UNIT 4 UNDERSTANDING REHABILITATION*

Structure

4.0 OBJECTIVES

After reading this Unit You should be able to:

- Explain the concept of rehabilitation and elaborate on its types;
- Understand the trends that are going to shape rehabilitation process in future; and
- Examine the challenges in the rehabilitation process.

4.1 INTRODUCTION

Rehabilitation is the restoration of local services connected to the fulfilment of urgent needs. According to UNDRR (United Nations Office for Disaster Risk Reduction), rehabilitation is the restoration of basic services and facilities for the functioning of a community or a society affected by a disaster. It denotes an orderly return to pre-disaster conditions. It describes actions taken in the aftermath of a disaster to restore basic services, assist victims' self-help efforts to mend physical damage, re-establish community facilities, revitalise economic activities and deliver support for the survivors' psychological and social well-being. It focuses on resuming typical living patterns for the afflicted population.

It might be viewed as a transitional stage between instant alleviation and considerable long-term growth. Existing research suggests that early involvement with rehabilitation programmes can minimise impairment with improved clinical results, as well as increase the participation and quality of life (QOL) of disaster survivors: Hence disasters become opportunities to plan

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for appropriate development in terms of social, economic and infrastructure aspects.

The incidence of natural catastrophes appears to be growing at a worrying pace, as does the extent to which individuals are surviving such terrible occurrences. Post-disaster survival frequently leads to a rise in population and individual disability-related consequences, such as impairments, activity constraints and engagement restrictions, all of which have a significant impact on the people and the community. The rise in disability-related outcomes following a disaster has provided justification for the disability and rehabilitation sector's increasing engagement in emergency response, particularly physical therapists.

Because of the considerable increase in survivors with complicated and long-term debilitating injuries, rehabilitation is critical after natural disasters. Rehabilitation specialists have the capacity to reduce mortality, disability and enhance therapeutic outcomes and participation. Skilled rehabilitation of human resources and services are either inadequate in disaster-prone nations, or complete rehabilitation-inclusive disaster management strategies have yet to be created. The World Health Organisation Emergency Medical Team project and standards provide structure and standardisation for disaster preparation, planning and delivery of effective and coordinated treatment. There are several hurdles in implementing these standards in catastrophic scenarios and incorporating rehabilitation workers.

Because of developments in emergency field medicine, the overall number of casualties following natural catastrophes is falling, although the proportionate rates of impairment among survivors is increasing. In post-disaster settings, an increasing number of people with newly developed disabilities will be added to the already existing proportion of the population who lived with impairments, resulting in a significant increase in the total number of people with disabilities (PWDs) in communities that are frequently ill-equipped to provide necessary services. Through early activation and avoidance of secondary effects, rehabilitation measures in the early phases of an emergency humanitarian response can reduce long-term impacts among persons with newly acquired impairments.

Massive natural disasters leave numerous survivors with disabling impairments; these survivors might get improved clinical results when treated by PRM physicians (Physical Rehabilitation Medicine physicians are medical specialists who specialise in the fields of physical medicine and rehabilitation.) and squads of rehabilitation specialists; the provisioning of these rehabilitation services to devastated areas is complex; and the lack of which can have grave repercussions for people, communities and society.

4.2 TYPES OF REHABILITATION

Due to the nature of the disaster and the impact it brings on the people, rehabilitation can be categorised in *three* major categories namely economic rehabilitation, social rehabilitation, and psychological rehabilitation. Let us see what they mean:

Economic Rehabilitation

Economic rehabilitation includes the restoration of physical infrastructure such as houses, buildings, road, railways, communication networks, water supplies and power, among other things. It concerns rehabilitation of every section of the society viz; agriculturalists, artisans, small businesses, other professionals, vulnerable sections of the society and even homeless generally provided by government and international organisations. Providing food and fodder supply, subsidy, farm equipment, seeds, fertilisers, employment, finance to Micro, Small and Medium Enterprises (MSMEs), developmental schemes for affected sections are majorly part of economic rehabilitation.

Economic restoration following a disaster never fully recovers what was lost and does not restore communities to their previous "normal" status. As society and economies are irreversibly transformed, a "new normal" emerges. Effective economic rebuilding in this new normal may alleviate individual and community suffering while also boosting economic development and wellbeing in the future. However, we must be aware of the challenges and potential pitfalls of rebuilding. The policies and actions of donor countries should not increase the anguish and misery of disasters.

The other measures on the part of government are related to information gathering, hiring professionals and implementation and evaluation of welfare programmes. The special programmes for agricultural farmers, labourers, skilled workers, animal husbandry, special training programmes, social forestry, as well as those to provide employment like the Pradhan Mantri Rozgar Yojana, Mahatma Gandhi National Rural Employment Guarantee Act, Pradhan Mantri Garib Kalyan Yojana should all be included in the economic rehabilitation package. All remaining elements of the rehabilitation package, such as developing a better environment in the region by establishing green belts and renovating public buildings, should be included in the package on other connected programmes and activities and structures.

Social Rehabilitation

The inclusion of vulnerable groups in the design and execution of services and activities from the day following the disaster or catastrophe is emphasised in social rehabilitation strategies. To develop the capability and potency of the people and the society, these tactics rely on offering appropriate training courses by local and international organisations, particularly local media. Disaster affects vulnerable people more in comparison to others due to lack of support, thus they require more social support to deal with impact of disaster.

As a result, the development of facilities like community centres, day care centres, anganwadis, old age homes and so on is an essential component of social rehabilitation. Health, education and specific activities for women and children should all be included in the social rehabilitation projects. Providing services with the cooperation of the people based on their capacity and potency is one strategy that can increase the participation of the in meeting their needs. Another is gradually reducing the vulnerable groups' reliance of vulnerable groups on outside services. The usage of social resources in the devastated region may be enhanced reciprocally.

Psychological Rehabilitation

The psychological effects of natural disasters are diverse rage in intensity, last for a variety of time periods and are related to the type of the catastrophe occurrence. The psychological repercussions of natural disasters are caused by and directly proportionate to the degree of exposure to dangers, loss, and change, which are the "forces of harm" that define natural disasters. High-risk groups are those that are sensitive to disaster's miseries and the mix of physical and psychological effects, sometimes have not been identified before the occurrence of disaster. The effect of a disaster, reinforced by adversities in the aftermath, "reshuffles the deck" by generating new distinct groups of people in need of medical and psychological help, made up of those who have experienced great trauma and harm. While most people recover quickly from brief distress reactions, some develop psychopathology such as PTSD (Post-Traumatic Stress Disorder), significant depression, anxiety disorders and drug dependence. Those who have lost loved ones in a natural catastrophe are prone to experiencing complex bereavement. The prevention of psychological effects of disasters offers enormous potential, but it has yet to be explored and tested. As evidence-based treatments replace psychological debriefing, early intervention is being redefined; psychological first aid is the latest competitor.

The earthquakes of February 6, 2023, which killed tens of thousands in Turkey and nearby Syria, caused more than 1,60,000 structures, holding 5,20,000 apartments, to collapse or suffer significant damage. Civilians whose lives have been disrupted by earthquakes are more likely to acquire mental health issues such as PTSD, anxiety, depression, and suicidal thoughts. Furthermore, because of the high levels of stress and disturbance to everyday routines, earthquakes can worsen pre-existing mental health concerns. Survivors will need immediate and continuous access to Mental Health and Psycho-social Support (MHPSS) services to minimise the risk of long-term mental health difficulties.

The Chernobyl catastrophe happened on April 26, 1986, at the No. 4 reactor in the Chernobyl Nuclear Power Plant, nearby the city of Pripyat in the north-western Ukrainian SSR of the Soviet Union. Since 1990, the International Federation has been conducting the long-term Chernobyl Humanitarian Assistance and Rehabilitation Programme in collaboration with the National Societies of Belarus, Russia, and Ukraine. Over the course of its 20-year implementation, the programme has unquestionably contributed to a better understanding of how to assist those impacted following a nuclear accident, detect serious diseases swiftly, improve quality of life and provide the population with necessary psychological support. It has also raised the possibility of the Red Cross and Red Crescent playing a role in the humanitarian elements of technical disasters.

No rehabilitation strategy can be effective if it ignores the psycho-cultural context of the damaged place. This implies that it must show appropriate respect for the customs, beliefs, norms, and practices of the people who have been touched by the calamity. Housing and shelter are where the rehabilitation plan's cultural component falls short the most. As we shall see later in this Unit, the recovery plan is frequently created and carried out with complete disregard for fundamental concerns like the availability of water, access to restrooms, personal cleanliness, and privacy for women. These elements need to be considered in a solid rehabilitation strategy.

To address the issues of psychological rehabilitation, a thorough health recovery strategy should be in place because multiple psychological effects might result from physical suffering and sickness. Additionally, there is a substantial likelihood of PTSD following a disaster. The efforts should be made to set up trauma counselling, panic management, psychological debriefing (semi-structured crisis intervention) and crisis intervention.

Check Your Progress 1

Note: i) Use the space given below for your answers.

ii) Check your answers with those given at the end of the Unit.

1. What are the types of rehabilitation?

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2. Explain the importance of psychological rehabilitation in disaster aftermath.

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4.3 DISASTER AND REHABILITATION

Numerous steps could be taken to mitigate the effect of disasters. Different disasters call for different responses. We can understand the responses in various situations as given below:

- **Earthquakes**

Post-earthquake rehabilitation efforts may include urgent relief actions as well as a long-term strategy concentrating on infrastructure repair that was devastated in the disaster. Improvement in education infrastructure through providing permanent structures for students in disaster-affected areas should be provided. It may involve supplying affected individuals with home, hospitals, water and gas pipes, restoring power, energy, transportation and communication. Some of these tasks may need multi-year efforts.

- **Tsunami and Floods**

No build zones in the coastal areas should be earmarked. We should identify areas beyond the "no-build zone" for permanent housing for persons affected by the tsunami, as well as for the rehabilitation of vital infrastructure, including

road access, water supply and sanitation, waste water treatment and solid waste disposal, if possible.

Authorities should make an attempt to avoid or reduce involuntary relocation in conformity with the UN Commission on Human Rights and the General Assembly's Guiding Principles on Internal Displacement. A "no build zone" imposed on a populated coastline may have serious ramifications for persons denied of land tenure or residency rights. In India, Ganga and Brahmaputra basin are prone to frequent floods during the monsoon every year. To mitigate this, we can provide sufficient compensation for land and property if relocation is deemed to be in the best long-term interests of individuals impacted. There can be attempts to create mechanisms for grievance resolution at the appropriate levels of government as well.

The authorities should provide potable water, sewage collection and treatment and suitable drainage systems in all new and reconstructed settlements. Efforts for adoption of construction codes that are appropriate for all structures, including seismic codes in earthquake-prone locations should be made. To save money and avoid future maintenance costs, we should choose standardised, modular systems with replaceable components. The government should encourage the use of local labourers in all stages of the reconstruction process, therefore creating jobs and improving the marketability of the impoverished.

- **Cyclones**

India faces a great number of cyclones on both its western and eastern coast. India began National Cyclone Risk Mitigation Project to implement structural and non-structural measures to alleviate the impacts of the storm. It is intended for India's coastal states and Union Territories. The project is being funded in part by the World Bank. The National Disaster Management Authority (NDMA) oversees its implementation. The Project's goal is to safeguard vulnerable local populations from the effects of cyclones and other hydro-meteorological disasters. The government should assess the damage, provide financial assistance, repair houses and then build resilient and permanent houses better than earlier, create livelihood opportunity to compensate losses of the people. Integrated Coastal Zone Management (ICZM) Project, Coastal Regulation Zones (CRZ), IMD's Colour Coding of Cyclones are some of the other initiatives to mitigate the impact of cyclone and provide guidance to the public.

- **Accidents (Nuclear, Chemical)**

A nuclear disaster occurred on March 11, 2011, at the Fukushima Daiichi Nuclear Power Plant in Kuma, Fukushima, Japan. The Tohoku earthquake and tsunami, one of the strongest earthquakes ever recorded in Japan, were the immediate cause of the calamity. The power station is being decommissioned and great work has been done in removing radioactive contaminants from the soil, farmland, residences and public buildings.

Over 80 per cent of infrastructure, including schools, clinics, and roadways, has been reconstructed. After two weeks of water addition, the three reactors (units 1-3) were stable and by July, they were cooled using recycled water from the new treatment facility. In mid-December, the official

'cold shutdown situation' was declared. Aside from cooling, the major task was to prevent radioactive elements from being released, notably in contaminated water spilled from the three units. There have been no reported negative effects of radiation on nearby residents, nor have any doses approached dangerous levels. However, around 160,000 people were evacuated from their houses and were only permitted a restricted return beginning in 2012. Because of government concerns about radioactive repercussions from the catastrophe, about 41,000 people were evacuated as of July 2020.

- **Biological Disasters**

Biological disasters are unforeseen occurrences that involve widespread sickness, impairment, or death among humans, animals, and plants as a result of micro-organisms such as bacteria, viruses or poisons. Covid 19 was a major health disaster or say biological disaster pushed the world into huge economic and, financial crisis. Covid 19 posed major challenges to rehabilitation services worldwide. Rehabilitation services have always been among the most severely interrupted by the epidemic. At the same time, Covid19 increased rehabilitation demands - both for patients, who were severely ill with the disease and for those who were still suffering from the long-term effects of their condition.

Many countries faced food shortage during the onset and the aftermath of Covid 19. It not only hampered the efforts towards food securities, it reversed the progress made over the year by the international organisations in many countries. Despite the early disruptions to supply chains and the problems of movement limitations, humanitarians swiftly adapted, allowing them to scale-up efforts and continue giving help to the most disadvantaged within months of the outbreak. This scale-up was achieved despite limited funds due to an urgent initial infusion of money, new ways to assistance and a dynamic prioritisation procedure that emphasised the most vulnerable people's immediate needs.

Covid 19 has posed a challenge to all aspects of healthcare, including rehabilitation and will to do so for at least a few years. Covid 19 has accelerated transformation and adaptability. It has the potential to cause a long-overdue shift in rehabilitation attention, resulting in a far better organisation and funding structure that allows for more efficient and effective use of resources that are now fragmented and unproductive. All patients and aspects of healthcare will benefit from this.

Check Your Progress 2

Note: i) Use the space given below for your answer.

ii) Check your answer with that given at the end of the Unit.

1. What are the rehabilitation steps which could be taken during biological disasters?

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4.4 FUTURE TRENDS IN REHABILITATION EFFORTS

The Covid 19 pandemic and effects of climate change have already given enough indications that we should gear up and evolve mechanisms to counter or mitigate the disasters that could come our way in the times to come. The use of science and adoption of futuristic planning should be the hallmark of our efforts to shape the future. The factors which should have our attention for planning for disasters could be explained below:

- **Type and Severity of Climate**

The climate disaster will result in tremendous humanitarian needs in both existing and emerging hotspots. A 1.5°C increase in global warming by 2030 will further exacerbate climatic shocks that are already causing food shortages, endangering human health, and causing widespread migration. The number of catastrophic incidents is expected to reach 560 per year, or 1.5 per day, by 2030, representing a 40 per cent rise in only 15 years. Global disasters increased thrice between 2000 and 2009, compared to 1980 and 1989. The most severe consequences will be seen by underdeveloped nations and disadvantaged people. Women and girls will experience greater rates of death, displacement, gender-based violence, economic losses, educational inaccessibility and child marriage.

The World Bank projects that slow-onset climate consequences would force 216 million people to relocate inside their nations by 2050. Rapid urbanisation and population expansion will make urban population extremely vulnerable. Population growth is anticipated to increase by 99 percent and urbanisation by 213 percent in the 12 countries with an inter-agency humanitarian appeal that are most susceptible and least prepared to adapt to climate change by 2050. Furthermore, as climatic shocks exacerbate other trends and impair people's ability to plan, respond and recover, new hotspots will need help outside typical humanitarian contexts.

- **Uneven Gross Domestic Product Growth**

People who live in fragile and conflict-ridden states will regress much further. In unstable and conflict-affected States, the COVID-19 pandemic's economic repercussions are impeding the recovery efforts. These effects are exacerbated by the consequences of the Ukraine crisis. It will be difficult to reverse high rates of poverty when combined with decreased from taxes, foreign investment, and spending on essential services. 40 per cent of the nations, having an interagency humanitarian response plan in 2022 are at significant danger of, or currently in, debt difficulty due to growing debt pressures. Basic services will be further hampered by slow development, unmanageable debt and shocks to the economy, politics, and climate. Socio- economic circumstances in the poorest countries, especially those already impacted by lengthy crises and violence, are likely to deteriorate and spiral out of control.

- **Increasing Inequality Amongst People and Society**

More individuals will become poor because of growing inequality, both inside and outside of humanitarian situations. Global poverty reduction progress has largely stopped. OCHA's Strategic Plan of 2023–2026, indicates that in 2030,

574 million people, or about 7 per cent of the world's population, will still be subsisting on less than US$2.15 per day, with most of them living in Africa. This amount, which is far higher than the aim of 3%, might increase even more because of the situation in Ukraine. The majority of the "new poor" will reside in sub-Saharan Africa and States that have experienced violent war, which are regions where poverty was previously concentrated. Up to two thirds of the world's extremely poor are predicted to reside in unstable environments by 2030.

Nevertheless, not only in low-income nations will inequality and poverty rise; many middle-income nations will also have sizable population of the impoverished. Women, unskilled and informal workers, racial minorities, and teenagers were the groups most severely affected by the epidemic and they now stand to lose the most because of the tardy recovery, decreased access to essential services and changes in the labour market. An increasing number of impoverished people in low- and middle-income nations will require humanitarian aid due to years of declining income, food insecurity and inadequate catastrophe resilience.

- **Growing Instability, Fragility and Conflict**

There will be increased insecurity, bloodshed, and strife throughout the world. Inflation, inequality, lack of water, food insecurity, poor economic conditions, restricted access to essential services and education and other risk factors are escalating, fuelling greater unrest. Concurrently, a competitive and fragmented geopolitical climate is increasing mistrust among global powers, fuelling instability, and creating power vacuums for non-state armed organisations (ISIS, all-Qaeda, Wagner Group, Bokoharam etc.). Technological advancements and weaponry proliferation are exacerbating war risks. Modern weaponry systems, such as long-distance missiles, drones with Artificial Intelligence etc., make it easier to strike infrastructure, financial institutions, and computer networks, all of which pose considerable social hazards.

With numerous violations of international humanitarian law and other human rights violations and atrocities, civilians will continue to bear the brunt of the suffering. Armed conflict has disastrous implications for gender equality, hurting women's and girls' safety and participation. Around 90% of those killed in armed conflict are civilians, 70 per cent of them are women and children.19 million additional people will relocate to flee war and bloodshed, which will lead to widespread hunger, poverty, and prejudice. Without assistance, the majority would experience prolonged relocation, have restricted access to essential services, land, livelihoods, and education and will be less able to withstand future shocks to the economy, the environment, or their health.

- **Pandemic and Disease Breakout**

The number and variety of pandemics, epidemics and disease outbreaks are said to increase. In addition to rising temperatures, zoonotic pathogen transmissions are becoming more likely due to deforestation, agricultural practices, and the trafficking in animals. Pathogens may spread quickly in a linked society, amplifying socio-economic effects. All nations will be affected, but the most vulnerable people in society and the poorest nations will be the ones that suffer the most. High levels of distrust and violence weakened health systems, social protection measures that are inadequate and poverty will soon turn epidemics

into socio economic and humanitarian catastrophes. Vulnerable sections like girls, women, children, and the poor are particularly at danger due to many types of discrimination, greater vulnerability to violence, job losses and secondary health effects, such as lack of access to sexual and reproductive health care, as the COVID-19 epidemic illustrated. These conditions also lead to increase in crime rate and other social problems such as drug abuse, intoxication, and domestic violence.

- **Divided Geopolitical Landscape**

The international order will become more competitive, multipolar, and fractured, which will exacerbate the drivers of need and undermine attempts to alleviate them. The five tendencies mentioned above are not unavoidable, but to reverse them, we will require creativity, collective desire, and effort. Geopolitical dynamics, however, make such collaborative endeavour implausible. In a multipolar world, several State and non-State actor organisations are vying to further their beliefs and goals. Powers competing for resources, market share and political influence are likely to enhance the dangers of uncertainty, instability, and violence. Rising hostilities between major world powers raise the possibility of war and social devastation. It will be challenging to confront global concerns and transnational challenges without a course correction. Without a renewed commitment to international law, norms and multilateralism, the structures created for safeguarding against humanitarian crises would be eroded, resulting in unsafe conditions for those affected and dangerous working environments for those who serve them.

These trends would affect local people more due their limited indulgence in decision-making. The coming years would also bring progressive developments, including growing capacity building to prepare for and respond to climate crisis and scientific and technological developments that will enhance the living standard and bring economic prosperity.

4.5 CHALLENGES TO REHABILITATION

Over the next decade, the operational environment will get increasingly complicated. While climate change, conflict, economic instability, inequality, and pandemics are not new, they are becoming more severe. They are also interacting and multiplying in unanticipated ways, becoming more irreversible. A fragmented and competing geopolitical landscape complicates these issues, undermining international responses. Simultaneously, the system is collapsing under resource restrictions.

- **Inclusive Approach**

A holistic approach for reconstruction in disaster affected area must consider the different needs of affected body of people. A plight of a farmer cannot be similar to agony of a trader. Children would require treatment and facilities different than old people. Considering these factors, the priorities must be set and planned to be executed.

- **Catering to varied Kinds of Needs**

The pace of rehabilitation is important. This is especially true in poorer nations, where even in the absence of a calamity, livelihoods remain prone to vulnerability. When post-disaster rehabilitation is sluggish, people and communities suffer

profound and long-term economic hardship and deprivation. Five years after Cyclone Nargis made landfall in Myanmar, studies indicated that more than half of the surviving families had yet to rebuild fishing boats and livestock destroyed by the storm surge. Compensation of monetary loss cannot heal psycological trauma of losing loved ones and ancestral home and trade. If recovery efforts are contextual and grounded in local values, they can be therapeutic in helping the victims reconstruct their lives and means of subsistence.

- **International Support**

At times of crisis, foreign assistance is often very useful, but at times it can also create unforeseen difficulties for the local authorities. Lack of cooperation with and among disaster management groups is a prevalent issue. This diverts time and resources away from the local response, which is especially important when international responders are only staying for a limited time. Language problems and issues with human resource to handle equipment sent by international agencies arises frequently in such situations. At the time of Fukushima tragedy planeload of equipment sent by French government could not be utilised by Japanese authorities because the equipment which arrived needed fuel which was not available in those areas.

Poorly prepared and inadequately equipped responders have sometimes resulted in the depletion of needed resources rather than the provision of solutions. Some health care providers have worked outside their area of practise and licencing in prior emergency situations. Many have been dispatched without adequate food, drink, medical supplies, or transportation. Their inability to establish fundamental logistical arrangements burdens already overburdened and disjointed local systems that are striving to provide fundamental essentials to the populace that is affected locally. If local authorities or foreign aid organisations are not coordinated, either current resources are duplicated or opportunities to address service gaps are lost.

Only members of well-established international organisations or Emergency Medical Teams (EMTs) that are officially registered with the World Health Organisation should ever travel to disaster areas on their own. They should only travel at the request of a locally based group, and they should be aware of the minimal technical criteria for rehabilitation in crises. Emergency Medical Teams are now recognised as an essential component of the global health workforce that provide direct clinical care to victims of disasters and armed conflicts and supports local health systems, especially in situations where the local health workforce has been completely decimated and the health infrastructure has been severely damaged or destroyed.

- **Rural Urban Disparity**

Rural regions are perceived to have more limited capabilities than urban areas, with significantly fewer resources, an inability to fully benefit from resources made accessible after a disaster, a failure to deliver basic services daily, and a rapid loss of social support networks as a consequence of systemic pressures like shrinkage of local economy. Cities have a natural advantage in terms of higher budgets and building code enforcement and personnel strength. These larger and more resourced jurisdictions can also have provision for resilience by establishing a “rainy day” fund or investing in robust infrastructure. Rural areas have certain advantages in term of access to natural resources, less

complex local governance, and low population density. In forming policy for reconstruction these factors also must be factored in.

- **Geographical Challenges**

The regional geographical location in which threats emerge dictates not only the spatial spread of exposure, but also affects the complexity of disasters and, as a result, the hazard intensity. Such factors may be critical in triggering multi-hazards, disaster chains and disaster compounding instances. The type of aid require, and nature of reconstruction depends on the affected location. The arrangement and planning in hilly areas would be different than a coastal area. The lake burst caused by a landslide in the upper regions caused the Kedarnath tragedy which was a sequence of natural occurrences culminated in huge catastrophe. The difficulty of terrain and remoteness of those areas hampered the rescue and rehabilitation efforts.

- **Gender Disparity**

The involvement of disadvantaged people, particularly women, in economic rehabilitation efforts to develop small businesses to fulfil their requirements for money is minimal. Supporting women's social engagement increases one's capacity to manage and coordinate a large number of capable and engaged people. The primary barrier to women's participation in economic rehabilitation initiatives is the emphasis placed by both international and local organisations on males as the family's breadwinner and head of household. Enhancing gender equality is essential for increasing a country's ability to withstand natural catastrophes. Not only does it affect human rights, but it also jeopardises hard earned development advancements if it is not addressed.

- **Bureaucratic Indifference**

The bureaucratic machinery often occupied by people whose level of motivation and sincerity for work is at times questionable. The selection procedures for intake into government machinery is devoid of any methods which can examine the persons' dedication or commitment towards the cause of common people. Nearly all governments in the developing world face the challenge of imbibing integrity and sincerity in the workforce. At times of disasters when values of selflessness, empathy and sensitivity towards other people's pain is required bureaucratic tendencies need to be overcome in government machinery. Training mechanisms should be designed to instil such values that would motivate and drive the people to mitigate the agony of the people affected by disasters.

Check Your Progress 3

Note: i) Use the space given below for your answer.

ii) Check your answer with that given at the end of the Unit.

1. Describe the challenges to disaster rehabilitation.

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4.6 A CASE OF KEDARNATH DISASTER REHABILITATION EFFORTS

Kedarnath Disaster was one of the worst disasters that India had witnessed in its Himalaya region. Between June 14 and June 17, 2013, the country's Kedarnath region had unusually severe rains and the Chora Bari lake collapsed because of a cloudburst that caused a significant flash flood. Officially it had claimed 5000 lives but according to the primary rescuers and other unofficial studyes and findings the figured was around 15000. Neverthless, There was unprecedented carnage. Environmentalists link the rains in the state of Uttarakhand to inappropriate development operations carried out in recent decades, which have resulted in a significant degree of property and life damage. Roads built haphazardly, new resorts and hotels built on vulnerable rivers and more than 70 hydropower projects in the state's watersheds all contributed to this "disaster waiting to happen," as some environmentalists put it.

Environmental experts reported that the tunnels built, and blasts carried out for nearly 70 hydroelectric projects contributed to the state's ecological imbalance, with water from rivers flows becoming restricted and streamside construction activity contributing to an increase in flooding and landslides. The government started a fund-raising campaign on both the public and private levels. To name a few, the Uttaranchal Daivee Aapada Peedith Sahayata Samiti, the Uttarakhand Relief Fund, individual donations and Relief Funds like the Chief Ministers Relief Fund, Prime Ministers Relief Fund, etc. have all come to the aid of the state of Uttarakhand to facilitate the above. After the 2013 disaster, the Indian administration devised a well-thought-out plan to reconstruct Kedarnath in a way that was both philosophically sound and considerate of the environment. Kedarnath›s eco-friendly hill town development concept quickly earned the Platinum Indian Green Building Council Grading (IGBC). It is supplemented by a risk reduction plan that calls for appointing and teaching community marshals as well as controlling hazardous circumstances.

For all structures, a vernacular architectural style has been adopted, utilising resources from the region such as building materials, technology, and artisans. Kedarnath is being developed on the 3PECH Formula (Preservation, Protection and Promotion of Environment, Culture and Heritage) to become a premier mountain town for pilgrims. Some of the development works that has been taken are construction of the 12.5 km Sonprayaga-Gaurikunda-Kedarnath Ropeway and Animal Welfare, Saraswati-Mandakini Ghats & Retaining wall, Construction of Bio-digestible Toilets on the Kedarnath Trek Route, Waste Management at Kedarnath Area, Recykal DRS(Deposit Refund System) (one can deposit a plastic bottle and get a refund of Rs10), Material Recovery Facility (for picking up dry waste), Micro Auto Gasification System (MAGS) and Smart Xpress Composter System (SXCS), Intelligent Traffic Management System and Pedestrian Friendly Pathways, Smart Public Addressal System, Eco-friendly Street Lighting System and soon.

4.7 CONCLUSION

Rehabilitation is the integral element of disaster recovery process. It requires not only economic rehabilitation but also social and psychological rehabilitation. Where there is widespread hardship, the state cannot bear the burden of

providing aid to disaster victims alone, it needs help from community and society to implement policy and guidelines. To build community resilience, a community must develop abilities in the following areas: active engagement of community participants in health planning for events and personal readiness, development of social networks, creation of health-promoting prospects to improve the physical and psychological health of the community as well as address disparities in health across subgroups, plans and programmes that address and support the functional needs of at-risk individuals. This unit brought out some of thes points.

4.8 GLOSSARY

Emergency Medical Technician (EMT): A medical worker who offers emergency medical services is known as an emergency medical technician. EMTs are most frequently spotted aboard ambulances.

Post-traumatic Stress Disorder (PTSD): This disorder develops when a person experiences or witnesses a scary, shocking, terrifying or dangerous event.

Physical and Rehabilitation (PRM) Physicians: Physical medicine and rehabilitation physicians are medical specialists who specialise in the fields of physical medicine and rehabilitation.

United Nations Office for the Coordination of Humanitarian Affairs (OCHA): It is a United Nations entity created by the General Assembly in December 1991 to boost international response to complex emergencies and natural catastrophes.

4.9 REFERENCES AND FURTHER READINGS

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4.10 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. Your answer should include the following points:

- Physical Rehabilitation
- Social Rehabilitation
- Psychological Rehabilitation

2. Your answer should include the following points:

- Psycho-cultureal context of the disaster affected region Important
- Respect for the customs, beliefs, norms and practises of the people
- Efforts to deal with post-traumatic stress disorder should be taken

Check Your Progress 2

1. Your answer should include the following points:

- Money infusion
- Prioritise the tasks
- Steps to ramp up health infrastructure
- Public awareness

Check Your Progress 3

1. Your answer should include the following points:

- Inclusive approach
- Catering-many kinds of needs
- International support
- Rural urban disparity
- Geographical challenges
- Gender disparity
- Bureaucratic indifference