

COURSE MATERIAL SW620G – Social Work Response to Disasters PREPARED BY

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(Government Degree College

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UNIT -1 BASIC CONCEPTS

I. BASIC CONCEPTS:

i. Hazard:

A hazard is any unusual event that has a potential to threaten people's lives, their property and livelihoods. Some hazards occur naturally or are of natural origin, like typhoons, earthquakes and volcanic eruptions. Some hazards are caused by humans, like environmental pollution, deforestation, civil conflicts, toxic gases and chemicals. In recent years, the distinction between natural and human-made hazards is becoming harder to distinguish. For example, the destruction of mangrove forests may worsen the damage caused by typhoons to the coastal areas. While illegal logging activities can make the effects of flooding worse and even cause landslides. However, a hazard by itself is not necessarily a disaster. A hazard only becomes a disaster when it adversely affects people and causes damage to property and/or peoples' livelihoods.

ii. Vulnerability:

Vulnerability is the extent or degree to which an individual, community, structure, service, or geographic area is likely to be damaged or disrupted by the impact of a particular hazard. Families and communities are said to be vulnerable when they are exposed to known hazards and are likely to be adversely affected by those hazards, if and when, they occur. But these vulnerable conditions are not the same for everyone. A family living on the riverbanks, for example, is vulnerable to a specific hazard (in this case floods) and a family whose house is located on higher ground that cannot be reached by floodwaters is not. A family or community can also be vulnerable in many ways. The example of the family living on the riverbank is an example of a physical vulnerability. Communities can have high social vulnerability when there is a lack of leadership and/or no cooperation between residents such that they are unable to help each other in times of disaster. Some types of livelihood activities are more prone to be affected by disasters than others and hence have greater economic vulnerability. Attitudinal or motivational vulnerability, on the other hand, can occur for people believe who believe that there is nothing that can be done to reduce the impact of disasters. The vulnerable individuals, families, communities, community structures, services, or activities concerned called "elements at risk". It is also important to remember that vulnerabilities are dynamic and can change for good or for worse over time.

Types of vulnerability:

Physical Vulnerability of an area also depends on its geographic proximity to the source and origin of the disasters e.g. if an area lies near the coast lines, fault lines, unstable hills etc. it makes the area more vulnerable to disasters as compared to an area that is far away from the origin of the disaster. Physical vulnerability includes the *difficulty in access* to water resources, means of communications, hospitals, police stations, fire brigades, roads, bridges and exits of a building or/an area, in case of disasters. Furthermore, the lack of proper planning and implementation in *construction of residential and commercial buildings* results in buildings that are weaker and vulnerable in earthquakes, floods, landslides and other hazards.

Material/economic vulnerability of a community can be assessed by determining how varied its sources of income are, the ease of access and control over means of production (e.g. farmland, livestock, irrigation, capital etc.), adequacy of economic fall back mechanisms and the availability of natural resources in the area.

Social/organizational Vulnerability: A socially vulnerable community has weak *family structures*, *lack of leadership* for decision making and conflict resolution, *unequal participation* in decision making, *weak or no community organizations*, and one in which people are *discriminated* against on racial, ethnic, linguistic or religious basis. Other social factors such as *culture*, *tradition*, *religion*, *local norms* and values, economic standard, and political accountability also play a vital role determining the social vulnerability of a community.

Social vulnerability to natural phenomena is greatest among the poorest people in developing countries owing to a lack of information and resources with which to take the appropriate measures. Within this group, children, women and the elderly are considered to be the most vulnerable. To reduce social vulnerability, all of the above factors must be addressed, but this requires knowledge and understanding of the local conditions, which can – in most cases – only be provided by local actors.

Attitudinal/Motivational Vulnerability: A community which has negative attitude towards change and lacks initiative in life resultantly become more and more dependent on external support. They cannot act independently. Their sources of livelihood do not have variety, lacks entrepreneurship and do not possess the concept of collectivism. This brings about disunity and individualism in the society. Thus, they become victims of conflicts, hopelessness and pessimism which reduces their capacity of coping with a disaster.

iii. Risk:

Risk is the probability that the occurrence of a natural, technological, or natural/societal event among a highly-vulnerable population will result in human, infrastructure, economic, or financial loss.

Theoretically, RISK = Hazard + Vulnerability + element at risk

<u>Hazard:</u> Primarily hazards could be: tsunami, hurricane, intense rain, technological accident, etc. <u>Exposed elements (element at risk)</u> could be: Individuals, dwellings or households and communities, buildings and structures, public facilities and infrastructure assets, agricultural commodities, environmental assets, and business activity.

<u>Vulnerability</u> could be: physical/material, social/organizational attitudinal/motivational e.g. poorly built housing, riverbank construction, lack of social safety nets, social disharmony etc.

iv. Disaster:

A disaster can be defined as the serious disruption of the functioning of a community, causing widespread human, material or environmental losses, which exceed the ability of the affected people to cope using their own resources.

International Federation of Red Cross and Red Crescent Societies (IFRC) refers to a disaster as "a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources."

Disasters can be classified according to a number of criteria. They are often classified according to their speed of onset (sudden or slow), or according to their cause (natural or man-made).

Disaster = Hazard * vulnerability/Capacity

A hazard turns into a disaster when people living in potentially high risk areas do not have the capacity to cope with the adverse impact of hazard.

2. TYPES OF DISASTERS:

Disasters can be of two types - either natural or human-made. When disasters occur due to natural forces, they are *called natural disasters*, over which man has hardly any control. Some common natural disasters are earthquakes, landslides floods, droughts, cyclones, etc. Tsunamis, volcanic eruptions and wildfires are also included under natural disasters.

When the disasters are due to carelessness of human or mishandling of dangerous equipment they are *called man-made disasters*. Common examples of these disasters are train accidents, aeroplane crashes, collapse of buildings, bridges, mines, tunnels, etc.

4. KEY VULNERABLE GROUPS IN DISASTERS:

I. CHILDREN

Children are considered to be a vulnerable group in society. A child is recognized to be anyone up to 18 years old or younger (UN Convention on the Rights of Children). Children who have lost or are at risk of losing parental care are critically vulnerable, as they have lost, or are at risk of losing those people who are primarily responsible for making decisions on their behalf, guaranteeing their safety and supporting their development towards adulthood. This places them at higher risk of experiencing child rights violations. Of the total population of the world about 2.2 billion are children which are vulnerable to disasters.

Causes of vulnerability:

The reasons due to which children become more vulnerable to various kinds of hazards and disasters are listed as follows.

• Parental death

- Poor Living and care arrangements
- Poor health and nutrition
- Poverty
- Child labour
- Child marriages
- Single parenthood
- Divorce of parents
- Remarriage of parents
- Presence of many children in household
- Early or unplanned parenthood
- Low education level of parents
- Lack of parenting skills
- Lack of support from the extended family
- Discrimination
- Separation of parents
- Children abandoned by their parents
- Children run away from their parents
- Children leave the family for economic or sociocultural reasons.
- Separation of children from their parents due to political or environmental circumstances.
- Parents leave the family home for economic opportunities.
 Psychological and social factors due to which children become vulnerable to disasters include issues such as;
- Violence
- Physical abuse
- Substance abuse
- Sexual exploitation
- Exploitation and neglect
 Political and economic factors of vulnerability include issues such as;
- Political stress at home
- Economic stress

Factors reducing the vulnerability / Needs of children:

Children's vulnerability can be reduced by the following factors;

- Better parental care
- Balanced diet
- Better health facilities
- Proper education
- Better security

- Awareness about hazards and disasters
- Effective laws against exploitation
- Complete ban on child labour
- Complete ban on child marriages
- Scholarships for poor and physically and mentally disabled children
- Free education
- Special schooling for physically and mentally disabled children

2. WOMEN

Women and girls are more likely than men to die in a disaster. About half of population of the world that is women and girls are more vulnerable to disasters than men. The various factors or causes responsible for higher mortality of women in a disaster are as follows;

Causes of vulnerability

- Poverty and poor living conditions
- Overall insecurity
- Poor health and nutrition
- Pregnancy
- Harmful traditional practices
- Lack of education or illiteracy
- Due to lack of female teachers and bad security most girls cannot go to school
- Responsibility of child care makes women more vulnerable
- Caring of house that arise from their role as mothers
- Women in rural and urban areas don't have access to transportation for evacuation.
- Lack of awareness of disasters.
- Lack of health care facilities
- Lack of access to female doctors in rural areas
- Lack of safe drinking water facilities (in rural areas women have to travel several kilometres to get water).
- Lack of urgent need kits during disasters.
- Low income or economic condition
- Cultural issues like women cannot escape without the permission of their husbands during a disaster.

Reducing vulnerability/Needs of Women

The women vulnerability can be reduced by the following steps;

- Proper education and training
- Free education
- Establishment of girls schools and colleges
- Awareness about hazards and disasters

- Better health care facilities for women nearest to their homes.
- Availability of female doctors
- Better Security
- Better socioeconomic condition
- Free medication during pregnancy
- Assistance of safety kits
- Reservation for women in education and government jobs etc.

3. ELDERLY

The population of individuals aged 60 years and above are considered to be elderly. The elderly people are more vulnerable to natural and manmade disasters for a variety of reasons. Some of the main reasons or causes are listed below.

Causes of vulnerability

- Physical or mental impairments- weakness may make it difficult for them to care for themselves.
- Poverty and poor living conditions, if throughout life makes them physically weaker and more vulnerable.
- Lack of transport facilities. Elderly might not own vehicle, may lack access to a car or may choose not to drive, impeding their ability to evacuate.
- Disabilities among elderly people are a major cause of their vulnerability.
- Poor health/ sickness
- Elderly people abandoned by their children are at risk.
- Lack of awareness of hazards and disasters.
- Low income/ economic condition also makes them vulnerable.
- Dependency on others

Reducing vulnerability/ needs of elderly

- The needs of elderly people should be included in disaster planning.
- In developing emergency plans local governments should seek inputs from elderly residents, professionals and from long term care take facilities.
- Government should make sufficient old age homes with better facilities for those elderly who have been abandoned by their children.
- Elderly should be given awareness about hazards and disasters including what to do during evacuation.

Some more important steps should be taken to help elderly to prepare for a disaster as follows.

Preparedness (the quality or state of being prepared)

• Inform elderly of important items to bring with them in case of an evacuation. e.g. medical records, medicines, clothes etc.

Establish long term care facilities.

Response (something that is done as a reaction of disaster)

- Serve nutritious meals to elderly people after evacuation
- Provide medical care services, free medicines, doctor on site etc.
- Separate space for elderly in old age homes.
- Stop people from preying on the elderly.

Recovery (the act or process of returning to a normal state after a period of difficulty or disorder).

- Some of the elderly want to return home and resume their daily activities as soon as possible after a disaster, so arrangements should be made for their safe return.
- Install small, localized food and service distribution centers in areas with a large number of elderly people.
- Government should provide financial assistance on monthly basis to elderly so that they can be respected by their children.

UNIT – 2: NATURE, CLASSIFICATION AND AGGRAVATING FACTORS TO DISASTERS

I. APPROACHES TO DISASTERS:

Disaster: A Social Work Approach:

Over the years Sociologists have agreed on the definition of disaster. They have "interpreted disasters as special types of social phenomena, in part because they are dramatic historical happenings (events), and also because they compel collective reactions (social catalysts)". The sociologists study a range of different types of events.

Disaster: A Medicine and Epidemiology Approach

This approach mainly focuses on the management of mass causalities, treatment of physical trauma and the epidemiological surveillance of communicable diseases. The incidence of such disease generally increases after a disaster as there is a disruption of public health. Medical support is the first priority after initial search and rescue phase. For example, disasters like floods can create epidemic in the form of diarrhoea, respiratory and infectious diseases. Disasters like earthquakes and technological accidents create problems like bone fractures and psychological trauma. If medical facilities are delivered to the victims in the first few hours of disaster, that saves a greater number of lives.

Disaster: A Geographical Approach

This approach has used the social science methods and emphasis is given to the spatio-temporal distribution of hazards, impacts and vulnerability. They have discussed how choices are made between different types of adjustment to natural hazards

Disaster: A Technical Approach

This is the approach of physical and natural scientists. They give more stress to seismology, volcanology, geomorphology and other geophysical approaches. The emphasis here is on nature, scale, intensity and impacts on human structure or engineering. It may have some elements of human ecology.

2. CLASSIFICATION OF DISASTERS:

Both natural and human made disaster can be classified in two ways – source and risk level-based classification.

I. Source Based Classification

Natural Disasters:

Geophysical (earthquake, landslides, tsunamis and volcanic activity). **Hydrological** (avalanches and floods). **Climatological** (extreme temperature, drought and wildfires). Meteorological (cyclones and storms/wave surges). **Biological** (disease epidemics and insect/animal plagues).

Human-made Disasters:

Complex emergencies – Conflict, famine and displaced population. Industrial accidents – Chemical spill, collapse, fire, gas leak, explosion etc. Transport – road, rail and water accidents, plain crash etc. Miscellaneous – fire, explosion, etc.

Please use this link to understand classification of disaster more:

https://www.emdat.be/classification

a) Risk Level Based Classification

NATURAL		HUMAN MAD	
Major	Minor	Major	Minor

II.	Flood	VII.	Heat	XII	. Communal	XXI.	Transport -
III.	Cyclone		wave		riot		road, air etc.
IV.	Earthqua	VIII.	Cold	XII	I. Ethnic	XXII.	Festival and
	ke		wave		conflict		pilgrimage
V.	Drought	IX.	Landslid	XIV	7. Refugee		related
VI.	Tsunami		e		situation		disaster
		Χ.	Tornado	XV	. War	XXIII.	Food
		XI.	Avalanc	XV	I. Epidemic		poisoning
			he	XV	II. Industrial	XXIV.	Alcohol/liqu
					disaster		or tragedies
				XV	III. Fire	XXV.	Acid rain
				XIX	K. Deforestatio	XXVI.	Environment
					n		al pollution
				XX	. Chemical		
					pollution		

Table 3: Classification of Disasters with examples

Classification	Types	Example
based on		_
ı. Cause	Natural	
	Natural (a) Geological: earthquakes, volcanic eruptions, landslides, avalanches, tsunamis	Sumbawa Island, 1815. Avalanches: Montroc, France, 1999. Tsunami:
		South Asia, 2004.
	(b) Meteorological or Climatic: hurricanes, droughts, heat and cold waves	Hurricanes: New Orleans, USA. 2005. Droughts: Russia, 1921-23. Cold Wave: South Asia, Jan-Feb, 2003.
	(c) Biological: Pest infestations	Pest infestations: coconut leaf beetle infestation, Philippines, 2007.
	Man-made	
	a) Technological:	
	(i) Industrial hazards: Mining disasters	Monongah, West Virginia, USA 1907.
	(ii) Structure collapse: Engineering failures	Can Tho Bridge collapse, Vietnam, 2007
	(iii)Power Outage: Extended power outages	New York City blackout, 1977

(iv)Fire: Bush fire, Mine fire,	Forest fires, Greece, 2007		
Wildfire, Firestorm			
(v) Transportation (Not War):	Titanic, 1912.		
Bus, Ship, Train			
(vi)Aviation: Helicopters,	Japan Airlines Flight 123, 1985.		
Airlines			
(vii) Space Disasters:	Disintegration of space shuttle,		
Shuttles	Columbia, Texas, USA, 2003.		
(viii) Hazardous materials:	Atomic bombing at Hiroshima and		
Radiation contamination,	Nagasaki, 1945.		
CBRNs			
(b) Civil disturbance: riots,	Sarin gas attack on the Tokyo		
terrorism, war	subway, 1995.		
(c) Sociological hazards:	Arson		
Crime			

II. Policy Disaster:

Policy disasters, defined as avoidable, unintended extreme negative policy outcomes, are important political, and historical events. When countries or regions within countries make or are usually prone to make large scale avoidable policy mistakes. The most generally used label for this category of error is policy disasters, generally construed to mean significant and substantially costly failures of commission or omission by the government. The American Historian Barbara Tuchmann added an important extra element to the concept of policy fiascos, namely that the mistakes made are eminently foreseeable – but decision-makers systematically choose to ignore an abundance of critical or warning voices in order to persevere with their chosen policy. Here an elite group of highly motivated decision makers insulated from challenge, disposing of great political and administrative power, and intellectually convinced of their own abilities, determination and direction – progressively cut themselves from information trending to undermine group morale, pushing to dominate its environment or collapses in wreckage around their ears.

Identifying policy disasters is notoriously difficult. It can only be done with hindsight, and even then, it is rare for consensus to be achieved.

III. AGGRAVATING FACTORS TO DISASTERS:

The severity of the impacts of each disaster is reckoned in terms of deaths, damage, or costs which are dependent on the existing socio-economic conditions of the affected community. In fact, the misery of the affected people is usually increased by the following aggravating factors:

1. Poverty

All disaster studies show that the wealthy among the population are less affected and are able to recover quickly. However, poverty generally makes people more vulnerable to all the impacts of disasters. It is only due to poverty that poor people are forced to live in more vulnerable areas such as the flood plains of rivers. Usually, droughts claim poor peasant farmers as victims and rarely the wealthy; and famines are the result of a lack of purchasing power to buy food rather than an absence of food. Many people are forced to move from their homes to other parts of their countries or even

across borders to survive. Such crisis induced migration poses considerable challenges both in terms of immediate assistance and long-term planning for development.

2. Population Growth:

There is an obvious link between the increase in losses from a disaster and the increase in population density. If there are more people and structures where a disaster strikes, there will be more impact. Increasing number of people will compete for limited resources (e.g., employment opportunities) which can lead to conflict. This conflict may result in crisis-induced migration. This type of growth occurs predominantly- in developing countries, which may aggravate the disasters.

3. Rapid Urbanisation:

Rapid population growth and migration are closely related to the major phenomenon of rapid urbanization. It is characterized by rural poor or people in disadvantaged areas moving to urban and metropolitan areas in search of economic opportunities and security. These people find fewer options for the availability of safe and desirable places to build their houses. Here again, competition for scarce resources can lead to social conflicts. Many of the landslides or flood disasters are closely linked to rapid and unchecked urbanisation which forces low-income families to settle on the slopes of steep hillsides or banks of rivers.

4. Environmental Degradation:

Many disasters are either caused or aggravated by environmental degradation. Deforestation leads to rapid rain run-off, which contributes to soil erosion and flooding. The destruction of mangrove swamps decreases the resistance of the coastline to withstand strong winds and storm surges. Drought conditions may be intensified by deforestation, overgrazing, the stripping of topsoil, poor conservation techniques, depletion of both the surface and subsurface water supply and to an extent, unchecked population.

5. Lack of Awareness and Information:

Lack of awareness and proper information usually converts a hazard into a Disaster. This ignorance may not necessary be clue to poverty, but due to a lack of awareness of what measures can be taken to build safe structures on safe locations. Perhaps some people did not know about safe evacuation route and procedure. Other population may not know where to turn for assistance in times of acute distress. In most disaster-prone societies, although there i a traditional wealth of understanding about disaster threats and responses, yet, they may not know what specific steps they should take immediately to escape the crisis.

6. War and Civil Strife:

War and civil strife are regarded a hazard, that is, extreme events that produce disasters. The causal factors of war and civil strife include competition for scarce resources, religious to ethnic intolerance and ideological differences.

UNIT:3 – MANAGING DISASTERS

I. CONCEPT OF DISASTER MANAGEMENT:

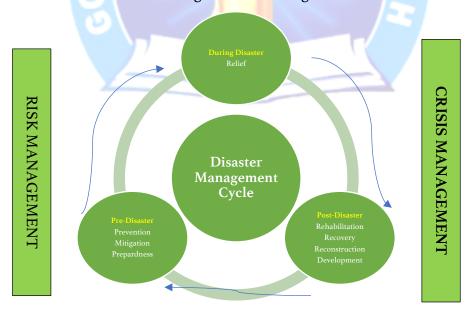
Disaster management is the collective term used to describe all the encompassing aspects of planning and responding to disasters, including post-disaster activities. In other words, disaster management refers to the entire range of activities and interventions that can, and should be, undertaken before, during and after a disaster to minimize loss of life, property and human suffering and to hasten recovery.

The aim of disaster management is to reduce, or avoid, the potential losses from hazards, assure prompt and appropriate assistance to victims of disaster, and achieve rapid and effective recovery.

2. DISASTER MANAGEMENT CYCLE:

Disaster management is a process – a continuum because it is continuous, also called a cycle because one phase may blend into the next without a clear beginning or ending. The Disaster management cycle illustrates the ongoing process by which governments, businesses, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred.

Broadly there are three stages in disaster management cycle – Pre-Disaster, During Disaster and Post- Disaster. All these three stages have sub-stages or intervention measures such as:



i) PRE-DISASTER:

I. Prevention

Activities designed to provide permanent protection from the threat of disasters or reduce the intensity or frequency of a hazardous event so that it does not become a disaster. These include activities designed to impede the occurrence of a disaster event and/or prevent such an occurrence from having harmful effects on communities and infrastructure.

For example, flood control measures; land use regulations; poverty alleviation programs; provision of basic needs; preventative health care and education. Prevention and mitigation activities are directly linked to development activities.

2. Mitigation:

Measure taken in advance of a disaster aimed at reducing its impact on society and the environment. These include all measures that can be taken to minimize the destructive and disruptive effects of hazards and thus lessen the magnitude of a disaster.

For example, structural measures like building dikes and safer houses, to legislation (i.e. restricting people building houses on the seaward side of a dyke) to non- structural measures such as training, organizing disaster-brigade volunteers, public awareness, food security programs and advocacy on development issues.

3. Preparedness:

Preparedness involves measures taken in anticipation of a disaster to ensure that appropriate and effective actions are taken in the aftermath. Preparedness activities attempt to minimize the impact of a disaster by structuring the response and effecting a quick and orderly reaction to the disaster.

Examples include capacity building to better undertake early warning, search and rescue, evacuation and relief operations; the development of and implementation of disaster preparedness plans; stockpiling equipment and supplies for immediate mobilization; emergency communications; shock-brigade training; simulation exercises; public awareness programs.

DURING DISASTER:

1. Relief

Applies to those extraordinary measures required in the search and rescue of survivors, as well as to meet the basic need for shelter, water, food and health care. This includes essential services and activities that are undertaken in the aftermath of a disaster to assist affected people. Examples include: search for and rescue of survivors; provision of food and non-food relief; emergency health; psychosocial interventions, repairing critical facilities (e.g. bridges, power/communication lines).

POST-DISASTER:

- Rehabilitation: Rehabilitation implies activities that are undertaken to support the victims' return to of temporary housing and public utilities as interim measures to assist longer-term recovery through permanent housing and infrastructure. Besides physical elements, rehabilitation programmes also include economic rehabilitation through livelihood recovery and support actions and finding alternate employment options for those who cannot get back to their original occupations due to irreparable damage. Rehabilitation also includes psycho-social rehabilitation for those who are badly traumatised and need support in terms of psychosocial counselling or even medication in some cases.
- 2. Recovery: Activities aimed at trying to return communities to normal life, such as livelihoods development or formal education. Recovery activities can start when the disaster has stabilised, and the affected population has access to food and water and some form of transitional shelter. This stage is sometimes divided into two: early recovery and medium-term recovery.
- 3. Reconstruction: Activities aimed at rebuilding infrastructure and housing. This can often take years and many activities may also blend back into mitigation, such as retrofitting schools to make them more earthquake resistant.
- 4. Development: The inclusion of development as a phase in the disaster cycle is intended to ensure the natural disaster, societies factor hazard and vulnerability considerations into their development policies and plans in the interest of overall progress. The rationale behind the use of the expression 'disaster management cycle' is that disaster and its management is a continuum of inter-linked activities. It is sometimes also referred to as the 'disaster development cycle', implying that disasters are periodic phenomena and occur regularly in such a way that there is development, followed by a disaster, then back to development till the next disaster.

3. EMERGENCY MANAGEMENT:

Pre-Disaster (Prevention and Preparedness)

Prevention: Activities aimed at trying to prevent future disasters from occurring, such as building dykes or a dam to control flooding.

Preparedness: Activities aimed at trying to **prepare communities for a disaster**, such as emergency drills or pre-stocking relief items in logistic hubs.

Post-Disaster (Response and recovery):

Response: Activities aimed at understanding needs and responding to them, including rapid assessments, provision of food and non-food items, provision of water, sanitation and hygiene services, and health and shelter interventions. In the immediate hours and days after a disaster, when search-and-rescue activities are critical, it is most often local actors who are first to respond. Information is often patchy and confused, there can be significant damage to infrastructure, and large movements of people.

Recovery: Activities aimed at trying to return communities to normal life, such as livelihoods development or formal education. Recovery activities can start when the disaster has stabilised, and the affected population has access to food and water and some form of transitional shelter. This stage is sometimes divided into two: early recovery and medium-term recovery.

4. SAFETY TIPS FOR KEY DISASTERS - FLOOD AND AVALANCHE:

I. FLOODS: DO'S & DON'TS

What to do before a flood

- Avoid building in flood prone areas unless you elevate and reinforce your home.
- Elevate the furnace, water heater, and electric panel if susceptible to flooding.
- Install "Check Valves" in sewer traps to prevent floodwater from backing up into the drains of your home.
- Contact community officials to find out if they are planning to construct barriers (levees, beams and floodwalls) to stop floodwater from entering the homes in your area.
- Seal the walls in your basement with waterproofing compounds to avoid seepage.

If a flood is likely to hit your area, you should:

- Listen to the radio or television for information.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.

If you must prepare to evacuate, you should:

- Secure your home. If you have time, bring in outdoor furniture. Move essential items to an upper floor.
- Turn off utilities at the main switches or valves if instructed to do so. Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

If you have to leave your home, remember these evacuation tips:

Do not walk through moving water. Six inches of moving water can make you fall. If you
have to walk in water, walk where the water is not moving. Use a stick to check the
firmness of the ground in front of you.

 Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

II. AVALANCHE:

Dos:

- I. When traveling in areas of snow, always travel in a group. Ensure you have an experienced group leader. Always stay within view of your group.
- 2. When travelling in avalanche prone areas, always carry safety equipment like beacons, probes, shovels, etc.
- 3. Look for avalanche signs in the slopes: fracture lines, eroded snow, or shooting cracks.
- 4. If an avalanche blocks the highway, remain in your vehicle and fasten your seat belts. Wait for assistance. It is easier to find a car in the snow than it is to find a person.
- 5. When caught in an avalanche push machinery, equipment or heavy objects away from you to avoid injury and grab onto anything solid (trees, rocks, etc.) to avoid being swept away.
- 6. If you start moving downward with the avalanche, stay on the surface using a swimming motion and try to move yourself to the side of the avalanche.
- 7. When the avalanche slows, attempt to push yourself towards the surface. Make an air pocket in front of your face using one arm and push the other arm towards the surface.
- 8. When the avalanche stops, begin to dig yourself out, if possible. Relax your breathing, particularly if you cannot dig yourself out.
- 9. Wait for rescuers to come. Stay calm and shout only when rescue searchers are near.

DON'Ts:

- I. Don't go into avalanche-prone regi<mark>ons with</mark>out having taken an avalanche rescue course and safety gear.
- 2. Don't assume that a well-tracked ski slope won't avalanche.
- 3. Don't ignore warning signs like snowpack "whumps," shooting cracks, or signs of avalanche activity on adjoining slopes.
- 4. Never travel alone in snow areas.
- 5. Don't leave a buried avalanche victim, try to rescue him / her.

5. BASIC SKILLS NEEDED TO RESPOND DISASTERS:

To effectively coordinate this cycle, disaster-management leaders must develop a number of critical skills. The skills necessary for each stage of the cycle are as follows:

Prevention

During the prevention stage, strong analytical skills help leaders identify potential threats, hazards and high-risk areas. Problem-solving abilities are also invaluable in identifying the best ways to avoid or diminish the likelihood of catastrophic events.

Mitigation

Planning is an important skill during the mitigation stage; the disaster-management leader will need to develop strategies and structural changes that can help mediate potential

threats. Spreading awareness is also critical, as community members must be made aware of the steps they can take to prepare for all contingencies.

"Of the five stages, mitigation is the most crucial because, if done correctly, it can reduce the impact of the next emergency or crisis," explains <u>Claire Connolly Knox</u>, associate professor and emergency and crisis management academic program coordinator at the University of Central Florida. "As per the National Institute of Building Science, for every \$1 spent on mitigation, there is a \$6 savings post-disaster. Mitigation can include changes to building codes as seen following Hurricane Andrew in 1992 or reinforcing infrastructure as seen in coastal communities in response to sea-level rise and climate change."

Preparedness

During the preparedness stage, it's important to be skilled in training people to respond to disasters. It's important to stay organized, which is the best way to ensure readiness. Oral and written communication skills prepare laypeople and emergency-response personnel for action in worst-case scenarios.

Response

The ability to quickly make decisions is crucial here, as the response stage is time-sensitive. Another valuable skill is delegating essential tasks to other volunteers or emergency responders.

Recovery

As disaster-management leaders help their communities recover, the most essential skills are empathy, understanding and relationship building; indeed, without earning the trust of the community, any recovery efforts are likely to come up short.

UNIT – 4 SOCIAL WORK INTERVENTION IN DISASTER SITUATIONS

I. CONTINGENCY PLANNING:

Contingency planning is a management tool that involves all parts of an organization. It can help ensure timely and effective humanitarian aid to those who need it most. Making a contingency plan involves making various decisions as an organization before an emergency happens. These decisions range from how to manage human and financial resources, how to best coordinate internally and with partners, and what communications procedures to put in place. The contingency planning process can be broken down into

three simple questions: What is going to happen? What are we going to do about it? What can we do ahead of time to get prepared? It is often used when there is a specific threat or hazard which is likely to impact an organization. But it is also important to consider less likely scenarios and develop contingency plans accordingly. Contingency planning must be a collaborative effort. And plans must be linked to the plans, systems and processes of governments, partners and other members of the International Organization.

• FUND RAISING:

There is about I natural disaster occurring every day per year, and the need for assistance is immense. Not all governments have the funding and resources to rebuild after disasters and often there are areas that are hit more than once a year. Unfortunately, this leaves communities to suffer and struggle to rebuild whilst trying to make money at the same time. Many are left without homes or access to food or quality medical care. Others may lose loved ones. This means that there are often physical needs, like building materials, temporary housing, or medical equipment, as well as needs for other services, like blood donations and grief counsellors.

The goal of fundraising in disasters is to provide for these emergency services so that the effects and long-term impact can be minimised. The disaster fund raising helps people in the provision of relief, assist communities rebuild homes and service centres as well as fund emergency teams to help communities. There are different ways of fundraising for disasters such as Online giving forms and donation pages, crowdfunding campaign, peer-to-peer campaign, Text-to-give or text-giving, disaster relief fundraising – virtual and in-person.

MOBILIZATION AND MANAGEMENT OF HUMAN RESOURCE:

The Resource Mobilization Plan is an all-hazards plan for the allocation, mobilization and deployment of resources in the event of a disaster or local incident that requires more resources than those available under any existing jurisdictional or mutual aid agreement. Human resource mobilization means the recruitment and bringing together of human resources for a collective action designed to enhance the work performance during disasters.

Disasters result in wide-spread community impact. Not only would a disaster cause the damage or destruction of public property, it could prohibit some staff from being physically able to travel to fulfil their work duties. This requires responsive human resource management plans to ensure sustainable relief and rehabilitation operations before, during, and after a crisis. Some of the key aspects in disaster human resource management are determining risks, assessing personal needs, considering staffing contingencies, including volunteer efforts, ensuring a platform exists for internal communications, identifying a control centre location, identifying worksite alternatives, offering employee assistance, training employees on social media policy, share your plans and train staff accordingly and review and adjust.

RELIEF MATERIAL PROCUREMENT:

Disasters cause massive destruction and their occurrence (even though declining since the last years) is still a topic of high actuality. To mitigate their negative impacts, in particular, humanitarian organizations put a lot of effort into helping nations and people to recover from disasters by providing relief commodities. Responding adequately to a disaster is difficult due to its highly complex and uncertain nature. Flexible but efficient supply chains are needed, which makes high demands on procurement operations. Within disaster relief logistics, procurement accounts for 65 % of total expenditures.

Instantly after a disaster strikes, relief organizations conduct an initial assessment (usually within one day after occurrence). The expected quantity of supplies required to meet the relief needs of the affected population is estimated as well as pre-positioned supplies, already available at the organization's warehouses, are evaluated. Relief items, which need to be procured from suppliers, are determined. As the next step, this assessment is translated into supply requirements.

Goods can be acquired differently, like in bulk or vendor stored, until needed and procurement can consider just local or also global suppliers and vice-versa. However, most of the big humanitarian organizations often purchase relief items from global suppliers through competitive bidding processes in order to provide equal opportunities to all firms interested. However, in cases of huge disasters, when providing goods quickly in large amounts is crucial, tendering techniques are not applied. In the bidding process, humanitarian organizations first identify potential suppliers which are able to meet the item and delivery requirements. Next, these qualified suppliers are invited to bid. As the final step, humanitarian organizations evaluate the purchasing offers and finally make contracts with the winning supplier. Then the delivery of supplies to the affected areas begins. To increase responsiveness, humanitarian organizations started to establish pre-purchasing agreements with suppliers, which specify in advance quality and delivery requirements for emergency items. Mostly, these agreements contain that suppliers hold emergency stocks for humanitarian organizations.

CRISIS MANAGEMENT:

Crisis management relates to a process of how we prepare for, respond to and learn from the effects of a wide range of major failures that impact upon groups of people, from organizations to local, national and international communities.

When the plan is well structured and well implemented, the emergency is managed effectively, and the human and economic losses are minimised. Emergency and crises management plans are generally structured in a way that helps to standardise and prioritise the actions requested to respond promptly to natural or man-made disasters. They comprehend different catastrophic scenarios and the related strategies that need to be implemented to minimise the impacts. The plans are designed in a way that allows coping with a wide range of situations. Unfortunately, sometimes, the large uncertainty mainly characterising the rapid-onset (as for flash-floods) disasters or the combined occurrence of more than a disaster could seriously put the plans to a harsh test.

RAPID HEALTH ASSESSMENT

Rapid health assessments (RHAs) are used during an emergency response to gather information about the health status and needs of an affected population. They are a systematic way of collecting information in a complex emergency situation, with the information gathered assisting in planning, directing and implementing an appropriate response. I RHAs provide decision makers and partner agencies with a rapid insight into the health needs of an affected population.

The World Health Organization (WHO) recommends RHAs should be completed as soon as possible following an emergency and performed by a multidisciplinary team of qualified personnel, with an appropriate range of expertise. The WHO outlines four steps in a RHA: planning, data collection, analysis and interpretation of findings, and presentation of results and conclusions. 2RHAs can be used in a range of emergency settings and focus on different areas of concern; they can be completed in an international or local context and gather information on issues such as mental health, communicable disease and nutrition.

In the international context RHAs are commonly used as part of an international public health emergency response; an example is the use of a RHA in a refugee or internally displaced persons camp. In this situation, RHAs involve the collection of information describing the demographics, mortality, morbidity, nutritional status, vital needs, shelter and security of the population. This information enables the prioritisation of interventions and identifies areas requiring further assessment.

In the local context, RHAs may be required as part of a public health emergency response following a natural disaster such as a severe storm or flood. In a local response, a RHA would be completed in coordination with relevant emergency response organisations and may contribute to the overall initial impact assessment completed by the Local Emergency Operations Controller during the response phase.

• EMERGENCY HEALTH MANAGEMENT:

In emergencies, disasters and other crises, the lives and well-being of the affected population must always be protected, particularly in the minutes and hours immediately following impact or exposure as time is of the essence in saving lives. The ability of health services to be delivered by critical infrastructure such as health facilities without interruption in these situations is a matter of life and death. It is one of the targets of the Sendai Framework for Disaster Risk Reduction 2015-2030, that is, "to substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030" (Target D). For a safe health facility to remain intact, accessible and functioning at maximum capacity before, during and immediately following an emergency or disaster, it relies on key factors, as follows:

I) Health infrastructure that can resist exposures and forces from all types of hazards (e.g., retrofitted towards disaster risk reduction);

- 2) Medicine and medical equipment that are essential, accessible and protected from damage from all hazards (including climate change impacts);
- 3) Community infrastructure and critical services (such as water, food, electricity and medical supplies) that are available to support the delivery of health services; and
- 4) Health personnel who can provide medical assistance in safe and secure settings where and when they are most needed.

The Hospital Safety Index, developed by WHO is a tool used by health authorities and multidisciplinary partners to gauge the probability that a health facility will continue to be safe and operational in emergency situations. The tool includes evaluation forms, a guide for evaluators and a safety index calculator.

WHO developed the "Health emergency and disaster risk management framework" (Health EDRM) to provide ministries of health and other stakeholders with an overview of:

- I) policies, strategies and legislation
- 2) planning and coordination
- 3) human and financial resources
- 4) information and knowledge management
- 5) risk communications
- 6) health infrastructure and logistics
- 7) community capacities for Health EDRM
- 8) monitoring and evaluation.

• LIVELIHOOD SECURITY:

Disasters almost always affect livelihoods and reduce people's ability to support themselves in the future. In some cases, the disruption to livelihoods can take years to recover from, particularly in areas that experience a greater frequency of recurring disasters. In other instances, livelihood conditions are unlikely to ever return to their previous condition. For those with limited options for alternative livelihoods, the risk of poverty is heightened, and so in turn is their vulnerability to future disasters.

Therefore, although disasters can strike anywhere, the poverty-disaster cycle is the most vicious in the most vulnerable regions. Hence, livelihood security is important aspect of disaster management. If any population is vulnerable to a particular hazard engaging people with activities not related to the hazard, or low disaster impact activities should be part of pre-diester preparedness plan. During the process of disaster when everything including livelihood get affected arrangement should be made for temporary livelihood security of the people, until things turn to normal and people can move to their actual livelihoods.

COMMUNITY BASED DISASTER PREPARDNESS

Community-based disaster preparedness (CBDP) is a process of involving and empowering local people to reduce the risks and impacts of natural and human-made hazards. CBDP

aims to enhance the capacities, resources, and networks of communities to cope with and recover from disasters.

Here are six aspects that you should consider when developing and implementing a CBDP plan.

Assess the hazards and vulnerabilities:

The first step of CBDP is to identify and analyse the potential threats and challenges that your community faces. You can use participatory tools such as hazard mapping, risk ranking, vulnerability assessment, and historical timeline to collect and visualize data on the frequency, intensity, and location of hazards, as well as the exposure, sensitivity, and adaptive capacity of your community. This will help you prioritize the most urgent and relevant risks and needs.

Define the goals and objectives:

The second step of CBDP is to set clear and realistic goals and objectives for your plan. You should involve your community members and stakeholders in defining what you want to achieve, how you will measure your progress, and what indicators and targets you will use. Your goals and objectives should be aligned with the national and local disaster management policies and frameworks, as well as the Sustainable Development Goals (SDGs).

Identify the strategies and actions:

The third step of CBDP is to select and design the appropriate strategies and actions to address the hazards and vulnerabilities that you have identified. You should consider the four phases of the disaster management cycle: prevention, preparedness, response, and recovery. You should also apply the principles of disaster risk reduction (DRR), such as prevention, mitigation, adaptation, resilience, and participation. Some examples of CBDP strategies and actions are hazard-proofing infrastructure, establishing early warning systems, conducting drills and simulations, forming emergency committees, providing relief and recovery support, and raising awareness and advocacy.

Mobilize the resources and partnerships:

The fourth step of CBDP is to secure the necessary resources and partnerships to implement your plan. You should identify and mobilize the existing and potential assets and capacities of your community, such as human, financial, material, social, cultural, and natural resources. You should also seek and establish partnerships with other actors, such as government agencies, non-governmental organizations (NGOs), private sector, media, academia, and donors. You should foster coordination, collaboration, and communication among your partners, and ensure accountability and transparency.

Implement and monitor the plan:

The fifth step of CBDP is to execute and track the progress of your plan. You should follow the action plan that you have developed and assign roles and responsibilities to your

community members and partners. You should also monitor the implementation of your plan, using the indicators and targets that you have set. You should collect and analyse data on the outputs, outcomes, and impacts of your plan, and report and share the results with your stakeholders. You should also document the challenges, lessons learned, and best practices.

Evaluate and revise the plan:

The sixth and final step of CBDP is to review and update your plan. You should conduct a participatory evaluation of your plan, involving your community members and partners. You should assess the relevance, effectiveness, efficiency, sustainability, and impact of your plan, using the criteria and methods that you have agreed upon. You should also identify the gaps, strengths, weaknesses, opportunities, and threats of your plan, and provide feedback and recommendations. You should then revise your plan accordingly, and incorporate the new information, knowledge, and experience that you have gained.

COMMUNITY BASED DISASTER MANAGEMENT:

The term" Community-Based Disaster Management" received attention in the development field in the 1980's, although community based disaster initiatives were already on-going in different parts of the world in formal or informal ways. Though CBDM has been a popular term in the last several years, in very few cases it has actually been incorporated into government policy. It has been a common notion that CBDM is the responsibility of grass root organisations and/ or NGOs.

There are two major aspects in this regard: First, the best practices of CBDM initiatives remain local initiatives and are not properly disseminated. It was observed that even though there have been good examples of CBDM in specific locations within a society, those lessons are not transferred to other parts of the country, neither do they reach the adjacent countries of the region. Second, due to lack of recognition of CBDM initiatives at the national level, there are often limited resources devoted to these activities. Thus, in most areas, CBDM is considered in isolation from national disaster management activities. It is also not included in the national development policies.

Therefore, there is an increasing need to understand the basis of CBDM, and try to formulate a framework for incorporating CBDM into national policy issues with special focus on sustainability. The Great Hanshin Awaji Earthquake of 1995 hit the city of Kobe and other parts of Hyogo prefecture in Japan causing serious loss of life and property. Immediately after the earthquake, the neighbours and relatives rescued many people from the debris. Statistics show that 85 percent of the people were either self-evacuated of were rescued by neighbours. This indicates the importance of community and neighbourhood immediately after such an event. The above case study from Japan indicates the importance of social capital inhering in communities and neighbourhoods during a disaster. It starts immediately after the disaster strikes, since the reconstruction programme incorporates both physical and social issues. Hence, involvement of people in recovery process is the key to success.

• DISASTER COUNSELLING:

counselling offered to victims and their families, emergency workers, and witnesses during or immediately following a catastrophic event. Individual therapists and counsellors and mental health teams are specially trained (e.g., by the American Red Cross) to respond in disaster situations. Their approach may include defusing, debriefing, and other counselling techniques to help traumatized people cope with stress. One aim of the counselling might be to reduce the potential for posttraumatic stress disorder, which may develop after the event.

TRAUMA THERAPY:

Trauma therapy is a form of therapy that can help you deal with the emotional response caused by a traumatic event. "Over 50% of people experience at least one trauma in their lives.I Trauma can include a wide range of situations, ranging from serious injury, sexual violence, and life-threatening events, to chronic abuse and neglect, being bullied, and homelessness," says Kelly Workman, PsyD, a psychologist at Columbia University Medical Centre who specializes in treating trauma.

"While not all trauma survivors experience long-term negative consequences, we know that the experience of trauma can profoundly affect someone's psychological, social, physical, occupational, and financial functioning." (KELLY WORKMAN, PSYD).

Types of Trauma Therapy

There are multiple types of therapy that can help treat trauma. Workman lists some of the forms of therapy a mental health practitioner may use to help you overcome trauma-related issues and treat <u>post-traumatic stress disorder (PTSD)</u>:

- I. <u>Prolonged exposure (PE)</u>: This form of therapy involves exposing you to the source of your fear, until you are not afraid of it anymore.
- 2. <u>Cognitive processing therapy (CPT)</u>: CPT involves challenging your perspective about why the traumatic event occurred and the thoughts and beliefs you've developed since. This form of therapy can be performed in an individual or group setting.
- 3. <u>Trauma-focused cognitive behavior therapy (TF-CBT)</u>: This form of therapy is for <u>children and adolescents</u>. It can help address inaccurate beliefs and unhealthy behavior patterns.
- 4. Eye movement desensitization and reprocessing (EMDR): This form of treatment involves using rhythmic left-right (bilateral) stimulation to help release emotions that have been blocked by trauma.

• GRIEF COUNSELLING:

Grief counselling, also known as bereavement therapy, is a form of therapy intended to help you cope with loss, like the death of a partner, family member, friend, colleague, or pet.

The death of a loved one can cause both emotional and physical pain that can sometimes impair your ability to function. Grief counselling can involve working with a counsellor, therapist, psychologist, or support group to address your feelings.

In the short term, grief counselling can help you navigate the aftermath of a loss and make practical decisions, like funeral arrangements.

In the long run, it can help you accept the loss of your loved one and adapt to life without them.

