
UNIT 9 REHABILITATION, RECONSTRUCTION AND RECOVERY*

Structure

- 9.0 Objectives
- 9.1 Introduction
- 9.2 Rehabilitation
 - 9.2.1 Physical Rehabilitation
 - 9.2.2 Social Rehabilitation
 - 9.2.3 Economic Rehabilitation
 - 9.2.4 Psychological Rehabilitation
- 9.3 Reconstruction
 - 9.3.1 Development of Physical and Economic Infrastructure
 - 9.3.2 Funding Arrangements for Reconstruction
- 9.4 Recovery
 - 9.4.1 The Ground for Recovery Activity
 - 9.4.2 Problems in Recovery Areas
- 9.5 Conclusion
- 9.6 Glossary
- 9.7 References
- 9.8 Answers to Check Your Progress Exercises

9.0 OBJECTIVES

After reading this Unit, you should be able to:

- Discuss the scope of rehabilitation;
- Explain the need of rehabilitation;
- Understand the scope of reconstruction;
- Explain the requirements of reconstruction and its significance; and
- Describe the relevance of recovery.

9.1 INTRODUCTION

Rehabilitation, reconstruction and recovery are three essential facets in post-disaster phase. These are in direct consonance with the nature of the disaster, location of disaster, proportion of damage, direct and indirect losses, availability of human resource with local capacities, available material resources along with institutional capacities. For example, when an earthquake occurs, it leads to damage of infrastructure and buildings, therefore, the planning for rehabilitation and reconstruction

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should be related to buildings and infrastructure. In the previous Unit, we have learnt about damage assessment and in this Unit, we will discuss rehabilitation, its types; reconstruction, requirements of reconstruction; and relevance of recovery as well as problems in recovery.

9.2 REHABILITATION

Rehabilitation means to take necessary actions after the disaster to resume the basic services, help the victim, to compensate the physical damage done to the surroundings and to start again economic actions to provide psychological support, social security and comfort to the victim. It functions to capacitate the affected people to restart regular functions of life. It may be considered as a dovetailing between present time relief and long-term development. Thus, the main aim of rehabilitation is to revive the victim to the normal life. Rehabilitation is classified as:

- Physical Rehabilitation
- Social Rehabilitation
- Economic Rehabilitation
- Psychological Rehabilitation

9.2.1 Physical Rehabilitation

Physical rehabilitation is an important component of rehabilitation. In this step, the focus is on the reconstruction of physical amenities such as houses, buildings, railways, roads, water supply, communication network, electricity, etc. It also includes strategies towards environment protection, employment generation, job creation, watershed management, alternative cropping techniques, canal irrigation. Rehabilitation of animal husbandry, agriculture, farm implements, flood plain zoning, land-use planning, retrofitting of undamaged houses are some other related activities of physical rehabilitation.

9.2.2 Social Rehabilitation

Social rehabilitation has its own significance. It aims at providing social support to sufferers. It could be through:

- Establishing educational committees that provide regular counselling to sufferers.
- Finding persons who could conduct educational activities and provide books and writing material to children.
- Running various programmes related to physical and mental health, stress management, nutrition and hygiene etc.
- Providing day care and old age homes to the sufferers for a limited time period.
- Setting up multi-purpose community centre and promote self help group.
- Finding native surroundings to sufferers like old age persons, women & children.

9.2.3 Economic Rehabilitation

It plays an important role to compensate the economic loss occurred due to the disaster, it involves providing compensation to the victim based on:

- Broad investigation of actual and future hazard and compulsion of troubled group; and
- Investigation of current livelihood planning and business.

9.2.4 Psychological Rehabilitation

One of the most important steps of rehabilitation is psychological rehabilitation. It is a very sensitive issue. Shock of disaster is directly connected with victims' psychology. The victims generally experience many types of physical and psychological strains.

A disaster victim goes through specific types of emotional stages. Psychological rehabilitation focuses on treating victims to cope up with the emotional imbalance. The psychological rehabilitation helps the victims to lead a normal life. Counsellors help the affected in leading a happy and healthy life.

9.3 RECONSTRUCTION

Reconstruction means to repair or to re-establish all services like buildings, infrastructure, replacement of damaged structures, reintegration of economic sectors (industries & agriculture), and the creation of cultural, social and environmental settings. Reconstruction is a long-term development plan to mitigate or reduce future disaster risk by incorporating appropriate measures. Damaged structure may not be necessarily being restored to their previous form. It may include temporary arrangements. Reconstruction aims to build the rehabilitated system to safer standards so that the future risks could be reduced.

The reconstruction efforts aim at restoring the affected structures to a condition equal to or better than what existed before the disaster. It also aims at constructing permanent housing besides restoring the basic amenities.

Reconstruction should pay attention to certain specific activities for speedy recovery in disaster hit areas. Every disaster results in a different type of damage, for example, when an earthquake occurs, it damages the infrastructure and buildings of that area, therefore, the planning for reconstruction should focus on mentioned thrust areas.

The major steps of reconstruction are:

9.3.1 Development of Physical and Economic Infrastructure

Infrastructure is classified as:

- **Physical Infrastructure:** Physical infrastructure includes roads, water, drainage, electricity.
- **Service Infrastructure:** In service infrastructure, transportation, health and education are included.
- **Social Infrastructure:** In social infrastructure, social sector services, primary healthcare, old age homes and community centres are the main components.
- **Environmental Infrastructure:** In environmental infrastructure, creation of necessary environmental conditions to reduce the risk of disaster is the thrust area.

When we talk about the physical infrastructure in relation to disaster, we refer to the nature of houses. In case of earthquake, it needs to be ensured that the houses

are earthquake resistant. In the case of flood, it needs to be ensured that the houses are constructed away from the flood prone area. In case of landslides, it needs to be ensured that the houses are constructed away from the area prone to landslides. Housing infrastructure needs to be planned according to the environmental conditions of the region.

Example of post-earthquake rehabilitation in Gujarat is useful at this point. The agenda in the reconstruction programme, propagated by United Nations Development Programme (UNDP), has not been just to build houses, but also construct them in a demonstrative manner to transfer the technologies to the villagers. These houses have served as model houses, incorporating disaster resistant technologies.

The UNDP's shelter programme aimed to:

- Build local capacities (training of semi- skilled construction workers and masons in hazard resistant construction)
- Support the environment (use of alternative technologies)
- Involve local communities
- Help rebuild lost livelihoods

9.3.2 Funding Arrangements for Reconstruction

It is very important to have proper knowledge about the policies available for providing funds for reconstruction in a disaster hit area. Central and state governments have specific schemes/ strategies for providing funds for disaster management activities like reconstruction and rehabilitation. Some of the funding arrangements are as follows:

9.3.2.1 National Disaster Response Fund (NDRF)

The NDRF (earlier known by the nomenclature NCCF) is a Fund constituted under Section 46 of Disaster Management Act, 2005. It covers calamities of cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst and pest attack. NDRF is operated by the Government of India (GoI) for the purpose of providing immediate relief to people affected by the calamities of severe nature, under non-plan expenditure. NDRF is classified in the Public Account in Sub-section(b) Reserve Funds not bearing interest of the Government of India under the National Disaster Response Fund major head 8235 – ‘General and other Reserve Funds’ – 119. Funds are to be credited into NDRF in accordance with the provisions of DM Act. Let us have a look at some of these provisions (IGNOU-NDMA, 2012):

- Upon a request made by a state not having adequate balance in its State Disaster Response Fund (SDRF), Ministry of Home Affairs (MHA) or Ministry of Agriculture, as the case may be, will assess whether a case for additional assistance from NDRF is made out under the guidelines and the approved items and norms of assistance under NDRF/SDRF.
- MHA shall oversee the utilisation of releases from NDRF for the purposes for which funds have been released and monitor compliance with guidelines of NDRF.
- Upon the approval of High Level Committee (HLC), constituted with members from Ministry of Finance, Ministry of Agriculture, Ministry of Home Affairs, Deputy Chairman Planning Commission, the assistance shall be released by the Ministry of Finance from NDRF to states.

**Disaster Management:
Concepts and Institutional
Framework**

- The actual expenditure out of NDRF should be booked under respective minor heads within major head.
- The Pay and Accounts Office, Ministry of Finance shall release payments to the state governments. The detailed accounts of the Fund shall be maintained by the Controller General of Accounts through the Chief Controller of Accounts, Ministry of Finance.
- The State Executive Committee shall be responsible for ensuring that the expenditure incurred out of funds received under NDRF is in accordance with the items and norms of expenditure of NDRF/SDRF.
- The accounts of NDRF shall be maintained and audited by the Comptroller and Auditor General (CAG) annually. Its report will be submitted to Ministry of Finance and Ministry of Home Affairs.

9.3.2.2 State Disaster Response Fund (SDRF)

SDRF (which has replaced the earlier Calamity Relief Fund (CRF)) is a Fund constituted under Section 48 (1a) of Disaster Management Act. The SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of Disasters, as identified for NDRF grant. The SDRF is constituted in Public Account under the Reserve Fund bearing Interest in the Major Head: 8121. The provisions include (IGNOU-NDMA, 2012):

- Of the total contribution indicated by the Thirteenth Finance Commission, Government of India will contribute 75 per cent for general category states and 90 per cent for special category states, of the total yearly allocation in the form of a non-plan grant. The balance 25 per cent in case of general category states and 10 per cent in case of special category states will be contributed by the state government concerned.
- The share of Government of India to SDRF shall be paid as Grant-in-aid and accounted for in the Government of India accounts under the Major Head “3601-Grants-in-aid to state governments – 01 Non-Plan Grants – 109 Grants towards contribution to SDRF”.
- The Annual Report shall, inter-alia, furnish details of expenditure incurred by the state government on each of calamities, for each type of expenditure allowed as per the items and norms of expenditure of SDRF/NDRF so fixed by MHA with the concurrence of Ministry of Finance.
- The State’s SDRF account would distinctly show the receipt of assistance from NDRF apart from the remaining four sources of receipts into the Fund, namely (i) Centre’s share of SDRF, (ii) State’s share of Disaster Response Fund, (iii) Returns on investments, and (iv) Redemption of investments.
- The State government will constitute a State Executive Committee (SEC) according to DM Act and entrust it with responsibility to decide on all matters connected with the financing of relief expenditure of immediate relief from SDRF.
- The accounts of SDRF and investment shall be maintained by Accountant General in charge of accounts of the State. CAG would cause audit of SDRF annually.
- The share of the Central government in SDRF shall be remitted to State governments in two instalments in each financial year. The State governments

shall furnish a certificate to MHA and Ministry of Finance indicating that the amount received earlier has been credited to SDRF along with State's share of contribution, accompanied by a statement giving the up-to-date expenditure and balance amount available in the SDRF.

9.3.2.3 National Disaster Mitigation Fund

As per Section 47 of the DM Act, 2005, Central Government may constitute a National Disaster Mitigation Fund for projects exclusively for the purpose of mitigation. This Section has not been notified by the Government so far. As mentioned earlier, the FC-XIV restricted its recommendation to existing arrangements on the financing of the already constituted funds (National Disaster Response Fund and State Disaster Response Fund) only, as per its terms of reference. The FC-XIV did not make any specific recommendation for a mitigation fund (Government of India, 2016).

9.3.2.4 Recommendations of the Fourteenth Finance Commission

In regard to grants for disaster management, Fourteenth Finance Commission (FC-XIV) has adopted the procedure of the XIII FC and used past expenditures on disaster relief to determine the State Disaster Response Fund corpus. While making recommendations, XIV FC have taken note of the additional responsibility cast on States and their district administrations under the Disaster Management Act. XIV FC has also taken note of the location-specific natural disasters not mentioned in the notified list, which are unique to some States (ibid).

9.3.2.5 District Level Funds

District Relief Fund at the district level is based on the principles of CRF so that they are readily availability for immediate requirements. The District Level Relief Committee under the chairmanship of the District Collector/ Magistrate would evolve the guidelines and norms for expenditure to be made from the funds allotted for rehabilitation at the district level. At least fifty percent of the contribution to the funds could come from the public. DDRF is proposed to be created at the District Level as mandated by Section 48 of the DM Act. The disaster response funds at the district level would be used by the DDMA towards meeting expenses for emergency response, relief, rehabilitation in accordance with the guidelines and norms laid down by the Government of India and the State Government (DDMP, 2012).

9.3.2.6 Members of Parliament Local Area Development Scheme

Another funding arrangement, called as Members of Parliament Local Area Development Scheme (MPLADS), was started in December 1993. Under this scheme, Members of Parliament (MPs) are allotted funds, annually, to pursue developmental work in their constituencies. Each MP gives a choice of works, to be undertaken in his/her constituency to the concerned District Heads, who get them implemented by the established procedures laid down in the guidelines for the improvement of their districts under MPLADS.

9.3.2.7 Prime Minister's National Relief Fund

The Prime Minister's National Relief Fund, created shortly after independence, provides immediate relief to people in distress. The fund depends entirely on voluntary donations received from the public. The fund renders assistance to individuals facing disaster. Its resources are utilised for the provision of immediate relief to the families of those killed in natural calamities like floods, cyclones and earthquake.

9.3.2.8 Insurance Schemes

Insurance is an important risk transfer technique. Insurance is very helpful to counter the losses caused by the disaster. The insurance cover, however, cannot be regarded as a funding arrangement for disaster. We need an insurance system that common people, especially the rural poor could afford. Some insurance schemes are:

- **Pradhan Mantri Fasal Bima Yojna – PMFBY** provides a comprehensive insurance cover against failure of the crop thus helping in stabilising the income of the farmers. The scheme covers all Food & Oilseeds crops and Annual Commercial/Horticultural Crops for which past yield data is available and for which requisite number of Crop Cutting Experiments (CCEs) are conducted being under General Crop Estimation Survey (GCES) (www.financialservices.gov.in).
- **Restructured Weather-based Crop Insurance Scheme – RWBCIS** aims to mitigate the hardship of the insured farmers against the likelihood of financial loss on account of anticipated crop loss resulting from adverse weather conditions relating to rainfall, temperature, wind, humidity etc. WBCIS uses weather parameters as “proxy for crop yields in compensating the cultivators for deemed crop losses. Pay-out structures are developed to the extent of losses deemed to have been suffered using the weather triggers (www.financialservices.gov.in).
- **Seed Crop Insurance** – is to provide financial security & income stability to the breeder/seed growers in the event of failure of seed crop. The salient feature of the scheme is to cover the risk involved in seed production at field stage, loss in expected raw seed yield, loss of seed crop after harvest so that more number of the breeder /institutions /organisations /seed growers would take up and come forward in seed production (RKMP, 2011).
- **Kisan Credit Card** – was introduced in 1998 for issue of KCC to farmers so that farmers may use them to readily purchase agriculture inputs such as seeds, fertilizers, pesticides etc. and draw cash for their production needs. The KCC scheme has since been simplified and provides for issue of ATM enabled RuPay Debit Card, inter alia, with facilities of one-time documentation, built-in cost escalation in the limit, and any number of drawals within the limit, etc (PIB, 2018).

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) Discuss the concept and types of Rehabilitation.

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2) What do you mean by Reconstruction?

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3) Discuss the financial arrangements for Reconstruction.

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9.4 RECOVERY

Recovery is the process by which society and the nation are supported in turning back to their appropriate level of working, ensuing disaster. The recovery process is a time taking process which takes almost 5 to 10 years or even more. The recovery process includes activities like re-establishing the necessary services, reconstruction of repairable homes and also other buildings, accommodate alternate housing, measures to facilitate the physical and psychological rehabilitation of persons who have gone through the disaster and also long term measures of reconstruction, including the restoration of buildings and infrastructure that have been devastated by the disaster. Post-disaster analysis should also be involved as part of the recovery process. The recovery process is, therefore, complex and extensive; it can lead to a multiplicity of problems, some of which will necessitate changes to original plans as recovery proceeds. Thus, decision makers should be prepared to take a flexible attitude toward policy implementation to produce the best results. Also, it is important to bear in mind that recovery from disaster offers opportunities for improvement and development.

9.4.1 The Ground for Recovery Activity

The ground for earliest recovery activity depends on following pillars:

- Identification of various necessary aspects of the recovery mode;
- Defining an overall strategy for recovery, with suitable proposed and potential national development;
- Decision of distinct recovery programmes within the overall strategy;
- Implementation of the individual programmes within the overall strategy; and
- Fulfilment of individual programmes and projects on a well supervised and coordinated basis.

9.4.2 Problems in Recovery Areas

Major problems in the area of recovery are necessary to be outlined. These are:

- Recovery programmes formulation has been always delayed because the description and administration of recovery programmes have not been sufficiently considered in overall counter-disaster planning;
- Severe and extensive damage may be so destructive that difficulties can take considerable time to formulate and assess recovery programmes;
- Information for the formulation of recovery programme is inadequate. Resurveys can be necessary in some cases in order to establish more accurately the post-disaster effect;
- Recovery programme may impose additional load on government system and even functioning output of government departments may slow down whereby the whole recovery process becomes unsatisfactory;
- Resources from recovery programmes and fund may divert due to the occurrence of another major disaster;
- Problems relating to ministerial responsibilities may arise because recovery requirements overlap from one department to another;
- Formulation of recovery programmes may hinder due to inavailability of required finance and restrictions;
- Sometimes political problems can arise when some areas are not receiving the same priority of attention as in regard to other recovery programmes;

The above do not necessarily reflect all the problems which might affect recovery programmes, but they illustrate the kind of difficulties with which disaster management officials may have to deal. There is much felt need for the Government to initiate steps towards long-term recovery. With the massive Kerala Floods, 2018, in view, it has been stated that the “Government has to come forward and accept the challenges and immediately initiate extraordinary efforts for quick recovery. People are in distress and complete disarray. State should stand behind them and get back to the business of innovative planning for faster recovery. Country has faced such problems in the past too. It took time but they could recover well. Maharashtra (1993), Andhra Pradesh (1997, 2001) Orissa (1999), Gujarat (2001), Tamil Nadu (2005, 2015) , Andman & Nicobar (2004), Jammu & Kashmir (2005, 2015), Bihar (2008) Utarrakhand (2015) and few more states have gone through the process of long-term recovery earlier. Few states have taken partial recovery with few sectors approach and some have gone for full recovery with all sectors approach with significant recovery. Prioritising recovery need is the immediate requirement for the state” (Kumar, 2018).

Check Your Progress 2

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

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

1) Define Recovery.

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2) Write a note on problems in Recovery Areas.

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9.5 CONCLUSION

In this Unit, the issues of Rehabilitation, Reconstruction and Recovery have been discussed. Various types of rehabilitation namely physical, social, economic and psychological have been explained. Besides describing the concept of Reconstruction, its major steps have been explained. Further detailed analysis on funding arrangements for reconstruction has been made. Towards the end, the discussion is on the problems in recovery areas.

9.6 GLOSSARY

- Rehabilitation** : To return to a good, healthy, or normal condition after a disaster.
- Reconstruction** : Reconstruction is the process of rebuilding something.
- Recovery** : To become successful or normal again after being damaged or having problems.
- NGO** : A non-profit organisation or an NGO is an organisation that operates independently of any government, typically one whose purpose is to address a social or political issue.
- Economic infrastructure** : Economic infrastructure promotes economic activity, such as roads, highways, railroads, airports, sea ports, electricity, telecommunications, and water supply.

9.7 REFERENCES

Asian Development Bank (ADB). (1991). *Disaster Mitigation in Asia and the Pacific*. Manila: Asian Development Bank.

Aysan, Y. & Davis. (1993). Rehabilitation and Reconstruction. Module prepared for Department of Humanitarian Affairs (DHA). UNDP.

Carter, N. W. (1991). *Disaster Management: A Disaster Managers Hand Book*. Manila: Asian Development Bank.

DDMP. (2012). *District Disaster Management Plan of District Kinnaur, Himachal Pradesh*. Kinnaur: District Disaster Management Authority.

IGNOU. (2006). *Rehabilitation, Reconstruction and Recovery*. New Delhi: Faculty of Public Administration, Indira Gandhi National Open University.

IGNOU-NDMA. (2012). *Training Manual on Conceptual and Institutional Framework of Disaster Management*. New Delhi.

Government of India. (2016). *National Disaster Management Plan*. New Delhi: National Disaster Management Authority.

Kumar, S. (September 13, 2018). Kerala Deluge: Dilemma of Long-term Recovery. Retrieved from <http://indianobserverpost.com/News-Detail.aspx?Article=118&WebUrl=Kerala-Deluge:-Dilemma-of-Long-term-Recovery>

Public Information Bureau. (August 7, 2018). Issue of Kisan Credit Cards. Retrieved from <http://pib.nic.in/newsite/PrintRelease.aspx?relid=181634>

RKMP. (2011). Pilot Scheme on seed crop insurance. Retrieved from <http://www.rkmp.co.in/content/pilot-scheme-on-seed-crop-insurance>

Sahni, P., Dhameja, A. & Medury, U. (Eds.). (2001). *Disaster Mitigation: Experiences and Reflections*. New Delhi: Prentice Hall of India.

9.8 ANSWER TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1) Your answer should include the following points:

- Rehabilitation means to take necessary actions after the disaster to resume the basic services, help the diseased, to compensate the physical damage done to the surroundings and to start again economic actions to provide psychological support, social security and comfort to the diseased.
- Physical rehabilitation; Social rehabilitation; Economic rehabilitation and Psychological rehabilitation.

2) Your answer should include the following points:

- Reconstruction means to repair or reestablishment of physical infrastructure, service infrastructure and Environmental infrastructures.
- It aims to build the rehabilitated system to safer standard so that the future risks would be reduced.
- The reconstruction efforts aim at restoring the affected structures to a condition equal to or better than what existed before the disaster.

3) Your answer should include the following points:

- National Disaster Response Fund (NDRF)
- State Disaster Response Fund (SDRF)
- National Disaster Mitigation Fund

- Recommendations of the Fourteenth Finance Commission
- District Level Funds
- Members of Parliament Local Area Development Scheme
- Prime Minister's National Relief Fund
- Insurance Schemes.

Check Your Progress 2

1) Your answer should include the following points:

- The recovery process includes activities like re-establishing the necessary services, reconstruction of repairable homes and also other buildings, accommodate alternate housing, measures to facilitate the physical and psychological rehabilitation of persons who have gone through the disaster and also long term measures of reconstruction, including the restoration of buildings and infrastructure that have been devastated by the disaster.

2) Your answer should include the following:

- Major points discussed in the Sub-section 9.4.2.

