, the scope of consideration is not less than a community.

Figure 1: Disaster Management Cycle

Disaster Management to Risk Management:

Now that the participants have a clear understanding of the disaster, they are to be explained what disaster management is all about. This is to be done using the disaster management cycle.

The trainer must make sure that he/she explains the disaster management cycle in the most intuitive manner possible; the participants are to be told that disaster management, however technical it might sound, is very logical and rational. The different phases of the cycle logically follow each other and the science can be found only within these phases and not between them.

The participants must also be given a flavor of how they can manage disasters at their level, preferably at the family level or community level. This is to be done by introducing the participants to the bow-tie analysis tool. Once the participants feel empowered, they must be enlightened about the paradigm shift that is occurring;

from disaster management to disaster risk management which circumscribes disaster risk reduction.The trainer may begin by introducing the participants to the disaster management cycle. One may find different versions of the disaster management cycle from different sources, but it is the responsibility of the trainer to explain to the participants that the core rationale behind all such versions is the same and is very rational for one to follow.

Phase I: Prevention and Mitigation:

If it is known that a system (community, area, village, etc.) is prone to or likely to be affected by a hazard or if it is established that there exists a risk, the first and the foremost logical thing to do would be to prevent the occurrence, if possible, or to mitigate the risk. This is what constitutes the first phase. Risk's of hazards like an earthquake cannot be prevented but they can be mitigated by ensuring physical (structural and non-structural), social and institutional vulnerabilities are addressed and the system is endowed with adequate capacity to deal with the risk. Fire risks can generally be prevented by taking care of points of failures (vulnerabilities); for example, in an organization with a risk of fire hazard, fire alarms are to be installed, fire extinguishers are to be placed at regular intervals, staffs are to be trained on how to use extinguishers and what to do in case the alarm rings, etc. If a fire occurs, due to any random reason, even with such steps of prevention, the magnitude of the loss will be reduced many folds. Thus, the idea here is to ensure prevention or mitigation of the impact of loss in any terms.

The trainer can then go about giving examples of what steps are generally taken in this phase. Care is to be taken that such examples are primarily from Gujarat so that the participants can easily relate to them. Examples can be cited in the Heat-wave Action Plan prepared by the Ahmedabad Municipal Corporation every year. The National Cyclone Risk Mitigation Project can also be explained by the trainer in this regard. The prevention and mitigation part of all the state and national level plans can serve as a good resource material for this phase as well as this entire section.

Phase II: Preparedness:

Once all steps have been taken to prevent or mitigate the impact of losses, the second phase is all about readiness; to put it in terms of management and administration, this phase is about the preparedness of the system such that its leanness and agility is not compromised during the event.

The trainer can then go about giving examples of what steps are generally taken in this phase. Care is to be taken that such examples are primarily from Gujarat so that the participants can easily relate to them. For example, the Gujarat School Safety Week Initiative is one of the most well-known

exercises carried out in this regard. Preparation of school disaster management plans, carrying out mock drills based on that, etc. are various steps that are taken to prepare the school community to respond to any unforeseen event. Similarly, training programs that are conducted by state and national institutes to build the capacity of different stakeholders are a crucial aspect of preparedness.

The trainer can use this opportunity to emphasize the role of the Gujarat Institute of Disaster Management in preparedness through capacity-building initiatives.

Phase III: Response:

After the first two phases, it is expected that the community or the system (speaking, generally), is ready to respond to any event. Of course, no one can predict the exact unfolding of events but then the first two phases of the cycle are ***all about preparing the system to respond to an event with the capacity*** to adjust to anything that exceeds the preparation. Everything that the system has been trained for is put to use in this phase and the failure to do so will make the effort put in the previous phases futile.

The trainer can give examples of prepared responses and un-prepared responses as seen in Gujarat over the years. For example, the response in the 2001 earthquake can be compared to the response of any subsequent exposed harads. Response to floods as seen in Sabarkantha can also be exemplified here. The trainer must also emphasize the fact that this phase constitutes three prime activities; search, rescue and relief. Even these sub-phases are intuitive in their discourse; one must search for a victim and then rescue him and finally, transfer him to a haven/shelter/relief camp, where he will be treated.

Phase IV: Recovery:

After the immediate response to the event, what primarily becomes the objective of all and every operation is to reinstate normalcy. To put it in terms of management and administration again, the aim is to ensure business process continuity; the business here may refer to the day-to-day working of a community (district/state) and even the day-to-day life of an individual or a family. The core idea is however not just reinstating normalcy; it is more than that; the idea is to build back from the ruins to a system that would have the capacity to deal in a better way. Examples can be cited from the recovery projects undertaken after the Bhuj Earthquake of 2001.

Build Back Better:

The trainer must emphasize the fact that restoring normalcy, i.e., recovery is not the end. It is just the beginning of a new cycle. In the recovery phase, it is essential to find out the causalities of the disaster, the points of failure, or simply put, the vulnerabilities and ensure that while recovering or 'building back', efforts are put to 'build back better. The basis of this lies in the fact that if normalcy is restored or the system is recovered to the state; it was before the disaster hit, the vulnerabilities will also be a part of it and that may result in similar consequences.

Learning Unit 1.2: Disability and DRR Approach

The International Decade for Natural Disaster Reduction:

The year 1990 marked the beginning of the United Nations (UN) International Decade for Natural Disaster Reduction. The International Decade aimed to raise awareness of the need for a more preventative approach to disaster risk. A key objective was to gain political commitment from UN member states for DRR as a viable and more holistic alternative to the response. the International Decade was the first global attempt to promote the understanding that disasters can be avoided.

The Yokohama Strategy-1994:

At the mid-point of the International Decade, the first World Conference on Natural Disasters was held. The conference was hosted by the government of Japan in Yokohama, 1994. The World Conference set out to review progress under the International Decade. The conference also aimed to promote common approaches to DRR. These included the importance of collaboration and partnerships; further generating political will; and the need to mobilize resources to reduce disaster risk.

Disability in the Yokohama Strategy:

The Yokohama Strategy does not make specific references to persons with disabilities. Women receive particular mention as do 'socially disadvantaged groups' (Para. II.11.Q). The Yokohama Strategy recognizes that 'in all countries, the poor and socially disadvantaged groups suffer most from natural hazards and are least equipped to cope with them.' Further, the Yokohama Strategy refers to a 'whole community approach (Para. I.7). This last point is echoed within the SFDRR.

The Hyogo Framework for Action, 2005:

The Hyogo Framework for Action 2005 to 2015: Building the Resilience of Nations and Communities to Disasters (HFA) was the second major international DRR framework. The HFA was the result of the 2nd World Conference on DRR held in Kobe, Hyogo, Japan, 2005. The priority of the HFA was to ensure that DRR was institutionalized at national and local levels.

Disability in the HFA:

In terms of considering who may be at increased risk, the HFA was more specific than the Yokohama Strategy. The HFA includes references to women; children and youth; and older persons. However, persons with disabilities receive only passing mention in one paragraph (Para. B.4.ii.g). This reference concerns the provision of social safety nets (for the 'disabled') as a mechanism for reducing underlying risk factors under Priority for Action 4. While this HFA reference is notable, it suffers from the suggestion that persons with disabilities are recipients of, rather than contributors to, DRR.

The Sendai Framework for DRR:

2015 was a landmark year for international development with three major new agreements. The first of these was the 3rd international DRR framework, the Sendai Framework for Disaster Risk Reduction 2015- 2030 (SFDRR). The SFDRR was finalized at the 3rd World Conference on DRR hosted by the government of Japan in Sendai.

Disability in the SFDRR:

The SFDRR is the first international DRR agreement to make significant reference to disability. Coming before the 2030 Agenda and SDGs; we can also say the SFDRR is the first major international development agreement that aims to be disability-inclusive. As noted, the SFDRR takes a rights-based and whole-society approach. The SFDRR also promotes a people-centered approach. For the first time in an international DRR agreement, persons with disabilities are listed alongside other highly at-risk groups, such as women, children and youth, and older persons.

The SFDRR has five direct references to disability or persons with disabilities. However, it is not only that disability is mentioned. It is the way that disability is approached that sets the SFDRR apart.

This includes noting the importance of including a 'disability perspective in all [DRR] policies and practices' (III.19.d)) and 'empowering persons with disabilities to publicly lead' (IV.32).

Following the principles of universal design is emphasized both in general and in reconstruction following a disaster (IV.30.c). The need for accessible and comprehensible information is highlighted (III. 19.g).

The media are urged to provide information that is easy to understand and accessible (V.35.d). The need to collect data that is disaggregated by gender, age, and disability is also an SFDRR commitment (III.19.g).

The most significant achievement of the SFDRR in terms of disability inclusion is the inclusion of persons with disabilities as contributing stakeholders. The roles and responsibilities of persons with disabilities under the SFDRR are as follows:

Persons with disabilities and their organizations are critical in the assessment of disaster risk and in designing and implementing plans tailored to specific requirements, taking into consideration, inter alia, the principles of universal design. ***Para.V.36.iii***

States Parties shall take, following their obligations under international law, including international humanitarian law and international human rights law, all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies, and the occurrence of natural disasters. ***Article 11***

Disability and the road to Sendai:

At the mid-point of the HFA several disability-inclusive DRR initiatives started to emerge in the Asia-Pacific region. However, progress was limited at the international policy level. While there had been individual efforts to promote disability inclusion in DRR, there was no collective voice. This presented a challenge for decision-makers who needed to be sure of clearer and broader representation. In response, the Disability inclusive DRR Network (DiDRRN) was formed in 2012. (www.didrrn.net).. DiDRRN recognized that there was a very limited engagement between the DRR and disability communities. As such, DiDRRN members included DRR actors, disability-focused actors, and, importantly, DPO networks. This ensured DiDRRN could draw on both DRR and disability expertise, partners' direct experience of implementing disability-inclusive DRR, and the all-important DPO representation.

DiDRRN was launched, in partnership with the UN Office for Disaster Risk Reduction at the 5th Asian Ministerial Conference on DRR (AMCDRR). [2]

The 5th AMCDRR was hosted by the government of Indonesia in the city of Yogyakarta, 2012. Alongside DiDRRN members, the conference was the first of its kind to have significant participation by persons with disabilities.

The outcome of the conference was the Yogyakarta Declaration. This was the first international DRR agreement to significantly address disability. Momentum continued to the 3rd Global Platform on DRR in Geneva, 2013 with the participation of DiDRRN, the International Disability Alliance (IDA), the Assistive Technology Development Organization (ATDO), and the Nippon Foundation. Later the same year, ISDR dedicated the annual International Day for Disaster Reduction (October 13th) to disability.

Preparations for the day included the first global survey of the impacts of disasters on persons with disabilities conducted online by ISDR. 3

At the 6th AMCDRR, 2014 hosted by the government of Thailand in Bangkok disability remained high on the agenda.

In the run-up to the 3rd World Conference awareness of the importance of disability, inclusion increased and participation by DPOs grew. This resulted in the establishment of the Disability Caucus to represent disability stakeholders in preparations for, and at, the World Conference in Sendai. 4.

The key messages taken forward to the World Conference in Sendai and that were included in consultations and formal preparatory documents, such as the Asia Pacific HFA2 Input Document of the 6th AMCDRR, are summarized as follows:

- Persons with disabilities face disproportionate risk from disasters.
- Persons with disabilities, and their representative organizations, must actively participate in DRR policy consultations and decision making.
- Persons with disabilities have the expertise, and experiences, directly relating to the risk that is of- wider benefit to the communities and society in which they live.

- The importance of access and also universal design.
- DRR policy needs to be aligned with the CPRD post-2015.

The last point above deserves clarification. Reference to the CRPD emphasized the importance of a rights-based approach to DRR. However, it should be noted that the SFDRR is a voluntary inter-governmental agreement. In contrast, ratifying the CRPD requires governments to put in place appropriate legislation. From a legal, or rights-based, perspective the CRPD has considerably more weight than the SFDRR. For those DPOs concerned with advocacy, this may be useful to keep in mind alongside the cross-cutting nature of Article 11.

UNCRPD:

The Convention on the Rights of Persons with Disabilities is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities.

Article 11 of the Convention affirms that States Parties shall take, all necessary measures to ensure the protection and safety of persons with disabilities in situations of armed conflict, humanitarian emergencies and the occurrence of natural disaster.

RPWD Act 2016:

The RPWD Act, 2016 provides that "the appropriate Government shall ensure that the PWD enjoy the right to equality, life with dignity, and respect for his or her own integrity equally with others."

Under section 7(2) of the Act, any person or registered organization, who or which has reason to believe that an act of abuse, violence, or exploitation has been, is being or likely to be committed against any PWD and the Equal protection and safety in situations of risk, armed conflict, humanitarian emergencies, and natural disasters are to be provided to PWD.

Technical Session 2: Concept of Disabilities and Its Inclusion in DRM

Overview of Session:

Disaster Risk Management is the cumulative approach to reduce and manage the risk, an inclusive approach to DRR saves lives. Inclusion engenders community resilience and promotes equity and human rights but in reality, certain groups of people are often left out due to their inherent characteristics such as age, disability, gender, religion, and social status. These left-behinds have the best experience about the risks, and how to manage the risk.

In this session, the discussion would be focused on disabilities, their nuances that may be the potential for inclusion in disaster risk management. The disabled one is the master's knowledgiate about his risk and how to overcome it. The disabled are the core experienced to take the inclusion tips to understand the risk of the Priority-I of SFDRR and reduce the mortality rate.

Objectives:

By the end of the session, participants would be acquainted about:

1. What is a disability?
2. Understanding of the term 'inclusion' in DRM
3. Perception of Inclusion in DRM as a core working principle

Duration: 75 Min.

Suggested Methods:

Presentation, discussion, and interactive learning.

How to Conduct:

The trainer will ask the participants to divide into groups of 4-5 five persons. As disabilities are defined in RPWD Act,2016. One disability will be allotted to each group; for group exercise one selected/ allotted disability trainer will ask to identify the associated risk and how we can have better inclusion. The responses will be collected under four heads of inclusions discussed by the trainer. Each group will present the responses at the end of the session.

Learning Unit 2.1: Concept of Disability, Types and Models

What is Disability:

A disability is defined as a condition or function judged to be significantly impaired relative to the usual standard of an individual or group. The term is used to refer to individual functioning, including physical impairment, sensory impairment, cognitive impairment, intellectual impairment mental illness, and various types of chronic disease.

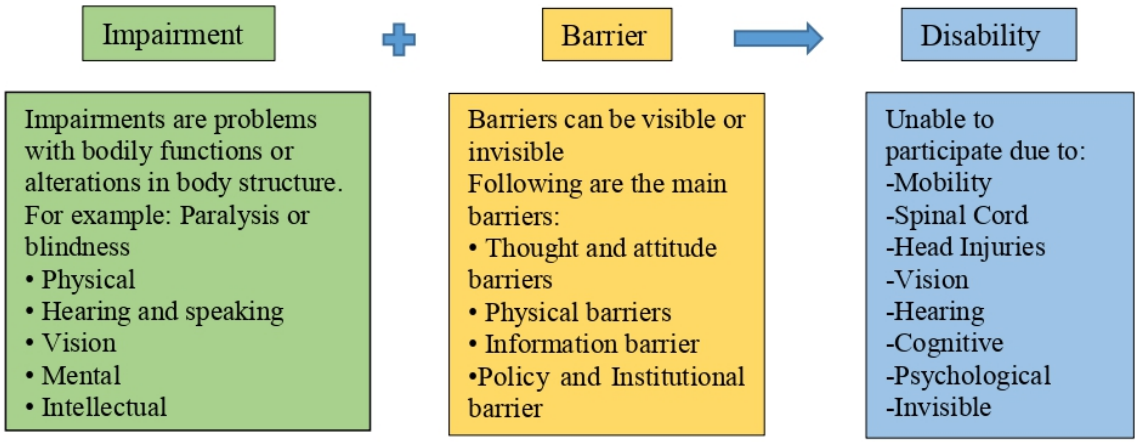
Definition:

"A person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others" (RPWD Act,2016)

Disability Indication and Types:

A person with long-term physical, mental, intellectual, or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others.

"Disability results from the interaction between people with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others." (UN Convention on the rights of persons with disabilities). (www.un.org/disabilities/convention/conventionfull.html).



There may be effects on organs or body parts, and there may be effects on a person's participation in areas of life. Correspondingly, three dimensions of disability are recognized:

1. Body structure and function (and impairment thereof)
2. Activity (and activity restrictions)
3. Participation (and participation restrictions)

Disability can be broken down into several broad sub-categories, which include the following 8 main types of disability.

- **Mobility/Physical:** (Upper limb(s) disability, Lower limb(s) disability, Manual dexterity, Disability in co-ordination with different organs of the body
- **Spinal Cord (SCI) :** ((SCI) can sometimes lead to lifelong disabilities. This kind of injury mostly occurs due to severe accidents. The injury can be either complete or incomplete. In an incomplete injury, the messages conveyed by the spinal cord is not completely lost. Whereas a complete injury results in a total dis-functioning of the sensory organs.)
- **Head Injuries (TBI):** A disability in the brain occurs due to a brain injury. The magnitude of the brain injury can range from mild, moderate, and severe. There are two types of brain injuries: A) Acquired Brain Injury (ABI), B) Traumatic Brain Injury (TBI) results in emotional dysfunction, and behavioral disturbance.
- **Vision:** These injuries can also result in some serious problems or diseases like blindness and ocular trauma, to name a few. Some of the common vision impairment includes scratched cornea, scratches on the sclera, diabetes-related eye conditions, dry eyes, and corneal graft.
- **Hearing:** People that are completely or partially deaf, (Deaf is the politically correct term for a person with hearing impairment). People who are partially deaf can often use hearing aids to assist their hearing. Deafness can be evident at birth or occur later in life from several biologic causes, for example Meningitis can damage the auditory nerve or the cochlea.
- **Cognitive/Learning Disability:** Cognitive Disabilities are a kind of impairment present in people who are suffering from dyslexia and various other learning difficulties and include speech disorders.
- **Psychological:** Disorders of mood or feeling states either short or long term. Mental Health Impairment is the term used to describe people who have experienced psychiatric problems or illness such as:

A)Personality Disorders - Defined as deeply inadequate patterns of behavior and thought of sufficient severity to cause significant impairment to day-to-day activities.

B)Schizophrenia: A mental disorder characterized by disturbances of thinking, mood, and behavior.

- **Invisible:** Invisible Disability, or hidden disability, is an umbrella term that captures a whole spectrum of hidden disabilities or challenges that are primarily neurological. Invisible disabilities, or hidden disabilities, are defined as disabilities that are not immediately apparent.

Types of Disability conditions included in the RPWD Act 2016:

1). Blindness, **2).** Low-vision, **3).** Leprosy Cured persons, **4).** Hearing Impairment, (deaf and hard of hearing), **5).** Locomotor Disability, **6).** Dwarfism, **7).** Intellectual Disability, **8).** Mental Illness, **9).** Autism Spectrum Disorder, **10).** Cerebral Palsy, **11).** Muscular Dystrophy, **12).** Chronic Neurological conditions, **13).** Specific Learning Disabilities, **14).** Multiple Sclerosis, **15).** Speech and Language disability, **16).** Thalassemia, **17).** Hemophilia, **18).** Sickle Cell disease, **19).** Multiple Disabilities including deaf-blindness, **20).** Acid Attack victim, **21).** Parkinson's disease.

The models of perception of disability:

Four main models characterize how we have thought and think about disability.

The Charity Model

The charity model reflects an outdated view that persons with disabilities need help. The idea was that persons with disabilities are, in effect, helpless. Therefore, persons without disabilities must provide relief from what was seen as suffering. The charity model did not recognize that persons with disabilities can and do take action.

The Medical Model

With improvements in our understanding of science and the human body around the 19th century, an alternative way of thinking about disability emerged.

As the name suggests, improvements in medicine and surgery gave rise to the thinking that disability could be cured or fixed. This links to the identification and classification of impairments (see Chapter 3). The idea is that impairments could be treated or cured through advancements in technology. As such, by focusing on the individual, a disability could be

cured. The relationship between a person with disabilities and their environment, and the barriers they face, was not a priority. The medical model remains important in health and medicine and to fully understand the full spectrum of disability.

The Social Model

The social model reflects the understanding that disability does not originate from the individual. Disability depends on how society organizes itself and how such an organization allows an individual to function, or not, in their daily lives. Persons with disabilities often cannot function or participate within society on an equal basis with persons without disabilities due to the barriers they face. This may be due to a range of factors. These include not only physical barriers but also socio-economic barriers that limit opportunities; attitudinal barriers that discriminate and exclude; and political barriers including a lack of legal recognition under the law (see rights-based model below). The social model of disability is concerned with how we imagine and shape the world or environment, we live in and how that affects people.

The Rights-based Model

The rights-based understanding of disability is highly important. This came to the fore in the run-up to the adoption of the CRPD by UN member states in 2006. This means that these countries have committed to establishing laws to ensure the equal rights of persons with disabilities in all walks of life.

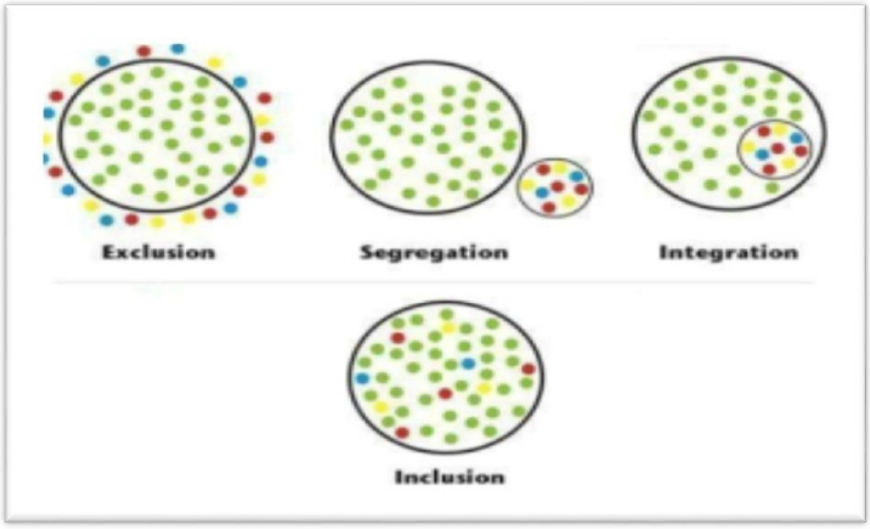
This includes, as we have seen, situations of risk. Rights are connected to law. As such, rights are an important part of how we organize the societies in which we live. In effect, laws are how societies institutionalize what is right and wrong.

The above-mentioned models are the concept of disability, and how disability had been treated, after the Convention on Right of the Persons with Disabilities (CRPD) and the enactment of RPWD Act, 2016. The disability issue is approaching social to right based model, under this streamline the SFDRR has emphasized the inclusion. Here inclusion is the use of a disabled person's skill and experiences to address the risk associated with disabled persons.

Learning Unit 2.2: Concept of Inclusion, Dimensions of Inclusion

Concept of Inclusion:

Disability inclusion means understanding the relationship between the way people function and how they participate in society and making sure everybody has the same opportunities to participate in every aspect of life to the best of their abilities and desires.



Source: http://jobsniagara.org/wp-content/uploads/2017/01/JOBSNIAGARA-INCLUSION-INTEGRATION.png

This involves more than simply encouraging people; it requires making sure that adequate policies and practices are in effect in a community or organization.

Inclusion should lead to increased participation in socially expected life roles and activities such as being a student, worker, friend, community member, patient, spouse, partner, or parent.

Socially expected activities may also include engaging in social activities, using public resources such as transportation and libraries, moving about within communities, receiving adequate health care, having relationships, and enjoying other day-to-day activities.

Participation + Access ⇨ Inclusion

Dimensions of Inclusion:

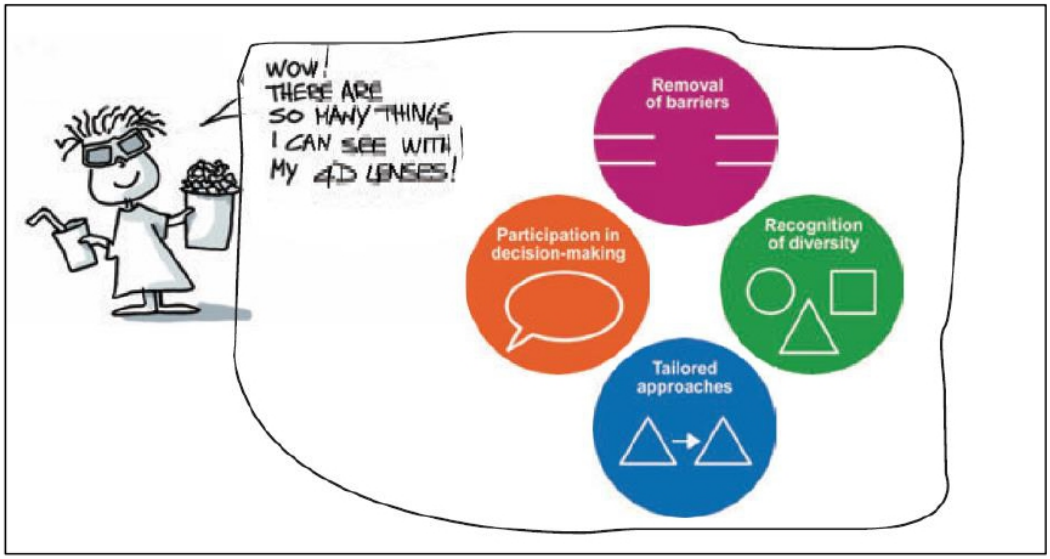


Figure: Four Dimensions of Inclusion

Participation in Decision Making:

• Involvement:

Participation in decision making means people are involved. This means that people are or can be **active participants** in DRM initiatives. Participation might take different forms: it is not limited to 'sitting in meetings '. Citizens might be also involved and active when effective mechanisms for representative participation is in place. People can consciously decide not to be actively involved. What matters is that they can be involved, if they wish to be.

• Voice/influence:

Participation in decision making happens when people have voice and influence. This means having a claim and/or in agenda setting, being able to speak out, and feel motivated and capable to stand in front of relevant institutions. People having a voice can advocate for issues that matter to them, promoting change.

• Accountability:

Accountability allows people to influence DRM processes even when they choose not to participate directly at all stages. Accountability means that: **1)** institutions inform people about their entitlements and resources, plans, decisions; 2) citizens are in a position to have a say and to give feedback; 3) their feedback is responded to or acted upon.

• Diversity of people with different power

Recognising the diversity of people means acknowledging that each person has characteristics that make them different from others, and thinking about how such characteristics impact on the power people have. power matters because it influences who is `in' (inclusion), and who is at risk (vulnerability).

• Diversity of risks and disasters

Hazards might be the same for everyone. Risk depends on the circumstances and on the characteristics of individuals. People who are excluded are likely to experience different risks, based on their unique experience and circumstances. And yet, precisely because they are excluded, the risk they face might not be prioritised or addressed by their communities.

• Diversity of barriers

Recognising diversity of barriers is acknowledging that there are many different things that prevent vulnerable people from being safer. These `barriers 'can limit people´s participation in the decisions that are relevant to their safety. But also, at a very concrete level, prevent their physical access to safe places, services, systems and other deliverables available to the rest. There are very different types of barriers, and they are not always imposed by others .

• Diversity of institutions, sectors and levels

Recognising diversity of institutions, sectors and levels means acknowledging that different institutions and sectors will have a say on DRM at different levels (from the local to the global). As there are different people facing different risk, there are different actors and institutions that hold keys to DRM.

Suitable
A tailored approach is suitable when strategies, processes and assistance offered and promoted are relevant and appropriate for excluded people. That is, they are adapted to their specific needs and capacities. There is no end to how much tailoring you can do, as no two places or people are the same.

- **Sensitive approach (and 'do no harm')**

A tailored approach is one that will not create problems for the groups of excluded people and for the people who work with them. Inclusive DRM interventions will be aware that potential tensions/conflict can arise from the empowering process, and we need to manage them to reduce the risk of doing harm to the people we work with.

- **Flexible**

An approach is tailored when it is not set, but adapted and adaptable to respond to changing environments, patterns of exclusions, needs and opportunities.

- ***Addressing the causes of exclusion***

The removal of barriers is when DRM addresses the causes of exclusion as part of the process. It does not always do so openly (that is, for example, saying to the community that an activity is directly aimed at generating social cohesion to reduce discrimination against *dalits*), but it does so **intentionally** by removing barriers to inclusion as an explicit objective of the work.

- ***Power shift***

The removal of barriers is when DRM supports excluded people to renegotiate their power relations with others in the community to level up the ground.

- ***Gains are sustained***

Removal of barriers is when inclusion gains are sustained as they do not depend on temporary arrangements with things falling back to the way they were beforehand after a period of time.

Learning Unit 2.3: Need of Disability Inclusion, Inclusive Disaster Risk Reduction

Need of Disability Inclusion:

Disaster Risk Management (DRM) aims to avoid, lessen, or transfer the adverse effects of hazards through activities and measures for prevention, mitigation, and preparedness. It is defined by the UNDRR, as a systematic process of using administrative directives, organizations, and operational skills and capacities:

- to implement strategies, policies, and improved coping capacities
- to lessen the adverse impacts of hazards and the possibility of disaster.

It generates awareness of the many things that can be done to prevent potential disaster losses from realizing in full force.

It is an integrated approach to managing disaster risk that can make a big difference. Supported by a global movement, more and more nations around the world are adopting it.

Persons with Disabilities have difficulty moving, hearing, seeing, communicating, and/or learning. They have the same needs and perform the same activities as other members of the community (eating, dressing, working, etc.).

However, Persons with Disabilities (PWDs) may need specific support related to their disability and their living environment (assistive devices, caregiver, a modified physical environment, or equipment) to enable them to participate fully in their daily activities.

In an emergency, when all members of the community are placed in a vulnerable situation, Persons with disabilities (PWD) may face extra challenges if these special needs are not met.

People with physical impairments need warm clothing, blankets, or firewood to keep themselves warm. People with difficulty in moving may also need assistance for evacuating from an unsafe situation, accessing relief shelters, and using latrines. Physical assistance, assistive devices, or the installation of ramps may be necessary to ensure these persons are not disadvantaged or trapped in a dangerous situation.

People with visual or hearing impairments are unlikely to notice warning signals and quick evacuation routes during a disaster situation. Some PWDs may find it difficult to understand and appropriately react to instructions; for these persons, it is important to provide relevant information in a manner that they can understand such as using simple language or pictures or speaking very slowly and clearly.

Inclusive Disaster Risk Reduction:

Inclusive DRR is an inclusive approach to disaster risk reduction that is integrated into all DRR components and activities.

An inclusive DRR approach encompasses the followig points:

1. Ensures the full and meaningful participation and leadership of *all* groups and individuals in identifying and reducing risk.
2. Promotes equality of rights and opportunities for all in the face of risk.
3. Appreciates and responds to the diverse characteristics, capacities, and vulnerabilities of all.
4. Contributes to resilience for everyone by transforming power relations and removing barriers that keep excluded people out.

Technical Session 3: Risk & Risk Associated with PwDs

Overview of Session:

Risk is a part of life. We all have to deal with risk daily, Risk associated with PwD is disproportionate, so the risk may not be addressed at common-mode in the disability sector. This section is designed to address the Risks associated with disabilities, Disproportionate Risks, and what disability-inclusive can play in DRR activities, the risk address is the prime concern of SFDRR and a challenging task in disability inclusion. The disabled person faces dynamic risks and the address of these risks can only be made by the concerned disabled.

Objectives:

By the end of the session, participants would be acquainted about:

a). Risk and Risk associated with PwD

b). Foundation for deciding how to approach disability when planning and considering DRM

c). Disproportionate Risk

Duration: 75 Min.

Suggested Methods:

Presentation, discussion, and interactive learning.

How to Conduct:

Ask the participants to be in groups of four for the group activity.

1. Ask them to Risk associated with disabled
2. Ask them what are the risk and how to reduce them by inclusion?
3. How SFDRR has addressed Risk and Inclusion.
4. Responses would be collected by Trainer and trainees will present their views

Learning Unit 3.1: Risk & Risk Associated with PwD

What is Risk:

Risk is a part of life, we all have to deal with risks daily. For example, crossing a road is full of risks. This means that each of us already has the experience that can be applied to DRR. Persons with disabilities accessing these lines will, as a rule, have more experience of having to deal with risk than persons without disabilities in their daily lives. So, while DRR may be new to you, the key issue is not new if you are a person with disabilities, you are most likely already an expert in managing risk.

To understand risk, we need to ask some questions. The three questions we need to ask are:

1. What can go wrong?
2. How likely is it (it will go wrong)?
3. What will the consequences (or impacts), be?

In disability-inclusive DRR, we should also ask:

• Who will be the most impacted (or worst affected)?

In disability-inclusive DRR, we need to ask who will be most affected. That is, do we all face the same risk of something going wrong when we cross a road? No, we do not. For many people with functioning difficulties, the risk is much higher. For example, a person who has difficulty in vision. For now, we should consider that not being prepared and not promoting and ensuring safety can have irreversible impacts on individuals, families, and society as a whole. As the SFDRR reminds us, we need to be people-centered when thinking about DRR.

Risk is about people and their safety. To explain further; we may recall the earlier story. Looking at 'what can go wrong?' there is a range of things that can happen when disabled one cross a road. However, there are only two important outcomes. Either a person crosses a road safely (no accident), or something goes wrong and a person does not cross a road safely (an accident) and is injured or killed. It is these either-or scenarios that we are forced to consider in DRR. We are interested in understanding and preventing, the second of the two. Turning to 'how likely is it?' we need to ask more questions.

There are a range of things that will affect the likelihood of a disabled person not crossing a road safely. We may think of these as underlying risk factors. These include the weather; the condition of the road; the person crossing the road may be in hassle or tired; a driver may be using their phone; driver had not considered traffic light; and so on. However, it should also be clear that by taking action we can prevent, or reduce, most of these risks.

We may not be able to change the weather, but vehicle users can slow down if it rains or if it is hard to see. The driver should see traffic light or must use indicator lights. The person crossing the road may be able to look both ways, listen, and be patient before they cross. If the person has practiced this since they were a child, they are less likely to forget when they are tired/ in hassle to work later in life.

A local authority can also take action, such as building a bridge, a pedestrian crossing, or underpass. Law enforcement agencies can take action to prevent vehicle drivers from speeding and to encourage safer driving.

The media can help by providing public service announcements to promote road safety. Car companies can produce cars that are less likely to injure pedestrians in an accident. Delivery companies can ensure their drivers take frequent rests and are not overly tired. Researchers can identify and prioritize accident hot-spots.

Vehicle users can make sure their vehicle is well-maintained and safe. The person crossing the road can also take responsibility.

They can cross in a safe place and manner where they can be easily seen. They may also wear bright clothing or carry a light at night.

All of the above examples can influence the likelihood of an accident. By thinking about the likelihood of something happening, we can then better prioritize and decide what needs to be done. This is essential in DRR in determining where your work can have a maximum positive impact on the resources you have available. You may not have the resources to build an underpass, but you can certainly encourage people to look both ways and cross in a safe place and manner. It is often these low, or no, cost preventative actions that can have the greatest and most immediate impact in DRR. Importantly, from the example, it is clear that not one individual or group can do everything. We all have a role and responsibilities in DRR. We need to work together to reduce and prevent risk.

Next, ‘what will the consequences be?’. From our either-or DRR viewpoint, we are not overly concerned with the person who crossed the road safely. If a person is injured, we should be

very much concerned. This could mean the person is not able to work. This may mean hardship for their family. This could lead to not being able to pay school fees and their children dropping out of school. The person who was injured may acquire another disability. This will mean they have to adjust and relearn much of what they took for granted before.

If the person is killed, this will not only result in grief for friends and family. It results in a loss that we simply cannot know. We do not know what this person may have done and achieved in the future. These concerns are at the heart of DRR. They are why DRR is so important. Finally, in disability-inclusive risk addressing we need to ask who will be most affected. That is, *do all disabled face the same risk*? No, they do not. For many people with functioning difficulties, the risk is much higher. For example, a person who has difficulty in viion. For now, we should consider that not being prepared and not promoting and ensuring safety can have irreversible impacts on individuals, families, and society as a whole. As the SFDRR reminds us, we need to be people-centered when thinking about DRR. Risk is about people and their safety.

Disproportionate Risk:

Disproportionate risk refers to some people being at far higher risk than others, disproportionate suggests there is a large difference in the levels of risk two people will face. Disproportionate risk relates to a person's lack of opportunities and not being able to participate fully in society in comparison to others. Disproportionate risk arises from social exclusion and the barriers an individual may face.

Social capital, or linkages between people, fosters the exchange of information and resources. Social capital facilitates collective action and support. Studies show that those more connected are more resilient and better able to recover from hazard events.

A child with disabilities who is out of school will be at higher risk than a child without disabilities who is out of school. The same child with disabilities will be disproportionately at-risk compared to a child without disabilities who is in school. The SFDRR states the following (emphasis added):

Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability, and cultural perspective in all policies and practices; and the promotion of

women and youth leadership; in this context, special attention should be paid to the improvement of organized voluntary work of citizens. ***(Para. III.19d)***

Reducing and preventing risk is the concern of everyone. DRR requires collaboration and calls on everyone to work together. Partnerships are key. Particular attention is required to address those most at-risk. Additionally, we need more women and young people to lead. In line with the emphasis on inclusion, we should not forget that this includes women and young persons with disabilities. It is these people who are more likely to be more disproportionately affected by disasters. The importance of accessibility is also noted and this means removing barriers.

Learning Unit 3.2: Evidences of Disproportionate Risk

Evidences of Disproportionate Risk:

1. As part of the inaugural World Tsunami Day (November 5th), 2016 a Disabled People's Orgaisation (DPO) in Chile conducted an assessment of the accessibility of tsunami evacuation routes, 5.

The findings showed that for a person using a wheelchair, accompanied by an assistant, it took over 18 minutes to reach the evacuation point. For a person that can walk the same route the time required was only nine minutes. Therefore, we may assume that a person using a wheelchair in this example would spend twice as long evacuating compared to a person without disabilities. However, we should note that this assessment was undertaken during a period when no hazard event occurred. As such, we should pause to consider what may happen in an actual tsunami. If people are unprepared, evacuations can be disorderly or chaotic. If the tsunami following an earthquake that affected the same area, damage and debris would make evacuation even more difficult. This would suggest the actual time required for a person using a wheelchair may be much longer. It may even not be possible at all.

This speculation brings us back (as noted previously) to considering the environment. It is the environment that links disability and disaster risk. We may think of this as the 'chain of disproportionate risk'.

2. Research, following the Great East Japan earthquake, 2011 shows the mortality rate for persons with disabilities was over four times higher than for persons without disabilities (3.4% and 0.8% respectively), 6.

<u>This may unfold as follows:</u>

- Disasters disrupt the environment.
- A disrupted environment has more barriers.
- More barriers further limit a person with disabilities' ability to function.
- Limited ability to function disproportionately increases risk for persons with disabilities.

The consequence is women, children, and men with disabilities are at disproportionate risk compared to women, children, and men without disabilities. While we may not yet have much hard data to make the case for disability inclusion in DRR, the logic, one would hope, is sufficiently clear.

Risk associated with the disabled, depends on the relationship between people and where they live and carry out their activities. That is, their environment. How people interact with their environment, including the hazards around them, can either increase or reduce the risks they face. As such, the risk of disasters can be prevented or reduced by people and this depends on what people can do, or their capacities. We may represent this relationship as follows:
The use of the environment is much broader and not only includes our natural surroundings. It also includes the social, cultural, legal, and economic environment. It refers to where we live and conduct our life activities. Importantly, the environmental concerns how we as a society choose to shape our world and in terms of disability the barriers we allow and create. DRR is about the choices we make to live with the hazards around us. Both disability inclusion and DRR are social concerns. Both are about improving how we all can better live within society and the world at large. As we have earlier discussed that each disabled person has risk recognition and resolution.

Suppose in the absence of the disabled person (with a single disability), we are recognizing associated risks! The task will be tough and we may miss some vital source of risk. To curb this lacuna, we ensure the Inclusion of disabled in DRM Plan preparation.

To identify, recognize, and to resolve the associated risk with a particular disabled person. Two way forward may be there.

1. Participation
2. Inclusion.

Participation is a key concept within DRR. The idea of participation has also suffered from misuse and abuse over the years. Participatory approaches in development were popularized by Robert Chambers (1983). Participation was about transferring power and decision making from elites (uppers) to the people who would ultimately be affected (lowers) by a development initiative. Participation was a response to dissatisfaction with top-down development. It concerned mutual learning and giving the voiceless, the poorest, and most socially-excluded a voice. In short, participation is about how far we, as outsiders, hand over decision making to

those who may be affected by our work and the efforts we take to do this. We can think of participatory approaches as lying on a continuum.

Inclusion is equal to participation plus access for those new to disability inclusion, the above should be encouraging. When we talk of inclusion, we maintain the principles of participation that we value in our work. We are concerned with people taking the lead and making decisions on issues that affect their lives. We are concerned with mutual learning. We consult, we listen, and we act on what we have learned. The difference is, to be inclusive we need to pay increased attention to accessibility. That is, we need to take steps to remove barriers to ensure people can participate. Again, we can see that disability inclusion in DRR, or any other area of work, is not about doing something new. It is about building on what we already do. It is the next step forward we need to take.

Technical Session 4: Disability Inclusion: Barriers to DRM

Overview of Session:

The barriers keep a significant workforce away, here we discuss and analyze barriers and how to overcome the barriers for effective inclusion. Discussion will be made on personal level deterrents of inclusions, cost of inclusion and exclusion.

In this session, the focus would be Barriers, Types of barriers, barriers, and characteristics that may be the potential consideration for inclusion in disaster risk management.

Objectives:

By the end of the session, participants would be acquainted about:

1. Barrier Concept, types and resolutions to barriers
2. Personal level deterrents
3. Cost of Inclusion and Exclusion

Duration: 75 Min.

Suggested Methods:

Presentation, discussion, and interactive learning.

How to Conduct:

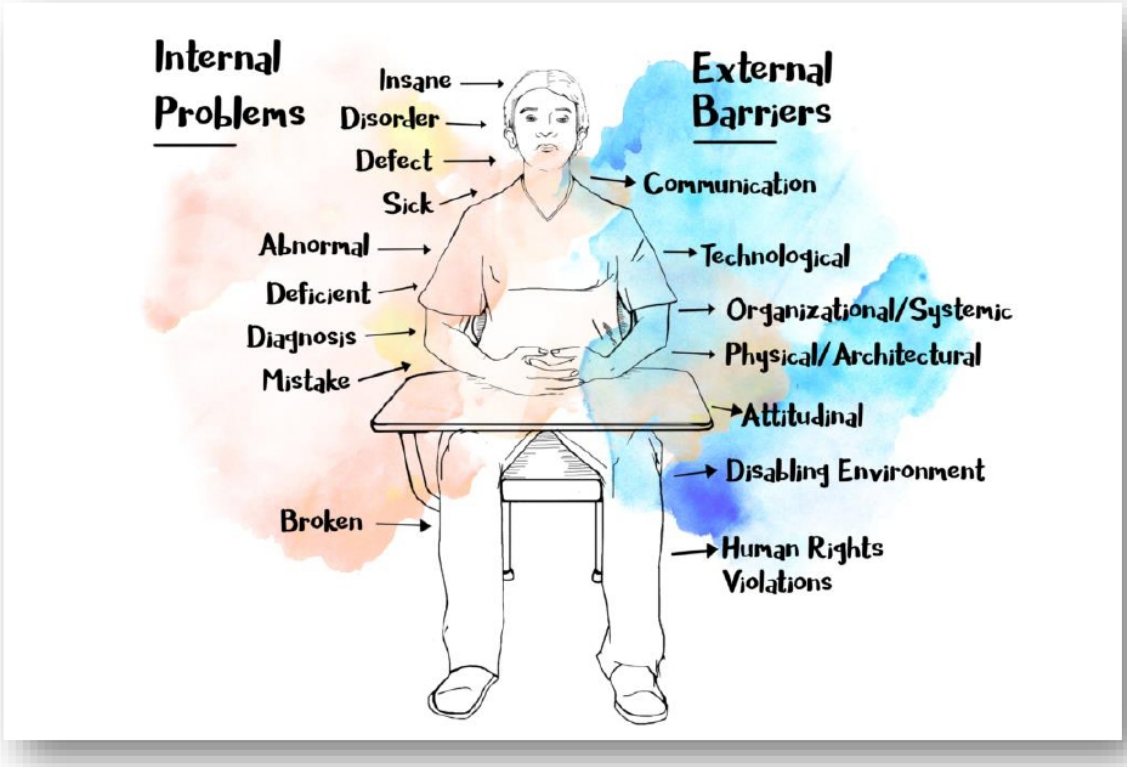
Trainer will ask the participants to be in (4-5) groups for the group activity. After completion of the Session trainer will select any one type of inclusion barrier to DRM, what are causes of the barriers, and what strategy required to overcome and how we can implement it at a larger scale. Trainer will collect responses; responses will be made by participants under the heads like barrier, causes, remedial measures. Each group would present the submitted responses.

Learning Unit 4.1: Barriers, Personal level Deterrents of Inclusions

Barriers:

Any factor including communication, cultural, economic, environmental, institutional, political, social, attitudinal and structural factor which hampers the full and effective participation of persons with disabilities in society. (RPWD Act, 2016).

Barriers are mostly created by their environment. Barriers and exclusion arise when people's characteristics – such as their sex, age, caste, ability, wealth, and many others – translate into less power and fewer entitlements. Sometimes barriers are not openly created by the environment, but by the excluded people themselves. Issues of self-perception, lack of confidence, amongst others, might all be factors that lead people to exclude themselves from some circles. For example, some people with a disability might have internalized the fear and the shame of `being different' and might not be willing to engage with others, even when others would welcome their participation.



Source: https://flexforward.pressbooks.com/chapter/models-of-disability/

Attitudinal Barriers are behaviors, perceptions, and assumptions that discriminate against persons with disabilities. These barriers often emerge from a lack of understanding, which can lead people to ignore, to judge, or have misconceptions about a person with a disability

Examples of attitudinal barriers include:

- Assuming a person with a disability is inferior.
- Assuming that someone with a speech impairment cannot understand you.
- Forming ideas about a person because of stereotypes or a lack of knowledge.
- Making a person feel as though you are doing them a "special favor" by providing their accommodations.

Attitude Barriers Examples:

• The attitudes of parents who refuse their children to study together with an intellectually-disabled child in the same class.

• The common prejudice which states that persons with disabilities cannot do anything so there is no point in inviting them to village meetings (including meetings for performing, Vulnerability and Capacity Assessment (VCA) or making Disaster Risk Management Plan).

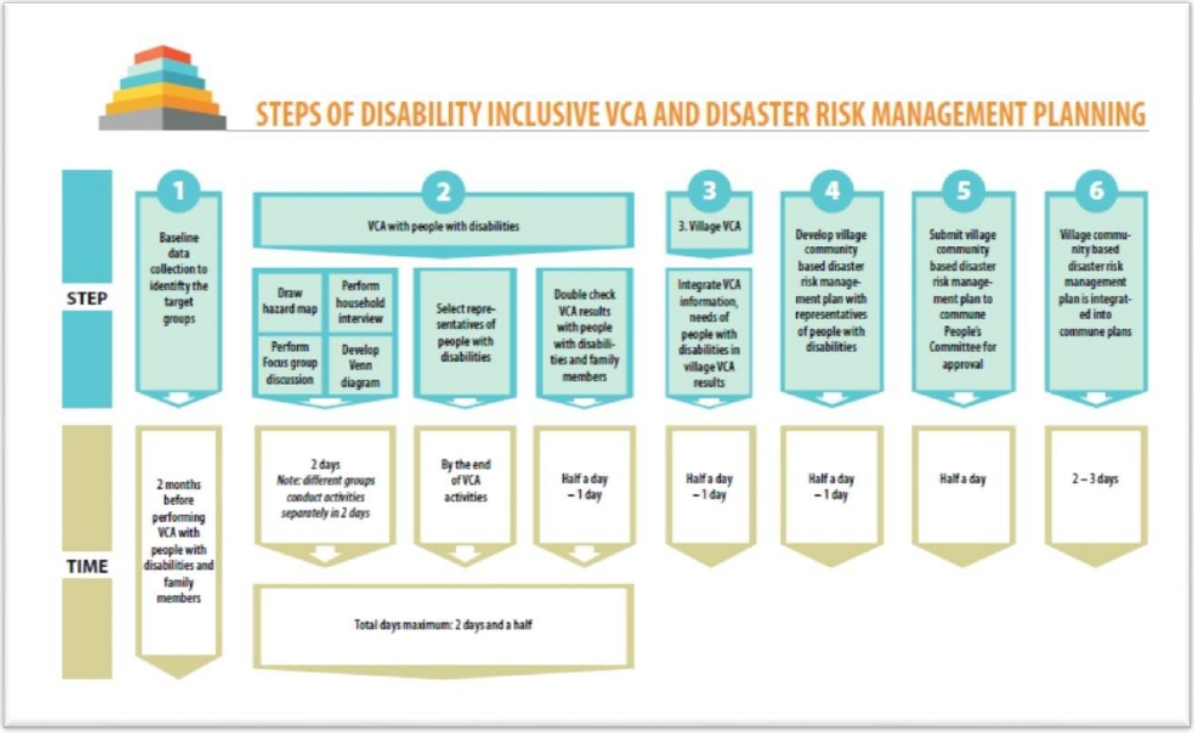
Recommended Solutions:

• Organize awareness-raising workshops on disability inclusion for villagers so that villagers have the right understanding about people with disabilities and their right to participate.

• Persons with disabilities need to be encouraged warmly to overcome their lack of confidence. One way to do so is to increase their confidence by helping them to prepare the contents to talk before participating in village meetings. In the meeting, the facilitator encourages them to speak by directly asking them questions, using pictures to help them to answer more easily.

• Train Vulnerability, Capacity Assessment (VCA) facilitators on disability-inclusive VCA so that the facilitators can help villagers to remove such barriers.

To ensure a disability-inclusive VCA process, it is necessary to perform VCA with people with disabilities before inviting them to join the village VCA. This step will make disabled people more confident and to be able to participate effectively in the VCA process with other villagers in their community (following the rule of inclusion).



Source: www.rcrc-resilience-southeastasia.org

Organizational or systemic barriers: are policies, procedures, or practices that unfairly discriminate and can prevent individuals from participating fully in a situation. Organizational or systemic barriers are often put into place unintentionally.

Examples of organizational or systemic barriers include:

- A program that requires students to take a full course load.
- Office hours conducted in person only, or not allowing students to access their professors or administrators by phone, e-mail, or other means of communication.
- Having poorly defined or unclear learning objectives for a course.
- Requiring students to express their understanding of course content is only one way.

Policy and Institutional Barrier Examples:

People with disabilities cannot become teachers in mainstream schools or village DRM committees as their condition is considered 'unfit to teach/participate'.

Recommended solutions:

Collectively work on advocacy to change public policies for people with disabilities.

Architectural or physical: Architectural or physical barriers are elements of buildings or outdoor spaces that create barriers to persons with disabilities. These barriers relate to elements such as the design of a building's stairs or doorways, the layout of rooms, or the width of halls and sidewalks. Examples of architectural or physical barriers include:

- Sidewalks and doorways that are too narrow for a wheelchair, scooter, or walker.
- Desks that are too high for a person who is using a wheelchair, or another mobility device.
- Poor lighting that makes it difficult to see for a person with low vision or a person who lip-reads.
- Doorknobs that are difficult to grasp for a person with arthritis

Physical environmental barrier examples:

• Meeting room on the second floor is not accessible to people with disabilities.

• Meeting location is too far for a person with a wheelchair to attend.

Recommended solutions:

• Select another accessible meeting room or ask people to assist if they cannot find an accessible room.
• Try to find a meeting space as close as possible for persons with physical impairment.

Information or communications: Information or communications barriers occur when sensory disabilities, such as hearing, seeing, or learning disabilities, have not been considered. These barriers relate to both the sending and receiving of information.

Examples of information or communications barriers include:

- Electronic documents that are not properly formatted and cannot be read by a screen reader.
- Lectures that are confusing and poorly organized.
- Language that is not clear.
- Print that is too small or in a font that is difficult to read.
- Videos that are not captioned and don't have transcriptions.

Information barrier Examples:

• Facilitator is only talking verbally when they are giving instructions.

• No assistance for people with visual impairments when they are drawing a hazard map.

Recommended solutions:

• Write down instructions on a large paper if they can read. If they can understand sign languages, try to have a sign interpreter.
• Ask an assistant to describe what is being drawn for people with visual impairment so that he/she can follow.

Technology Barriers: occur when a device or technological platform is not accessible to its intended audience and cannot be used with an assistive device. Technology can enhance the user experience, but it can also create unintentional barriers for some users. Technology barriers are often related to information and communications barriers.

Examples of technology barriers include:

- Electronic documents without accessibility features, such as alternative text (Alt Text), that screen readers read to describe an image.
- Handouts or course material that is available only in hard copies.
- Requiring students to use a website that does not meet accessibility standards.
- Learning Management Systems or course websites that cannot be accessed using screen-reading software. 7.

Picture: Person with physical impairment cannot come into the room to attend the meeting due to no ramp for wheelchair

Personal level deterrents of inclusions:

At the personal level, we are feeling some sort of hindrances that all are in the form of barriers that causing as a hurdle in the inclusion of disabled persons like:

Fear: This is the most common social barrier and obstacle of inclusion. We are often afraid of people we see as different, so we choose not to interact with them. Or perhaps we don't want to be invasive or offensive.

Overcoming Fear: People are people, and we are all different, but also similar in the ways that make us all human. Some people like casual conversation and some don't. Some appreciate help, and others don't. Our differences need not prevent us from being connected. Human connections are worth the risk.

Awkwardness: Sometimes we just don't know what to say. We see only our differences, and don't have the right words to connect. People with differing abilities are often used to being treated differently or sometimes even ignored. Thus, they may have expectations of not being included, and behavior may appear aloof because of feeling marginalized.

Overcoming Awkwardness: By altering our thoughts, beliefs, and behavior, we can diminish the awkward feeling. We all have differences, but we can find common ground. That's how we make connections. Eye contact or a kind voice can be the first step to inclusion and unification.

Difficulty: It is much easier to look away than to watch someone struggle.

Overcoming Difficulty: Bridging the gap between different people is easier than you think, and just because someone has a disability does not mean we don't have many things in common. Connecting with people who are different does not have to be effortful or uncomfortable unless we live by that belief. Simply deciding it's not difficult is how we can abolish this social isolation, and change as a society.

Disinterest: Maybe you have nobody in your social circle with a disability. It's not your thing. It's not your problem. You're busy. You have your issues and agenda.

Overcoming Disinterest: As human beings, we have a social responsibility to care for one another. We take turns offering and receiving help when one is needy or one is able. The one thing we can be sure of is that at some point in life, everyone will experience a limitation on our abilities, even a temporary one. We will all experience a moment when we do not have our full abilities. If you have ever been on crutches, had your eyes dilated, been bed-bound, been disoriented, needed an inhaler, been in a foreign country without speaking the language, or even just lost your voice, you have experienced limitations on your abilities. You were likely

dependent on somebody to help you. A person to drive you somewhere, reach something for you, to translate, to open a door for you, feed you, help you get dressed, read something to you. That help was given out of compassion. Understanding that is what creates empathy. That human understanding is what makes the world go ‘round. Pay it forward. It will come back when you need it.

Ignorance: We are human and we learn by example from other humans. Sometimes we are taught that a person who is different, or perhaps has a deformity or a behavior that we don't understand, is not capable of normal relationships. Parents often think they should protect their children from seeing individuals who are suffering or are different. If we can't see past the disability, it's just not easy to watch.

Overcoming Ignorance: We can educate ourselves on the facts, especially when our ignorance creates belief systems that contradict common goodness and common sense. Every single person needs love and meaningful relationships with others. True compassion always feels right, and is easily passed forward to others. Shut your eyes, take a breath, and find your compassion. It's in there, and it can help us see more clearly. 8.

Learning Unit 4.2: Cost of Inclusion, Accessible Infrastructure, Vs. Cost of Exclusion

Cost of Inclusion:

It addresses the concern that disability inclusion is often viewed as being expensive. This, in turn, relates to the idea that disability inclusion is a specialized or technical area of work.

Technical Expertise:

Disabilities have been popularised as a technical case; that needs a lot of research and intervention before inclusion in DRM. A survey of DRR actors in Indonesia, 2014 identified factors that influenced whether these actors included persons with disabilities in their work, or not. The barriers that these DRR actors, from both government and non-government, identified related to the following:

- Limited experience of disability (Each disability has its sphere of risk and way to tackle this)
- Limited expertise on disability. (Risk addressal of each disability need specialized understanding and work experience that is devoid in DRM experts)
- Limited access to networks of disability expertise. (As earlier discussed disabled has a hidden network that need to be identified to address the risk)

Respondents recognized that 'the diversity of the types of disability, adds 'complexity' to accommodating people with disabilities within their DRR activities. Respondents mentioned the 'range of physical, cognitive, communication, and mental health' factors that needed to be taken into account. 'Lack of technical knowledge' about disability, 'limited experience' of working with people with disabilities, and 'lack of access to a network' of expertise in disability were often cited together as barriers to practicing inclusive DRR. Several respondents noted these factors, in combination, were the greatest challenge for their agency, rather than one stand-alone factor. [9]

The same DRR actors were asked to identify what would help them (enabling factors), become more disability-inclusive. The findings included DRR actors recognizing a commitment from Disabled Persons Organization (DPOs) to collaborate in DRR. That is, DRR actors recognized the solution. Rather than bring in high-cost outside experts, these actors could discuss and collaborate with DPOs. This solution recognizes that disability inclusion is a social or collaborative concern. While the DRR actors noted this solution, it seems the idea that

disability is a technical issue remained more prominent. This has several implications. Firstly, there is still a need to change perceptions of disability inclusion among DRR actors. Secondly, there appears to be growing recognition of the need for disability-inclusive solutions among DRR actors. We may expect this need to grow under the SFDRR. Thirdly, DPOs are well-placed to provide the disability perspectives that most DRR actors lack and seek. It is this that the SFDRR calls on DPOs to do. Such collaborations are mutually beneficial and are neither technical nor high-cost. They begin with dialogue and discussion. DPOs learn more about DRR. DRR actors learn more about disability. Collaborations of this kind are the solution to fulfilling SFDRR commitments to inclusion.

Costs of Accessible Infrastructure:

Another issue that is often raised is that it is expensive to insure infrastructure is accessible for persons with disabilities. This assumption is also open to question. A World Bank (2000) study shows that if accessibility is considered from the beginning of the design process, the additional costs are only around 0.5% of total construction costs. 10.

The same study notes that if accessibility is incorporated late in the design phase, the costs do rise, but slightly. The cost of including accessibility later in the design phase amount to a little over 1% of the total construction costs. These almost negligible costs bring wide benefits. For example, for older persons, or for someone of productive age who has had an accident and temporarily lost mobility. The latter can return to work earlier. Design-for-all also allows persons with disabilities to contribute to society and realize their potential.

The costs of exclusion:

The costs of exclusion are the costs of not acting. These costs are high for individuals, households, and society as a whole. The costs of exclusion relate to persons with disabilities not participating in, and not contributing productively to, the societies in which they live. The costs of exclusion include the costs to organizations, institutions, and enterprises of not drawing on and utilizing all available resources. Exclusion is limiting for us all. There have been several studies that have put a dollar figure on these costs. A World Bank (2004) study shows the costs of not including persons with disabilities amounts to between USD 1.71 trillion to USD 2.23 trillion globally per year. This is the loss to countries' national incomes, or Gross Domestic Product (GDP). 11.

Technical Session 5: Methods and Approaches of Inclusion

Overview of Session:

This session is about methods and approach of inclusion, the highlights of this session will be Twin Track Approach of Inclusion, Identification and need to investigate hidden population, snowball sampling, data privacy and transparency, Washington Group Questions and How to modify as WGQ in perspective to DRR. Inclusion depends on the method and approach to apply for inclusion.

Objectives:

By the end of the session, participants would acquaint about:

1. Inclusion approaches
2. Hidden population data, privacy and transparency
3. Washington Group Question and Modification in DRR

Duration: 75 Min.

Suggested Methods:

Presentation, discussion, and interactive learning.

How to Conduct:

Ask the participants to break into groups of four for the group activity.

1. Ask them to select any one type of approach.
2. Ask them what are the advantage of this approach
3. What strategy required to modify WGQ for DRR.
4. Build all the responses into the framework
5. Presentation

It is to understand the relationship between the way people function and how they participate in society, and making sure everybody has the same opportunities to participate in every aspect of life to the best of their abilities and desires. 12

Learning Unit 5.1: Twin Track Approach, Societal Mainstreaming Disability

Twin Track Approach:

Disability can be defined as a difficulty in functioning at the body, person, or societal levels, in one or more life domains, as experienced by an individual with a health condition or impairment in interaction with contextual factors.

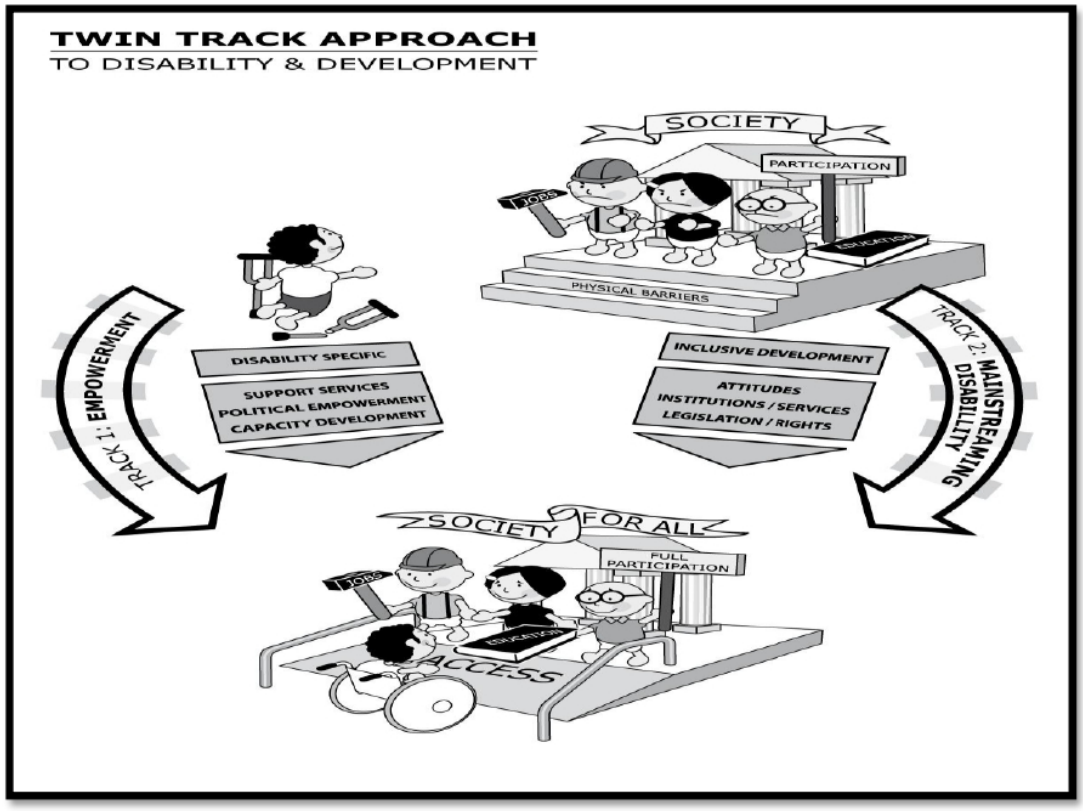
When we use this definition of disability, it means that to improve the lives of persons with disabilities, it is not sufficient to only give support to individuals with disabilities based on their impairment (by providing rehabilitation, education, healthcare, etc.) but it is equally essential to address the societal and environmental barriers which lead a person with impairment to be excluded in society.

Therefore, the two tracks can be considered as:

1. Disability Specific (Empowerment) – enabling and empowering persons with disabilities, their families, and representing organizations through increasing their access to support services, healthcare, education, livelihood, and social activities as well as through political empowerment. empowering persons with disabilities has different components. One is focusing more on support services for and rehabilitation of the person, to improve function or to prevent impairment. The other is focusing on capacity building, on social, livelihood, economic, and political aspects to make the inclusion of people with disabilities a reality. [13]

2. Societal (Mainstreaming disability)- working to identify and overcome the barriers in society that people with disabilities face e.g. physical accessibility, communication, attitude, legislation. It involves including persons with disabilities into all aspects of development and societal life (mainstreaming). For all actors in the field of development, this means working towards fully including persons with disabilities in their programs.

It involves identifying and overcoming barriers within society, which exclude persons with disabilities. These barriers may be physical, attitudinal, legal etc., for example lack of access of children with disabilities to education or inequalities in access to employment for adults with a disability. Track two also involves the commitment of ensuring that persons with disabilities enjoy the same rights and opportunities as others. In practical terms this means that they have the same access to all services and activities, are equally represented in decision-making, and are fully included in society.



Source:www.google.com

Learning Unit 5.2: Identifying Persons with Disability, Hidden Population, Snowball Sampling

Identifying Persons with Disabilities:

As per newly notified disability categories the available data on disability tends to underestimate the number of persons with disabilities in a country and state. If we do not know numbers and where persons with disabilities are, we cannot begin and our understanding of risk is incomplete. As there is a lack of available disability data in general, it may well be the case that you will not have disability data for the communities where you are working. If you do have official disability data, it is currently not unreasonable to assume it will be an underestimate. It may also be out of date, or inaccurate. This can become another excuse to not act. Currently around 10% of the world's population, or roughly 650 million people, live with a disability. 14. In Gujarat number of disabled person is 1092302 number out of a total population around 2.76 Crore; it is around 2.52% of total population of the state. 15.

Hidden Populations:

Persons with disabilities are often part of what we call a hidden, or invisible, population. As the term suggests, this means persons with disabilities are often not seen. Stigma, and prevailing social norms, can keep these groups hidden or private. Being part of a hidden population helps explain why persons with disabilities may not be included in survey findings. When working in DRR we can, intentionally or not, contribute to this cycle. To ensure we do not perpetuate the cycle of exclusion, we need to be proactive in including community members with disabilities in our work and any assessment of risk. The starting point is knowing where persons with disabilities are.

People who are socially excluded are at much higher risk than those who are included in society. People who are excluded have fewer opportunities and this leads to lower-incomes, resources, and networks of support. In short, people who are excluded face more barriers. Hazard events create even more barriers and further increase risk. As such, in DRR we must ensure we are identifying those most at-risk in our initial risk assessments. It seems unthinkable that we could try and assess the risk of a community without including those community members who are most at-risk. However, as we know, this has been the normal course of action

in DRR and development over the years. DRR and development practitioners have overlooked persons with disabilities. We have overlooked those at disproportionate risk. To overcome this shortfall in risk assessment we may try the snowball sampling method.

Snowball Sampling:

Snowball sampling is a way of identifying hidden populations, or groups of people that are not visible. We can start snowball sampling with a little information- like the small snowball at the top of the hill. It may be possible to start when we know only one person with disabilities in a community. However, the more persons with disabilities we can identify before we start, the better. Once we have identified an initial person with disabilities, we ask that person if they know any other persons with disabilities. If they do, that person is visited and the process repeats. This continues until a network of persons with disabilities is identified- the snowball rolls and gets bigger. It is possible the first person you ask; does not know any other persons with disabilities. If so, start with another person with disabilities that you have previously identified. It is recommended to start with several persons with disabilities at the same time. It is about making an effort to better understand disaster risk as Priority 1 of the SFDRR requires. Without identifying those most at-risk in our work, our work in DRR will remain partial and selective at best.

Learning Unit 5.3: Data Privacy and Transparency, Accessing Information and Enabling Actions

Data, Privacy, and Transparency:

The collection of data implies responsibility. It also raises ethical concerns. When interviewing and/or collecting data from persons with disabilities, or anyone else, it is important to be transparent and clear about why you are collecting that data. It is also entirely reasonable for someone to refuse to participate and do not provide information. There should be no attempts whatsoever to coerce participation in data collection. It is also important that how any data will be used is made clear and agreed in advance.

This is all the more important for individuals at increased risk. For example, if data is to be shared with a government or any other agency, this must be made clear to the respondent before data collection begins. Concerning the above, a possible role for DPOs could be to maintain a voluntary system where persons with disabilities who may need assistance in an emergency may choose to provide information to the DPO. The DPO could then act as a custodian of this information on behalf of persons with disabilities.

Starting approach and Functioning Need:

Disability inclusion in DRR remains an emerging field of work, we can apply the data; we collect from identifying persons with disabilities, it is helpful to consider how we may approach disability inclusion in DRR in our work. The number of handbooks and good practices that have been developed. Various models can help us by providing guidance and direction when planning and implementing disability-inclusive DRR.

Accessing information and enabling action:

The Information-Action, or IA, model. emerged out of disability-inclusive school-based DRR projects in Indonesia, 2007. The idea of the model is to boil down disability inclusion in DRR to its most basic elements. The model was developed to guide project teams who were unfamiliar with disability and to encourage teams to question and challenge the received wisdom that disability inclusion is technical and complex. The idea being that good change involves being able to access, assess, and apply information. The successful application of information results in a positive development outcome, or act.

The IA model focuses attention by reminding us to ask two fundamental questions in DRR. These are:

• Can everyone access your DRR information? (The 'I' for information)

• Can everyone act on your DRR information? (The 'A' for action)

As noted, these two questions are deliberately simple; however, they are pertinent. It is hard to imagine a DRR or development activity that does not rely on information in some form. This ranges from training, risk assessments, and policy engagement to early warning systems, establishing evacuation routes, and relief distribution. In each, information is critical. Accessing information is the first barrier that many persons with disabilities are confronted with. Further, we know information is of little use if it cannot be acted upon. Again, acting on information is a major barrier for many persons with disabilities.

Example:

A Deaf person may face barriers in accessing information about how to evacuate safely. This information may be provided in a training or, in the event of an emergency, from an audible alarm that is not accessible to the person. However, once the information is communicated appropriately, this person may have no particular difficulties putting it into action. That is, a Deaf person is likely to be able to evacuate safely- assuming the signal to evacuate is suitably provided. Conversely, a person using a wheelchair may have no difficulties accessing DRR information- assuming the training venue is accessible. However, they may have difficulty acting on information. For example, evacuating in a fire, flood, or earthquake. A Deaf-Blind person will face difficulties in both. We must anticipate such issues and act accordingly to remove barriers and provide support as may be needed in advance.

Learning Unit 5.4: Washington Group Questions, How to Craft DRR Questions

Washington Group Questions:

The biggest hurdle in DRR activities may be the hidden group of disabled, When disaster strike they becomes victim but in normal days this group dislikes to declare that they are disabled; to ensure their participation Washington Group has designed some short of questions as integration into, the experiences people with little prior experience of disability.

The Washington Group Short Set of Questions on Disability is based on familiar, and universal, daily activities. The questions concern how an individual can function in their daily life and the wording of the questions follows a standardized format.

There are 6 questions in the short set as follows:

1. Do you have difficulty seeing, even if wearing glasses?
2. Do you have difficulty hearing, even if using a hearing aid?
3. Do you have difficulty walking or climbing steps?
4. Do you have difficulty remembering or concentrating?
5. Do you have difficulty (with self-care such as) washing all over or dressing?
6. Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?

Four standard answers apply to all of the Washington Group questions. The four possible answers are:

1. No- no difficulty
2. Yes- some difficulty
3. Yes- a lot of difficulty
4. Cannot do it at all

If we consider the four answers above, we will note that the answers are subjective. They depend on the view, or opinion, of the person answering. Disability is a social issue and, as such, things are not always so clear-cut and neat. We all interpret our realities in different ways. The answers relate to how much difficulty the individual experiences functioning in their environment. This is important. We are interested in that person's experiences of how they interpret, and respond to, the difficulties (or barriers) in their environment.

How to modify as WGQ in perspective to DRR:

Disability:

Considering the Washington group question in DRR activities we must consider that *we are more interested in the effect, or impact, of a functioning difficulty on an individual's level of risk.* The direct question 'do you have a disability?' can lead to underreporting by respondents. People may be uncomfortable or afraid to answer yes. Alternatively, a person may have a functioning difficulty and not identify as being a person with disabilities. The Washington Group questions avoid these situations and allow us to better identify those at disproportionate risk in DRR.

Example of Question: Do you need beryl for Early Warning of Disaster.

Assistive Devices:

Overcome barriers in their environment to varying degrees. If we were to include assistive devices, the answers may be quite different. From a DRR perspective, this is important. As noted previously, we are often forced to consider either-or scenarios**.** The worst-case scenario is a person with disabilities does not have their assistive device. This is our point of departure in DRR. We should consider the higher-risk scenario.

Example of Question: Do you need Crutches for Evacuation.

Diversity of Disability:

Consider who can access DRR information and who may be excluded or overlooked. This includes considering stigma and social conventions and norms. This approach should be adopted when using the Washington Group questions in DRR.

The Washington Group questions can assist in better identifying and understanding access and functioning needs in DRR. The questions can indicate what people can do, or not, and how individuals may be impacted by a hazard event. As such, the short set can facilitate a better understanding of an individual's risk. It is important to reiterate, that in DRR;

we are not particularly concerned with identifying impairments, or different disability types. We are primarily concerned with safety and this is where a functioning approach and the Washington Group questions can greatly assist.

From a DRR perspective, we are more interested in identifying, and responding to, differential risk than quantifying the number of persons with disabilities in a population. If there is any variation from the protocol, we may assume that only three answers are of immediate relevance. These are the 'yes' answers. If a person answers 'no-noo difficulty' (answer 1) to

all questions we may assume that this person does not have a particular access or functioning need. The Washington Group recommends that if a person answers they 'have a lot of difficulty' or 'cannot do it at all' to at least one of the questions that person may be considered to have a disability. This is the cut off for identifying persons with disabilities in censuses and surveys

The focus is on risk rather than whether a person is categorized as having a disability. Again, be aware of how you use the questions and be transparent in your reporting and communication.

Most of our work in DRR is concerned with prevention and preparedness. This involves building capacities and equipping individuals and communities to better consider, anticipate, and act to reduce disaster risk. Examples include awareness-raising, planning, and trainings.

All of these examples concern information. Therefore, we need to ensure access to information, and accessibility in general, in all these activities.

we can consider a capacity-building project activity, such as training. Combined with the IA model, the Washington Group questions can help us prioritize and plan. The information the Washington Group questions provide can assist us in knowing who may face difficulties accessing information in the training. For example, if we know participants have difficulty walking or climbing steps we will need to consider the physical accessibility of the training venue and its location. This can also help us to understand who may have difficulty getting to the venue and inform us of what, pro-active, assistance we may need to provide. during the training, if we know that there are participants who have some difficulty seeing or hearing we can adapt accordingly in advance. This will include considering where people sit so that they can access the training information, providing handouts in large print, and the need to speak clearly and keep distracting background noise to a minimum. If a person cannot see at all, we will need to check if the person can read Braille. If so, we can provide handouts in Braille.

If a person cannot hear at all, we should plan to include sign language interpretation. If a person has difficulty concentrating, we should plan to include a family member, or carer, in the training. It is also important, as in all our work, that we consider safety during the training. For example, how will all participants be safe in the event of a fire? Will everyone be able to access the information that is needed to know when to evacuate? For example, if there is only an audible fire alarm with no visual alarm. Will everyone be able to act on this information and be able to evacuate independently? Answers to the Washington Group questions can provide

this information and help us anticipate, plan, and be prepared. At the beginning of the training these issues should be discussed. If a person cannot see at all and the participant sitting next to them may need to guide them in an evacuation, does that person know how-to guide? If not, take five minutes to discuss and practice. If a person uses a wheelchair, crutches, or another assistive device, is that person's assistive device to hand? Ensure exits and exit routes are kept clear during your training. Aim to be barrier and risk-free.

Technical Session 6: Case Study: Disability Inclusive Early Warning System

Trainers Note:

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

Objectives:

By the end of the session, participants would acquaint about:

1. Early warning system
2. Nuances to make Early warning System Inclusive
3. Role and Potentials of Disabled in Early Warning System

Duration: 75 Min.

Suggested Methods:

Presentation, discussion, and interactive learning.

How to Conduct:

Ask the participants to break into groups of four for the group activity.

1. Ask them to select any one type of approach
2. Ask them what are the advantage of this approach
3. What strategy required to make Inclusive Early warning System
4. Presentation

Learning Unit 6.1: Elements of Early Warning System

Elements of Early Warning System:

Early warning is important for everyone, but for the most vulnerable advanced warning can make a crucial difference in 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 is 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 disabilities 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

The 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

Learning Unit 6.2: Early Warning System Preparaedness and Review

How to Make Early Warning Systems Disability-Inclusive:

The suggestions below are framed around the five stages of developing a people-centered 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 centers 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 analyze 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 utilized 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 caregivers, 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 an EWS. If 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 about the stages identified above

Part of Team: Role Played by Disabled 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 a 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 km 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 regularly.

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 studies 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, throughout 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 be able to contribute in a few months. 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 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.

Source: Disability Inclusive Community Based Disaster Risk Management Toolkit, Year 2012.

Post Technical Session: Valedictory Session

At the end of the training, evaluation of the knowledge, skill, and attitude of the participants would determine their exit behavior. The level of increase of knowledge and skill from the inputs given through the training has to be evaluated. Feedback from trainees regarding the training and related facilities would help in modifying future modules to make it more effective.

The primary objectives of the module are to:

- To understand the role of Social justice and Empowerment Dept., Health and Family Welfare Dept., NGOs, and all the departments associated with disability issues and concerns both as part of a solution as well as building.
- Explain the uses of Inclusion and modern innovations for reducing disaster risk and promoting sustainability.

Objectives:

- Discuss a framework for Disability Inclusive DRM
- Evaluate the quality of training imparted through the program
- To assess the exiting behavior of the participants at the end of the course
- To evaluate the knowledge and skills gained during the course
- To carry out formal internal evaluation

Duration: 60 Mins

Methodology:

Anyone of the following methods can be followed:

1. Formal structured questionnaire – Each trainee is asked to fill up a structured questionnaire that evaluates their knowledge gained through the course

2. Quiz on the course – Divide into groups and give points for correct answers. The group that wins gets a small prize.

3. Informal discussion– The trainees divide into groups and identify the key learning points of the training and write them on a flip chart. After they finish, they move on to the next flip-chart and add or comment on the points raised by other groups. At the end of the exercise, all the points are collated by the trainer and discussed.

Training/ Performance Aids:

Depending on the methodology chosen:

- Copies of pre-decided questionnaires or
- Flip charts, Markers, Tag-boards to pin the handouts

This successfully concludes the “Training Programme on “Disability Inclusive Disaster Risk Management”.

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