
UNIT 7 CREATION OF LONG-TERM JOB OPPORTUNITIES AND LIVELIHOOD OPTIONS

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7.0 LEARNING OUTCOME

After reading this Unit, you will be able to:

- e Understand the concept of livelihood
- Discuss the livelihood approach to reconstruction
- e Bring out the significance of livelihood perspective; and
- Examine the challenges and limitations underlying livelihood options.

7.1 INTRODUCTION

The disaster-affected areas take a very long time to return to normalcy. There is a lot that needs to be done beyond rescue, relief and rehabilitation. A disaster management policy must entail a long-term livelihood generation and support strategy for effective employment creation. New structures and processes that could generate livelihood have to be created as well as sustained. Creation of long-term opportunities of livelihood is a crucial step in building disaster coping strategies.

This Unit discusses the concept of livelihood and its relevance to the approach of reconstruction. It takes up a few Case Studies on livelihood opportunities to examine the challenges and limitations of livelihood options in the aftermath of disasters. There are some significant differences in the means of livelihood commonly seen between rural and urban areas, **and** also between the men and **women** in these areas. These factors are examined in context of their implications for environment and disasters in this Unit. The **broad** livelihood approach to reconstruction is also highlighted.

7.2 CONCEPT OF LIVELIHOOD

Livelihood and the available means of employment opportunities are significant issues even in normal times. But these turn into more compelling needs in the face of natural or man-made disasters. The literal meaning of livelihood is existence of employment, work opportunities or occupation as a means of support. This type of support refers to physical sustenance of individuals' families and households. The livelihood approach is particularly linked with the creation of sustainable environment; In its emphasis on multi-sectoral coordination, the livelihood approach advocates an increase in economic opportunities of work without degrading the natural environment.

The varying nature of economies and the new trends in globalisation present some distinctive features in the case of livelihood opportunities in the developing countries. Some of the contributing factors such as uneven process of industrialisation, non-availability of fertile land for cultivation and process of environmental degradation create a complex scenario with regard to the linkages between rural and urban economies, as well as amongst the available livelihoods.

International Approaches to Livelihood

The operationalisation of sustainable livelihood is broadly manifested in two ways. The first is as an analytical tool, applying a sustainable livelihood lens as a part of policy formulation and/or programme planning process. This ensures that efforts, say to reduce poverty or promote environmental conservation, recognise the linkages between development and environment; and the effects of such linkages on the livelihoods of the poor. The second is the manner in which the approach of sustainable livelihood is used for the design and implementation of sustainable livelihood programmes. In this context, sustainable livelihood initiatives aim to strengthen one or more aspects of a household's livelihood through distinct programme interventions (e.g., provision of micro-finance), but does so in a consistent manner within an overall sustainable livelihood framework. In essence, a sustainable livelihood programme acts merely as a demonstration of the approach. It is imperative to understand that this approach is adopted, modified and tailored to the individual country's context.

The United Nations Development Programme (UNDP) has been at the forefront of employing the sustainable livelihood approach. Different governmental ministries have come together to discuss the pros and cons of using a sustainable livelihood lens for poverty reduction. Substantive interaction among ministries has meant that actions at the local levels (e.g., district, community) are better coordinated and implemented. Moreover, by using a sustainable livelihood approach, UNDP has managed to bring together a diverse set of actors (e.g., government, civil society, donors and community-based organisations) that have traditionally operated in isolation from each other.

Many other premier agencies are also striving to have a well-rounded approach to development. For instance, the Environment Strategy Document of the World Bank is a step in this direction. The goal of the World Bank's Environment Strategy is to promote environmental protection as a fundamental element of development and poverty reduction strategies and actions. The World Bank's Board of Executive Directors has endorsed an Environment Strategy on July 17, 2001. The Strategy has three interrelated objectives:

- **Improving** the quality of life
- Enhancing the prospects of quality of social and economic growth; and
- Protecting the quality of the regional and global environmental commons.

The Significance of the Livelihood Perspective

Some important approaches and steps underlying the livelihood perspective are:

- Rational and planned growth of agricultural, industrial and tertiary or services sectors of the economy
- Creation of employment opportunities
- Programmes for the youth, women and physically handicapped
- Alternative cropping patterns, irrigation and water harvesting techniques
- Social forestry
- Promotion of skilled labour

Issues such as protection of the environment, promotion of developmental programmes, and creation of employment opportunities are integral to any long-term livelihood strategy. Sustainable livelihoods are best created through planned use of locally available resources. If this is ignored, plans ostensibly meant for economic development do not succeed. Livelihood initiatives are required both in 'normal' times as well as at the time of disasters. Livelihood Options Research (LOR) Project in South Asia aims at creation of alternative livelihood generation. It:

- Applies participatory research tools and methodologies to the study of livelihood options
- Identifies gaps in institutional arrangements that largely neglect the livelihood options
- Criticises the existing disaster management approaches that do not include 'at-risk' communities
- Confirms the notion that there is a wide gap in our knowledge on risk and vulnerability in South Asia
- Maintains that there are lack of analytical concepts in addressing risks and vulnerability in South Asia
- Appreciates indigenous coping systems and tracks down differential impact of disasters on different vulnerable groups in different social settings
- Suggests ways of enhancing the knowledge base of various social determinants that multiply the effects of natural hazards
- Concludes that natural hazards are not disasters. They become disasters only when 'at-risk' communities are not able to fight the menace through their physical and social resilience (Bhatti, 2003).

The Cases given in the next Section of this Unit illustrate planning for sustainable livelihood in normal times as in Himachal Pradesh, and the livelihood approach as it has been employed in post-earthquake Gujarat.

7.3 CASE STUDIES ON LIVELIHOOD OPPORTUNITIES

Governmental, non-governmental and people's initiatives in creation of livelihood options could go a long way in developing sustainable development strategies for long-term disaster mitigation.

Let us now look at some Case Studies to further understand the crucial interlinkages in development of livelihoods:

The Development of Economic Zone in Kullu District in Himachal Pradesh

The government's daily wages are important to people of this economic-zone, especially in the absence of other employment opportunities. Though there is an extensive opportunity for daily wage work in this region, it is somehow only being selectively provided. The poor thus had been finding it difficult to obtain work for any meaningful stretches of time until now. Women had been largely engaged in nursery work while the bulk of other daily wages work had been going to the men.

After the eco-zone initiative was taken up, it was agreed as a policy that in the eco-zone area of great Himalayan National Park in Kullu, the first preference in daily wages work would be given to the members of the Women Savings and Credit Groups. Over the last one year, this decision has helped to provide several hundred man-days of work to group members in a number of panchayats. Some groups have agreed to save one third of their daily wages on a regular basis. Such a step could greatly increase their collective and individual savings.

The success of vermin-composting as an income generation activity can be largely attributed to the assurance given by the National Park authorities to purchase the compost produced by the groups. The local Forest Department too is a major buyer of vermin-compost from the groups. The Forest Department uses vast quantities of manure in its nurseries every year. A policy decision to purchase vermin-compost produced by women's groups in the area could give a big boost to this important livelihood opportunity in the years to come.

Livelihood Initiatives in Gujarat

After the earthquake, it was easy to measure the loss of life and property, but what emerged as the most difficult task was rebuilding the livelihoods of the affected people. Most of the water resources such as ponds, wells, check dams etc., were completely damaged. Storage areas were lost and thus food grains became scarce. People lost their sources of income and there seemed hardly any scope for retrieving the livelihood means. In addition, since most parts of Gujarat have been prone to droughts, inappropriate models of agricultural development and water management have already led to recession in ground water levels; salinity has increased and desertification is on the rise.

Realising the need to rebuild capacities of the people in a manner that it reduces their vulnerability to multihazard situations, the UNDP dovetailed rehabilitation programmes towards an integrated livelihood approach. Immediately after the relief phase was over, UNDP partnered with 'Abhiyan' network of NGOs to repair the small water harvesting structures in Kutch District, which were posing a threat to the village habitats in the ensuing monsoon. Using assistance from the Government of Italy, 34 water bodies (check dams, minor irrigation dams etc.) were repaired or partly reconstructed in Anjar, Bhachau, Rapar, Mundra, Bhuj, Abdasa and Mandvi Talukas of Kutch District in the initial phase.

UNDP has also been supporting a Drought Proofing (through watershed development and eco-regeneration for vulnerability reduction) Project for the District of Kutch, with assistance from the Government of Netherlands. As a part of the Project, UNDP in association with the Government of Gujarat, Environmental Planning Collaborative (EPC) and Kutch 'Nav Nirman Abhiyan' have set up a Kutch Ecological Fund (KEF). The Project aims at supporting and facilitating the planning and implementation of initiatives towards long-term recovery and drought proofing of the region. A Core Planning Team (CPT) has been set up to operationalise the KEF, which is headed by the Chief Relief Coordinator, Kutch Rehabilitation Programme.

A few research studies and village level consultations were conducted to arrive at income equivalents of various entitlements and their corresponding occupations, which are specific to the conditions in Kutch. These income equivalents were used against the household entitlements to calculate annual household incomes. The incomes were compared with the vulnerability categories developed again for specific drought conditions in Kutch.

As a result, it became possible to develop certain benchmarks. The advantage of this kind of analysis, is that it helps in targeting interventions for drought proofing to the vulnerable households. It further helps in designing the interventions to increase income-generating capacities of the households (reflected by their portfolio of entitlements) to cope with drought conditions. Besides formulating long-term strategies towards drought proofing, UNDP has been supporting 'Abhiyan' in constructing and repairing dams and other water harvesting structures. A total of 30 rainwater-harvesting structures have been planned for repair/ construction / renovation under this section of the programme. These have been spread over the talukas of Abdasa, Anjar, Bhuj, Mandvi, Mundra and Nakhatrana in the District of Kutch.

7.4 LIVELIHOOD APPROACH TO RECONSTRUCTION

The livelihood approach is significant even at the time of reconstruction and thus mention of some of the instances from different countries are in place here. Let us first take the case from North Korea. After a series of meetings between World Vision and Floods Damage Rehabilitation Committee, North Korea, it was agreed that World Vision should provide raw material to produce noodles. As an experiment, a first noodle factory was built in Pyong Won and the first production of 1 ton of noodles started in December 1996. It was followed by 50-ton production every month to feed 10,000 people (4,500 children and 5,500 elderly) in the Pyong Won area.

Following the success of the noodle factory in Pyong Won, World Vision and Floods Damage Rehabilitation Committee, North Korea, agreed to build 5 additional factories in other parts of the country in October 1997. With the construction of 6 noodle factories during 1998, World Vision's North Korea Programme has now developed into one of the most effective areas of their Relief Ministry. The distribution of noodles is designated to nurseries, orphanages, kindergartens, elderly care facilities, and hospitals in the neighbouring areas of the factories and distribution is made on daily basis to these recipients.

Another instance could be cited from the pastoralists around the world who, in general, are quite vulnerable to disasters. These pastoralists (nomads and trans-humants), as per the Food and Agriculture Organisation (FAO, 1987) constitute the majority of the inhabitants of arid, semi-arid and dry sub-humid areas and their shelter needs have rarely been considered by the national policies. Predominantly smallholders, they are the first to suffer from severe winters or recurrent droughts. The small herders often lose all their reproductive stock during severe drought. In order to understand the plight of the destitute pastoralists, one should observe the following generalities.

First, in spite of the noticeable increase in the number of livestock in the dryland areas during the last 30 years, the overall holding capacity of the grazing resources has remained unchanged. The increase in livestock population has rarely been associated with improved range and pasture productivity, but has mostly been induced by supplemental feeding using both local (food crops and crop residues) and external resources (grain imported From high potential areas). The use of supplemental feeding, particularly subsidised food grains (e.g., in West Asia and North Africa), has modified the traditional fluctuation in animal numbers during drought and normal years and kept more animals on the range, thereby disturbing the natural balance and intensifying the degradation process.

Second, it has been established that the range of productivity in the dry land areas is primarily influenced by rainfall fluctuations and that severe multi-year droughts are predominant causes of the high rate of periodic losses in animal numbers. There is much evidence that the people most adversely affected by climatic changes are the smallholders. Thus, a systematic livelihood approach should target the affected people-shelterless, disadvantaged, tribals, poor as well as livestock and physical infrastructure.

7.5 LIVELIHOOD OPTIONS: CHALLENGES AND LIMITATIONS

A fundamental issue before a livelihood approach is to ensure a means of employment and a source of work. This has emerged as one of the most significant challenges to providing livelihoods. There is a rapid migration of large number of people from rural to urban areas, which creates an imbalance in terms of the supply of and the demand for opportunities in the urban areas, particularly where sufficient planning has not been undertaken. Similarly, the rural economy is geared towards the changing demands in the context of large-scale migration and fragmented households where one or more members have emigrated. There are several challenges to ensuring the livelihood of people in diverse geographical and socio-cultural settings in the face of emerging environmental trends as well as disaster situations. This Section looks at some of these challenges.

The impact of disasters on life and property is increasing by the day. During the 1990s, three times as many natural disasters have affected the communities. As a result, economic losses due to natural disasters have increased tenfold. Much of this increase is due to a dangerous combination of increasingly degraded natural environment and more and more populations moving into disaster-prone areas. Environmental degradation can be witnessed in the form of acute climate changes, deforestation, desertification, salinisation of soil, as well as polluted air and water bodies.

USAID/OFDA and other members of the disaster relief community continue to face major challenges posed by the significant increase in worldwide disasters. These challenges demand **stronger** links between relief and development in an effort to prevent and reduce the impact of natural disasters on land and communities. USAID/OFDA has been working toward a greater capacity and **resourcefulness** in responding to and mitigating these impacts by combining disaster reduction and prevention programmes. Efforts have also been made to establish linkages with other US agencies and international institutions for strengthening its internal capacity for response.

An important factor precipitating environmental degradation is global population growth in the context of dire poverty. Much of the world's population growth is concentrated in urban areas, where half of the world's six billion people now live. According to a recent Population Institute Report, this proportion is continuously growing at a rapid pace. Much of this urban growth is neither planned nor regulated. In some of the world's largest cities, according to United Nations Environment Programme (UNEP), around 30 per cent to 60 per cent of the urban population lives in unauthorised settlements and shanty colonies.

The lack of socio-economic opportunities in rural areas is one of the factors that has pushed populations into cities. These migrants settle in vulnerable but affordable sites. These are generally precarious urban locations on the least desirable land. This land is often most prone to hazards, such as landslides, floods or fires. The population cramped in these areas can destroy the land's natural resilience, thereby making it even more vulnerable. Unauthorised settlements are characterised by inadequate construction, poor or non-existent sanitation and high concentration of people, all of which greatly increase vulnerability to disasters, as

demonstrated vividly during 1998 Hurricane Mitch and the 1999 Venezuela Floods. The vulnerable conditions of New Orleans that became obvious in the aftermath of Hurricanes Katrina and Rita are also too stark to ignore.

Deforestation is one of the most visible signs of environmental degradation. According to the UNEP, half of the world's forests are located in the developing countries; and during the 20th century, forested areas in these countries have been halved. Deforestation on hillsides often leads to soil erosion, landslides and increased risk of flooding as water runs off slopes rather than being absorbed. A reduction in the absorptive capacity of soil contributes to ground water resource depletion. If groundwater reserves are depleted, it can take hundreds of years for them to be replenished; if groundwater is used beyond the replenishment rate, it becomes, in effect, a non-renewable resource.

In arid regions, which cover some 40 per cent of the Earth's land surface, a warmer Earth and increased pressure due to human activities could only accelerate desertification. Salinisation also is a common problem that affects soil quality in arid regions, as salts accumulate in the upper soil layers over time, often exacerbated by irrigation with poor quality water and inadequate drainage. Both desertification and salinisation can render soil useless for grazing or agricultural production, leading to the displacement of populations away from the region. When drought strikes, traditional agricultural coping methods to meet poor rainfall may no longer be adequate to deal with these new challenges.

There is a growing evidence that the Earth's climate is getting warmer at a faster pace. The UN Report on Climate Change concluded that the Earth's average temperature may rise by as much as 10 degrees Fahrenheit during the next 100 years. Effects that may flow from this type of global warming include the weather that is increasingly volatile, storms that are more frequent and intense, and changing rainfall distribution patterns that inundate some areas while leaving out others to suffer drought conditions of unprecedented intensity. And these are only the short-term effects. Global warming may be expected to have longer-term effects as well. The glaciers may melt and areas covered by permafrost may shrink, sea levels may rise, ocean currents may change, and warm climate diseases such as malaria and cholera may spread to new areas. Millions and millions of people could be displaced, as low-lying coastal areas get inundated by rising sea levels.

When environmental degradation leads to a scarcity of basic resources, such as food and potable water, social tensions and conflict may arise either between or within the states. Territorial rights to bodies of water shared across boundaries are an increasingly contentious issue. Furthermore, environmental degradation has the potential to propel large-scale population displacement, as land becomes unusable or climate-related disasters drive people out of their homes, just as drought conditions have precipitated an exodus from Afghanistan. Migrations may lead to tensions between migrants and host communities, particularly if resources are also scarce in the host area. Since there are a complex variety of factors that drive these conflicts, it is difficult to determine the role that the environmental factors usually play in these conflicts.

Solutions to such complex problems is not easy. Balanced rural development is a way, out. Everyone agrees with the concept of thriving rural communities that maintain healthy landscapes and clean water. However, in many communities this kind of vision is not being created. Sometimes, it is due to lack of knowledge or callous actions on the part of the administration, but more frequently it is due to economic forces that are much larger than the confines of the community.

Watershed partnerships are developing across the country that may bring the decision-making power back to the local level. Such initiatives have been successful and have got beyond finger

painting. They have created working relationships between diverse stakeholders. Only with this network of support can farmers and other landowners produce benefits that could be recognised in the global economic system.

Environmental problems have to be solved cautiously. Take for instance, the case of Minnesota, USA. It is now widely recognised that fires play an important role in forest ecosystems. Minnesota's jack pine has fire resistant bark and cones that are closed tightly by a thick resin. During a fire the resin melts, releasing the seeds. Without fire, jack pine cannot regenerate naturally. Although the importance of fire to forests is being acknowledged, its reintroduction is a complicated process due to the risks involved for the humans and the forests themselves. After so much fire suppression, a great deal of fuel (dead branches, logs, leaves) has built up on the forest floor. This amount of fuel allows fires to burn hotter and more intensely than forests are adapted to. This can lead to the death of all trees and plants in the area - not the normal result of a wildfire. In other words, fires can be good for forests, but not the kind of fires created by years of fire suppression.

Determining how to reincorporate uses of fire safely into forest ecosystems is just one of the many challenges facing sustainable forest management. Thus, environment management is the most crucial challenge before an effective livelihood programme. Creation of livelihood options is interlinked with environmental preservation. It is thus clear that long-term livelihood opportunities cannot be created in degraded environmental conditions.

7.6 CONCLUSION

Creation of livelihood options as a significant vulnerability reduction approach could be used in the context of development in general and disaster prevention and management in particular. The coordination of different sectors and agencies is crucial to this approach. UNDP has been playing an important role in creation of livelihood options. This Unit discussed some of the issues involved in the creation of livelihood options in dealing with the challenges underlying the livelihood approaches. It brought out the interlinkages between environmental conservation and creation of livelihood options through some Case Studies from Himachal Pradesh and Gujarat in India and Minnesota in the US. These Cases focused on the manner in which the livelihood means and economic opportunities need to be planned keeping in the mind the natural environment and prevailing socio-cultural practices.

7.7 KEY CONCEPTS

Deforestation

The process of continuous felling of trees and other plantation in the forests due to man-made and natural seasons is called deforestation. It is usually defined as the loss of forestry. Food and Agriculture Organisation (FAO) defines deforestation as converting forests to another land use. It results in many negative consequences. Forest conversion for permanent pasture, shifting cultivation, urban area expansion, overgrazing etc., all cause deforestation.

The process of deforestation could cause the climate to become more extreme in nature, and the occurrence and strength of floods and droughts could also increase. It is projected that deforestation and the burning of biomass will be responsible for 15 per cent of the green house effect between 1990 and 2025. Deforestation permanently destroys the biodiversity that a forest contains, and a degraded forest may not be able to support species adapted to the specialised conditions.

Desertification

Desertification is becoming a major problem as more and more of the world's land surface is turning into a desert. The new deserts, which are being created, are not necessarily hot, dry, sandy places, but are those areas where humans have mistreated the soil and rendered the land useless for agricultural purposes. Soils, in any case are ruined easily in areas where seasonal rainfall is unreliable. Cutting down of forests and trees, over-cultivation of soil and overgrazing leads to desertification.

Global Warming

The earth is getting warmer by the day. Human activities as well as natural processes have precipitated the rate of global warming by producing certain green house gases such as carbon dioxide, methane and chloro-fluoro- carbons into the atmosphere. It is the people also who are causing the change in the climate by burning nature's vast stores of coal, oil and natural gas. Some studies suggest that ultraviolet rays may also be causing global warming. Mountain glaciers the world over are receding, the Arctic Ice Pack has lost a large percentage of thickness, and global sea level has risen about three times faster over the past 100 years. The plants and animals are also changing behaviour in response to the shifts in the climate. Clearly, global warming is a problem. It will take the government, industry, communities and individuals to come together in order to make a real difference to alter this process.

Social Forestry

The National Commission on Agriculture, Government of India, first used the term 'Social Forestry' in 1976. It was the time when India decided to go in for a Social Forestry Project to take the pressure off the forests and make use of all the unused and fallow land. The Project aims at raising plantations by the common man so as to meet the growing demand for timber, fuel wood, fodder etc., thereby reducing the pressure on the traditional forest area. It involves community participation as a part of a drive towards afforestation and rehabilitation of the degraded forest and common lands in order to meet the fuel wood demands. Social Forestry scheme comprises various sub-schemes such as farm forestry, community forestry, extension forestry and agro-forestry.

Watershed

We all live in a vast watershed, as we all contribute to the health of the lakes, rivers and groundwater in our watershed and beyond. A watershed is the area across or under which water flows on its way to lakes, rivers, streams and ground. Any area of land is made up of overlapping basins. Water flows to the lowest point in each of these basins - usually a lake, stream, pond or river. This basin is a watershed, and can come in many different shapes and sizes. The Mississippi River Watershed, for example, is composed of hundreds of smaller watersheds.

7.8 REFERENCES AND FURTHER READING

Allaby, Michael, 1996, *Basics of Environmental Science*, Routledge, London.

Bhatti, Amjad, 2003, "Disaster Risk Reduction and Disaster Policy" in Pardeep Sahni and Madhavi Malalgoda Aryabandu (Eds.), *Disaster Risk Reduction in South Asia*, Prentice-Hall of India, New Delhi.

Blunden, John *et al.*, (Ed.), 1978, *Fundamentals of Human Geography: A Reader*, Harper and Row Publishers, London.

Brown, Lester R *et al.*, *Vital Signs, The Environmental Trends that are Shaping our Future*, Worldwatch Institute, USA.

Doornbos, Martin *et al.* (Eds.), 2000, *Forests, Nature, People, Power*, Blackwell Publishers, London.

Khatun, Hafiza, 2003, "Livelihood Strategies in Disaster Risk Reduction in Bangladesh" in Pardeep Sahni and Madhavi Malalgoda Aryabandu (Eds.), *op.cit.*

Riitta, Tiia (Ed.), 1999, *Managing the Globalised Environment: Local Strategies to Secure Livelihood*, IT Publications, London.

Sinha, U.P, 1985, *Planned Development of Resources in a Developing Region: An Economic and Geographical Analysis*, Inter-India Publications, New Delhi.

7.9 ACTIVITIES

- 1) Enumerate different ways in which the community could be involved in planning for livelihood options that are relevant and sustainable.
- 2) Prepare a list of the major challenges underlying the provision of livelihoods and economic opportunities in the present times.
- 2) On the basis of Activity Two, compile your points and then write a note on the ways to overcome these challenges.