UNIT 18 DISASTER MANAGER

Structure

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18.0 LEARNING OUTCOME

After studying this Unit, you should be able to:

- Discuss the role and functions of the disaster manager;
- Highlight the significance of incident command system as a managerial tool;
- Appreciate the managerial skills and techniques required for disaster manager; and
- Analyse the key lessons for a disaster manager.

18.1 INTRODUCTION

Disasters, as we are aware, affect many critical resources and services. The negative effects, though cannot be prevented, the impact of disasters on communities, livestock and infrastructure can be mitigated. The scope of disaster management is quite wide and it extends over development, prevention, preparedness, response, relief and rehabilitation and mitigation. All these phases require discharge of key functions and assumption of certain roles. The roles at times can be primary, especially when a crisis takes place and certain other functions become secondary which become supportive to the primary functions. A disaster manager is one who is entrusted with the responsibility for planning and managing the pre, during and post-disaster activities. A disaster manager could be a specialist, belonging to, for example, public health department, engineering etc. A disaster manager can also be one handling the incident command system. As per the *Disaster Management, Act 2005,* in India, the District Collector can be considered a disaster manager as he/she coordinates all activities at the district level. A disaster manager is one who is entrusted with the responsibility for planning and managing pre, during and post-disaster activities. It can also be personnel functioning in a disaster management agency, ministries, departments, municipal and local governments. The international agencies also have specialised disaster management personnel. The NGOs too have disaster specialists who

play a key role. Irrespective of the nature of an organisation, any individual entrusted with managing disasters in pre, during and post-disaster scenarios is considered a disaster manager. Yet, as one in charge of overall management of disaster situations at any geographical area, she/he needs to discharge certain basic managerial functions. The disaster manager handles chaotic situations and this necessitates being equipped with certain key skills and techniques.

As learners of Masters Programme in Public Administration, you are familiar with certain basic concepts and techniques of the discipline. We have already discussed about these in our First Year Courses. In this Unit, we shall attempt to apply some of these concepts and principles to the disaster scenarios. We shall orient you with the functioning of disaster manager, the required managerial skills and lessons to be learnt by the disaster manager in the process of management of disasters.

18.2 DISASTER MANAGER: ROLE AND FUNCTIONS

The disaster management activity as you know is extending beyond post-disaster relief, assistance and rehabilitation encompassing pre-disaster planning, preparedness, response, information management, interpersonal relations, conflict management etc. The question that arises is why we have to apply management principles to disaster situations. Disasters disrupt the economies and have devastating consequences, create chaos that throw up certain serious issues to the disaster manager which, to a certain extent can be made amenable to solution through application of managerial concepts and principles. The disaster manager is often confronted with certain complex problems some of which are:

- Lack of assessment or clarity regarding the multiple consequences arising out of disasters
- Unavailable, unreliable, competing, and multiple types of information
- Limited and at times inaccessible resources (human, material and financial)
- Ambiguity regarding the nature of disaster, its repercussions, the extent of damage, ways of prioritising resources etc., and
- Indeterminate behaviour amongst the individuals working in the organisation and other stakeholders and community.

Disasters are chaotic situations that create confusion, instability and also call for prompt action on the part of the managers. Since the events move rapidly and are traumatic, they necessitate quick decisions. Often the managers might not even get a second chance to think and decide. Hence application or use of management principles facilitates the handling of situation and bringing the events under control. Managerial principles are said to:

- Provide a framework for decision-making which is essential for disaster situations
- Facilitate prompt and quick decision-making
- Help group activity that is needed for guiding proper utilisation of resources for accomplishing goals; and
- Formulate and implement a balanced disaster or crisis management action plan.

Management principles are required to be applied both in routine situations and crises. The time when disaster takes place, requiring emergency operations are the crisis situations. There are routine or non-crisis situations encompassing preventive, mitigation and rehabilitation phases. These also need routine or regular management activities. For example, any housing project in a disaster prone area is to adhere to or incorporate disaster-resistant construction technologies. This activity has to take cognisance of certain management principles from planning to implementation.

Disaster management as an identifiable profession is of a recent origin. It has multifaceted activities that are designed to control disaster and emergency situations, provide a framework for assisting those persons who are at risk to avoid or recover from the impact of disaster. In accordance with the changing nature of the field of disaster management, the role of disaster manager, which earlier was confined to relief provision, discharging certain specific adhoc activities during or after an emergency is presently undergoing a transformation. The entire approach to managing disasters, which hitherto was traditional, relief oriented, and reactive in nature, is becoming development-oriented. The disaster manager's tasks are to minimise people's vulnerabilities to hazards, cater to their needs and expectations, and accordingly embark upon positive response to meeting emergencies.

We have discussed in the First Year Courses of our Master's Programme about the concept of 'responsiveness'. Entrepreneurial, result-oriented and innovative practices are being experimented in managing disasters. The present day emphasis is on introducing broad-based networks in the provision of services. Disaster organisations are also moving towards responsive governance.

There is a distinct change in the values in managing disasters, which calls for more accountability on the part of disaster organisations. The disaster manager is expected to usher in more people-oriented values in service delivery. This is reflected in the table below:

Table - 18.1

Traditional	**Contemporary**
Emphasis on relief	Pre-and Post-disaster activities linked to development goals
Centralised decision making	Decentralised and participative decision making
Quantity of Relief	Quantity and quality of services
Reactive approach	Proactive approach

A disaster manager's role, in the light of this, centres on the following considerations:

- Identify the key issues involved in managing disasters
- Integrate disaster prevention and preparedness into development
- Protect the vulnerable
- Ensure the involvement of community

- Provide disaster assistance as far as possible in an equitable and consistent manner
- Establish transparency, commitment and involvement in implementing any ongoing disaster management programme
- Address or take cognisance of the local ecology
- Draw up an emergency or response or disaster management plan which is transparent flexible, efficient, effective, affordable and sustainable; and
- Make disaster management activity need oriented, multi-disciplinary and integrated.

These responsibilities envisage that a disaster manager be innovative, risk taking, catalytic, entrepreneurial and proactive. You are familiar with these concepts, as we had discussed the basic tenets of entrepreneurial government propounded by Osborne and Gaebler in the Unit on Entrepreneurial Government in MPA-011. These concepts are applicable in the present context to any organisation involved in service delivery. The performance of multifaceted activities calls for a broad base of knowledge in several areas and blending this into well-coordinated programmes. A disaster manager in fulfilling the assigned tasks addresses the following aspects on a continuous basis. These include:

- Disaster and its linkage with development
- Disaster Preparedness
- Disaster Mitigation
- Risk and Vulnerability assessment
- Logistics
- Rehabilitation and reconstruction

Let us now discuss the broad set of activities the disaster manager is to discharge in routine situations as well as crises.

Management of Risks

A disaster manager is to be fully equipped and prepared to manage the risks. This includes identifying the possible threats or hazards, assessing the probability of their occurrence, their impact on community and laying down measures to reduce the risks or threats. These can be managed by initiating appropriate development activities in addition to the immediate measures to tackle the crisis.

Management of Losses

In a disaster, as you know, the losses are manifold, encompassing human, livestock, infrastructure, property, etc. Efforts towards managing losses are addressed in pre, during and post-disaster phase encompass. Pre-disaster activities as we have been discussing in the earlier Units encompass:

- Providing appropriate information to the communities about the impending disaster
- Strengthening wherever possible the resistance of buildings and physical structures
- Arranging for the safety of the people residing in threatened areas; and
- Making use of social networking mechanisms to mobilise people in the vulnerable areas.

The post-disaster loss management activities aim at improving the response and widening the support to the community. This includes devising prompt relief and recovery activities and a host of rehabilitation and reconstruction efforts. These have already been discussed at length in the earlier Units of this Course.

Control of Events

This is a very important activity as the situation that is likely to arise or the crisis that has occurred need to be controlled and managed through several measures such as:

- Determining or gauging the cause and effect relationship generated by each event
- Reducing the scope of disaster
- Collecting information and assessing it to prioritise actions and guide response
- Developing an appropriate mix or a combination of responses for meeting disaster needs
- Taking appropriate action on identifying the problem and selecting response strategy
- Providing a lead to the various activities as well as the personnel. Appropriate and effective leadership enables good public response and encourages people to take action for themselves in meeting their needs
- Fostering discipline in all activities and disaster management systems to enable orderly and precise functioning; and
- Providing assistance in an equitable and fair manner to enable disaster victims receive fair treatment and adequate access to the resources.

Resource Management

Resources are of various types. They include financial, organisational, personnel, logistics, information, and so on. These need to be managed with the help of managerial techniques to facilitate the disaster manager's functioning. Also, innovative practices are being introduced in present times in the management of resources. For example, the disaster manager can mobilise the communities to contribute either in the form of cash, kind or labour in mitigation activities in reducing their risks to disasters. Presently, micro-finance is being used to enable the community to act and invest in preventive measures such as check dams, drainage systems etc.

These are some of the broad functions the disaster manager is expected to perform. With this overview, let us now analyse the role of the disaster manager. This can be done under the following three broad categories.

- Managing Organisations
- Managing Operations
- Managing People

Managing Organisations

The process of managing organisations involves discharge of POSDCoRB (Planning, Organising, Staffing, Directing, Coordinating, Reporting and Budgeting) activities, resource management, monitoring and evaluation. You are familiar with these POSDCoRB functions, which are the basic managerial functions discharged in an organisation, as discussed in MPA-012. Let us now elaborate these:

Planning: It implies determining in advance the objectives and activities to be carried out, the methods to be adopted to achieve the purposes. Planning with reference to managing disasters includes strategic planning, contingency planning and forward planning.

Strategic Planning: This involves preparing for disaster threats from the long-term perspective that is those, which are not to occur immediately, but could take place in future.

Contingency Planning: It implies planning for a crisis. According to the Disaster Management Training Programme, it is a forward planning process in a state of uncertainty in which scenarios and objectives are agreed, managerial and technical actions defined and response systems put in order to prevent, or better respond to an emergency or critical situation.

Forward Planning: This is resorted to in situations where disaster is going to occur and the manager takes adequate precautions.

Organising: It involves establishing the formal structure of authority through which the work is subdivided, arranged and coordinated. Organising implies laying down the activities to be performed to implement the strategies that have been chosen as the part of the planning process, division of activities and their assignment to individuals and groups, the type of authority and responsibility to be assigned, control and coordination mechanisms.

Disaster management activities are to be supported by an organisation in which these are to be carried out. Organising involves establishment of clear-cut functions and responsibilities for prevention, preparedness, response and recovery. The roles and responsibilities of all concerned are to be specified. This involves inter-agency and inter-departmental arrangements to support planning, control and coordination.

Staffing: This encompasses hiring personnel at various levels, training, team building, motivation and morale etc.

Directing: This is concerned with making of decisions and providing necessary directions to guide the organisational efforts. It involves command and control activities wherein prior to the occurrence of any disaster, the responsibility for overall control of the situation and of each organisational element needs to be clearly laid down.

Coordinating: This relates to bringing or putting together the efforts of various units and personnel to work towards the laid down goals. For example in a disaster management organisation, there can be top management, middle and field management along with other specialists handling areas such as finance, logistics etc. Disaster operations require appropriate pooling and assembling of resources. As the organisation becomes complex and diversified, a chain of command and coordination running across several levels is established.

Reporting: Each level in the organisation reports to the next higher level. For example in government, the top management reports to the political executive and thereby to the Parliament.

Budgeting: This involves fiscal planning, budgeting and accounting.

These are the basic managerial functions to be discharged by any organisation. Each specialised functioning area has its own processes and techniques. A combination of

general principles with specialised tools makes disaster management effective.

Managing People

Managing people involves organisation of tasks and assignment of functions and responsibilities to people, establishing lines of communication, performance evaluation, motivation and morale of the people, leadership and conflict resolution. We shall be discussing some of these aspects in detail in the section 18.4 of the Unit.

Managing Operations

This includes managing the various operations pertaining to several phases of disasters. It deals with the management of logistics/materials, emergency operations, information, along with formulating an action plan for handling crisis, operationalising the plan etc. It is also concerned with creation of an appropriate disaster information system.

Let us now briefly examine a few of these facets.

Logistics Management

Management of logistics is critical in any disaster situation. It reflects the disaster manager's ability to identify the resources required at the disaster site which could be equipment, commodities etc. Logistics is concerned with getting the desired materials and services and it provides a framework for management of materials, services and information. Logistics is concerned with operations and coordination of activities involved in movement of materials and storage. During disasters, there is a huge demand for procurement and distribution of relief commodities such as food, clothes and medicines. The holistic approach towards logistics management aims at integrating the procurement, preparation and physical distribution into a simple logistical process.

Inventory control is very important in logistics management and the disaster manager needs to install a proper inventory control system. It is the system through which any material of right quantity and quality is procured and made available at the right time and right place. The disaster manager needs to determine the right quantity and type to be kept as stock, which are specially required in pre-disaster and disaster situations. There are certain types of materials which are required in large quantities during disasters such as food grains, medicines etc. Use of inventory control techniques such as ABC (Always Better Control) and VED (Vital, Essential and Desirable) analysis can facilitate the task of inventory control. For example, items such as chlorine tablets, band-aid and cotton are required in large quantities during disasters. Similarly there are vital items such as milk powder, medicines and water. ABC analysis helps in determining high consumption, medium consumption and low consumption value items.

A disaster manager needs to catalogue, categorise and record the logistic requirements for pre, during and post-disaster situations. This can include making an inventory of

- Commodities likely to be needed
- Sources of supply (government, NGOs, international agencies, etc)
- Storage facilities (warehouses, temporary storage facilities, etc)
- Sources of transport (road, railways, air, etc.)

A disaster manager needs to undertake a general assessment of logistics requirements

capability. For example, if a flood is going to occur, an assessment is to be made of the

- Areas likely to be accessible or inaccessible for providing relief
- Time period for which the situation is likely to continue
- Commodities required to be given to the people residing in the cyclone or temporary shelters due to evacuation
- Measures for preserving the commodities including the location of warehouse buildings and the condition of the building so that food grains are protected from insects, rodents, birds, etc.

The following aspects need to form part of a logistics management plan formulated by the disaster manager:

- Logistical requirements such as fuel, oil, tents, materials for cleaning and sanitation and other supplies such as food, water, etc.
- Procurement of supplies
- Food security
- Inventory of intended beneficiaries
- Warehouse facilities
- Modes of transport
- Methods of distribution including dry ration and wet ration

Information Management

Information is a key resource in managing disasters. Effective management of information is a prerequisite for dealing with any emergency. Any planning and control activity requires information about the existence of various resources, operations involved, stakeholders etc. The operationalising of an organisation needs routine type of information for day to day activities.

Disaster management requires information on various aspects such as the socio-economic profile of community, topography of the area, weather, existing infrastructure etc., as it is helpful in assessing the vulnerability to hazards. Presently, such data are being generated by multiple actors which include government, private sector, NGOs, CBOs, UN organisations etc. Since the data is fragmented and stored at several locations and formats, this calls for putting together the scattered data to support disaster management activities. There is hence, a need for an effective disaster management information system with networking between those who provide the data, the government and the community.

Disaster manager needs to examine the possibilities of creating a synergy of technologies and interaction between different agencies. Networking and multi-agency interface lead to institutionalisation of disaster management. The technique of Management Information System (MIS) adequately equipped with the necessary infrastructure and expertise to constantly monitor the risk profile of possible disasters will be useful. We shall be discussing about the technique of MIS in section 18.4 of this Unit.

The principles we have discussed in this Unit, find a concrete shape in the form of

Incident Command System (ICS). This is institutionalised in many countries in the present times. We shall now discuss the significance of ICS as a managerial tool to the disaster manager.

18.3 INCIDENT COMMAND SYSTEM: A MANAGERIAL TOOL

Managing disasters is a multifaceted activity and involves putting together the key activities of command, control and coordination of response. Operations management during emergencies is concerned with or requires prompt decision-making, problem solving and matching resources to priorities. The basic premise on which the Incident Command System (ICS) functions, is to foster a formalised management structure that coordinates several activities pertaining to a crisis and provides a direction. ICS is an appropriate model for command, control and coordination of response aimed towards the goal of stabilising the incident and protecting the life, property and environment.

ICS was developed initially in the 1970s in USA in response to a series of major wild land fires in Southern California. Many other countries gradually have adopted this model.

There is a person designated as the incident commander who is in charge of the incident and entrusted with the tasks of managing the response. These include:

- Protection of life and property
- Control of personnel and equipment
- Establish command
- Assess priorities at the time of incident
- Determine operational objectives
- Formulate and implement the Incident Accident Plan
- Develop an appropriate organisation structure
- Coordinate the emergency activities
- Ensure the safety of respondents

The ICS organisation functions on the basis of the following components:

- Incident command
- Planning
- Operations
- Logistics
- Finance

You are familiar with the functions of disaster manager and important of these are discharged by the incident commander. The Command function is directed by the incident commander as he/she is the person in charge of the incident. The incident commander is involved in planning, and creation of the Incident Action Plan, which defines the response activities and resource utilisation for a specified time period. The Operations Section is

responsible for operationalising or executing the response activities as indicated in the Incident Action Plan. The Logistics Section provides assistance in the form of facilities, services, materials, personnel to handle the incident. The logistics functions are geared to cater to the incident responders. The Finance Section is in charge of meeting the costs of incident.

The ICS provides for a flexible, standardised response management system, logical and smooth organisation and availability of trained personnel to meet the crisis. Any disaster ranging from a minor accident to a large scale one requires cooperation among several agencies. The disaster manager can use the ICS as an effective managerial tool.

In addition, there are certain other managerial skills and techniques that the disaster manager needs to be familiar. This we shall be highlighting in the next Section.

18.4 DISASTER MANAGER: SKILLS AND TECHNIQUES

Disasters are the critical situations which pose tremendous challenges to the persons entrusted with managing them. The disaster manager is expected to devise a sound process and system that have the potential of saving the lives, property, livestock, livelihoods etc. There are certain skills, techniques and tools that facilitate the task of disaster manager. These are not different from those applied in day-to-day activities. The disaster manager is to apply or tune these to the situations of crisis. We shall be highlighting some of the important skills and techniques the disaster manager needs to be conversant.

Problem Solving and Decision Making

Management involves solving problems and arriving at decisions. The best decisions generally are those that are well thought of, and planned ahead of time. For example, a flood preparedness plan is the outcome of an organised decision making process. But in crises such as disasters, decisions are taken in a reactive manner, as they are turbulent situations. A disaster manager functions in varied managerial environments. As soon as the disaster occurs, the disaster manager finds himself/herself in a chaotic situation. This requires him/her to assess the current situation and take quick decisions, who otherwise in normal course functions in a stable environment. At times the environment can also be diverse and the disaster manager is expected to handle different situations with varying needs. For instance, the disaster requirements in urban and rural areas can be different, accordingly the situations have to be managed and decisions are to be taken. The environment can be technically complex too wherein decisions pertaining to agriculture, housing, and health are to be made. Hence disaster manager encounters diverse situations. But an organised approach to problem solving and decision-making is to be developed. Though there cannot be a rational approach to decision making certain basic guidelines can be adhered to.

Decision-making is the process of determining a course of action. As students of public administration you know that there are two types of decisions – *programmed* and *non-programmed*. Programmed decisions are generally taken for handling routine problems, such as those relating to stocking of food grains, providing training in first aid and so on. Decisions taken, for example, regarding devising new strategies for information dissemination to the public, is a non-programmed decision.

When we refer to decision making, it is the rational decision making model, and it comprises the following steps:

Definition/Identification of Problem

The general tendency on the part of an individual is to examine or analyse the entire situation in totality instead of identifying the problem. For example, if there is a cyclone alert, instead of reiterating that the cyclone is approaching, the problem can be promptly identified as evacuating the people especially those residing in low lying areas. One needs to be very specific in identifying the various aspects of the problem.

If there is not a single but several related problems, one needs to prioritise as to which one is to be initially addressed. For example, due to impending cyclone threat, the problem could be evacuation both of people and livestock, arrange shelter, provide food and water, protect infrastructure and so on. As a disaster manager, one needs to prioritise the problems in order of significance and the feasibility of solving.

Determining the Goals

Once the problem has been identified, the next step is to determine the goals. In the scenario of an impending disaster such as cyclone, the immediate goal is to ensure the safety of people and move them to cyclone shelter. On determining this goal, the sub goals can be prioritised. These could be for instance, dissemination of cyclone warning, preparing the people for evacuation, informing the community leaders, Panchayat Raj functionaries and others and set a time frame for evacuation.

Generating Alternatives

Once the objectives are set, the different alternatives for solving the problems are to be determined. This facilitates foreseeing and analysing the consequences likely to arise on choosing the alternatives. The disaster manager can make use of group decision making techniques as many a times, the decision quality is higher when made in groups. The group as a whole tends to create better ideas. *Brainstorming* is one of the techniques of decision-making that generates several solutions to the problem. It facilitates pooling as many ideas as possible and choosing the best idea.

Another technique to arrive at an alternative especially, when there are diverse opinions is the *nominal group technique*. Here large groups are broken into small ones and each person responds in writing to a question, the responses are recorded and ranking of the ideas is done. On this basis a final decision is taken.

Delphi is another technique that helps in meaningful and accurate decision-making. This involves the participation of insiders as well as specialists from outside the organisation to provide certain judgments relating to the problem. Each expert is asked to make some prediction and once a convergence of opinions begins to emerge, the results are made use of in arriving at decisions. Delphi technique is applied to diverse problems. Though it is laborious and time consuming, it facilitates decision-making in an emotional environment.

Evaluating the Alternatives

On arriving at several alternatives to the problem, an assessment of each alternative is done in terms of its feasibility to implementation. Then ranking is done of the alternatives. For instance, while drawing up the evacuation plan, different alternatives can be drawn up or prioritised as follows:

- Determining the evacuation plan
- Prioritising the categories of persons to be evacuated (women and children, old, physically challenged etc.,)
- Arranging for transportation of the people
- Making the cyclone shelters ready along with the provision for food and water.

Once the ranking done, the various steps to be followed in the implementation of alternatives are worked out, the resources required in terms of human resources, facilities, money and time, for completion of the activity, the persons responsible for its implementation, their roles and responsibilities are clearly laid down.

In decision-making, a cost benefit analysis is generally done. *Firstly,* the likely costs and benefits arising out of this activity are to be analysed. *Secondly,* the quantitative assessment in terms of monetary value is done. *Thirdly,* the costs and benefits likely to accrue in future are examined based on the present costs. This is not an easy task as there are methodological problems involved in cost benefit analysis. It is at times difficult to assess the monetary value of any activity. Also there are problems in determining the future outcomes especially the direct and indirect loss potential and application of economic appraisal skills.

Monitoring and Evaluation

Irrespective of who and how has the decision been made, it is important to monitor and evaluate the results of the decisions. Especially in crises, it is essential to keep track of the decisions made, the persons who had made the decision and those entrusted with its implementation. Evaluation facilitates review of decisions for bringing about suitable improvements.

A model of *Six Thinking Hats* developed by Edward de Bono is a powerful technique of looking at decisions from a number of perspectives. Each thinking hat reflects a different style of functioning. We shall discuss them now.

White Hat: This thinking enables one to focus on the available data, examine it and learn and analyse the gaps in decision-making.

Red Hat: This attitude prompts one to look at problems in a reactive manner rather than with reasoning.

Black Hat: This enables one to be cautious and defensive and look at the weak points in a plan or a decision being made. It helps to eliminate certain plans or alter them or prepare contingency plans. It facilitates minimising flaws before embarking on a course of action.

Yellow Hat: It helps one think positively about the benefits of the decision and its inherent value.

Green Hat: It facilitates one to develop creative solutions to problems.

Blue Hat: This is for process control. Six thinking hats is a good technique for looking at the effects of a decision from a number of viewpoints. It facilitates bringing in creativity within decision making (*www.mindtools.com*).

Planning

The planning process involves formulating goals, methods and strategies to achieve the goals, specific objectives to be accomplished to achieve the goals, the assigning of tasks to the people for implementation and required resources in the form of personnel, materials, technology, finance etc., to implement the strategies.

The planning process involves the following steps.

- A clear definition of overall goals, the plan is to achieve is to be done. For instance let us assume that the disaster manager formulates the goal of building the capacities of the community in meeting any disaster threat.
- The specific objectives that need to be specified can be formulated by analysing the situation. There are many methods. One is the Strengths Weaknesses Opportunities and Threats (SWOT) analysis. In this case, this analysis pertaining to the community is to be done.

Establish Sub-goals

On the basis of the analysis and the overall major goals, a set of sub goals is to be built or developed by the disaster manager. This could be the Information Education and Communication activities, training, skill building, etc.

Formulating Strategies to Achieve Goals

The various strategies or methods to achieve the goals are to be determined. For instance, the various methods of disseminating information, providing education and communication such as pamphlets, posters, plays, talks, etc., can be designed.

Allocate Responsibilities for Achieving Objectives

Plan implementation requires clear-cut assignment of responsibilities to various organisations and personnel. For example, the NGOs, CBOs, PRI functionaries, etc., can be identified and assigned the responsibilities and can be made accountable.

Formulating a Plan Document

The plan of action is documented and given to all involved in its execution.

Project Management

The Plan document has several activities and some of these can be executed in the form of project. A project comprises a set of identified activities that must be completed within a time frame. The activities under the project require special skills, creative inputs and effective decision making capabilities.

The project plan outlines the major goals and objectives, personnel responsible for the activities and the required resources (human, equipment, materials and money). Once the project proposal is finalised it is put to execution. This involves organising the project team, formulating operating rules and detailed scheduling of activities. All projects require constant monitoring. The progress of the projects is continuously tracked and controlled to ensure corrective action. There are various reporting tools that bring out the variations in project implementation. These include Gantt charts, cost control schedules etc.

Strategic Management

It is a tool or technique that integrates planning, budgeting, implementing, monitoring, reporting and controlling. It facilitates anticipating the future by analysing the various facets of the organisation that is., its culture, mission, strengths and weaknesses. Strategic Management involves:

- Strategic assessment of the situation
- Strategic analyses for developing organisational plans by identifying the strengths, weaknesses, opportunities or favourable conditions and unfavourable conditions
- Strategic direction in which appropriate strategies are determined; and
- Strategic planning involving creation of a range of scenarios

The implementation of a strategy encompasses allocating sufficient resources (financial, personnel and infrastructure), establishing a chain of command to carry out the tasks efficiently, assigning responsibility for tasks to specific individuals or groups and implementing specific plans and programmes. Strategic management requires continuous reassessment. Hence performance evaluation is undertaken at regular intervals for modifying the plans and strategies.

In managing a crisis, the disaster manager involves in strategic management and resorts to the following measures.

- Constituting a crisis management team
- Developing worst case scenarios
- Creating a crisis management plan

The crisis management team is required to foresee and anticipate the crisis and manage the recovery process. The team has to develop worst-case scenarios to determine the types of disasters that could possibly occur. A crisis management plan is to be prepared indicating the clear procedures, details of specifics of the operations and roles for various categories of personnel.

Disaster Information System

The disaster manager is to respond to challenges efficiently, take judicious decisions and perform the tasks in effective manner. As we had discussed in the earlier sections, information is a key component for effective decision-making. It is the collection or repository of expertise, experience and database utilised for discharging responsibilities.

The disaster manager requires information to:

- Formulate or specify the objectives
- Determine the plan of action for achieving the objectives; and
- Provide feed back

The significance of information in managing activities and situations has always been emphasised. F.W. Taylor highlighted the significance of collecting information through studies to find out the one best way to do things. Herbert Simon in his theory of decision making about which you have studied in MPA-012 emphasised on examining as many

alternatives as possible to arrive at a rational decision.

Management Information System (MIS) is a system designed by an organisation to collect and report information on a programme that facilitates the manager to plan, monitor and evaluate the organisations and performance of any programme. It includes the physical infrastructure used in computing data, a set of instructions and procedures that help the people use the systems and related data in the form of database.

Managing of information and creation of information infrastructure are very essential in disaster management. Disaster is generally confined to a particular geographical area, hence the disaster manager needs to collect information from several sources and involve other organisations and experts in relevant disciplines, NGOs, CBOs, community etc. The most important aspect of information management is providing the right information at the right time to the right people. In a crisis, the disaster manager has to determine the recipients of information, and make it available to them. The disaster information system that is created is to comply with the requirements of every possible disaster scenario.

Leadership

Leadership facilitates the formulating of vision, shaping effective strategy and motivating employees to achieve the goals. Leadership is distinct from "command'. It reflects a particular approach of working with people and hence leadership skills are of prime importance in organisations and situations such as crises as they cannot be controlled through command. A disaster manager needs to emulate or demonstrate a style based on cooperation, participation and performance.

Leadership is a personal trait and every person possesses certain distinct attributes, which need to be made use of in disaster situations. It's due to this that a disaster manager is able to guide others and not just because of the authority he/she possesses to make decisions. Let us now discuss certain leadership theories. An understanding of this enables in identifying the styles and skills necessary for a disaster manager.

Leadership Theories

There are several theories of leadership. The *trait theory* is based on the assumption that people are born with certain inherited traits some of which are particularly suited to leadership. A combination of traits makes a good leader. Some of these include, being assertive, decisive, energetic, persistent, cooperative, self-confident etc.,

The *behavioural theory* is not based on inborn traits or capabilities. It assumes that leadership capability can be learnt rather than being inherent.

Participative leadership style is based on involving other stakeholders also in the process. This is said to elicit more commitment and participation from the people in making decisions and implementing them.

Kurt Lewin identified three types of leadership styles. These are:

Autocratic: This is a style where the leader takes decisions on own without any consultation.

Democratic: Here, the leader involves the people in decision-making.

Laissez-faire: This style intends to minimise the leader's involvement in decision-making by allowing people to make their own decisions.

Rensis Likert identified four main styles of leadership. These are:

Exploitative authoritative: In this style, the leader has a low concern for people and makes use of such methods as threats and those inducing fear.

Benevolent: This is the style that reflects concern for people by the persons occupying authoritative positions.

Consultative: The leader here is receptive to ideas.

Participative: The leader makes maximum use of participative methods to involve people from the lower echelons of the organisations.

Hersey and Blanchard's Leadership Styles

These are based on the assumption that leaders should adapt a particular style that matches the development needs of the followers.

These include:

S1: *Telling / Directing*

Development levels D1: *Low competence, low commitment / unable and unwilling Leader*: *High task focus, low relationship focus.*

In this type, the followers cannot perform the job and hence are not motivated. Hence the leader takes the directive role, tells them what to do. For example, the disaster manager works with the team, as they have low maturity and less information about disaster preparedness and response.

S2: *Selling / Coaching*

D2: Some competence, low commitment / unable and willing

Leader: *High task focus, high relationship focus.*

The follower is willing to perform the job but lacks the skills and knowledge. The leader attempts to persuade and help the follower to complete the task.

S3: *Participating / Supporting*

D3: *High competence, variable commitment / Able and unwilling*

Leader: *Low task focus, high relationship focus.*

There is a sense of participation on the part of the followers to do the job. The knowledge of the team about the situation increases and they assume more tasks and responsibilities. The team leader does not direct the followers.

S4: *Delegating*

Follower: *D4*: *High competence, high commitment /Able and willing*

Leader: *Low task focus, low relationship focus*

There is a lot of commitment, knowledge and willingness on the part of team members or followers. The leader delegates work to them, and trusts them for performance.

Hurricane Katrina, the worst natural disaster in the United States that left nearly one million Americans homeless, raised the issue of strong leadership skills. Ronald Heifetz, the co-founder of Centre for Public Leadership, says that good leaders often emerge in crisis and during that crisis, they make it a point to be visible. For example after the September 11, 2001 attack on New York city, the Mayor of the City was on the streets everyday and people could see him at a greater distance. In times of disturbance, human beings turn to their authority figures to coordinate protective response.

In disaster situations, leadership styles could be a combination of several characteristics. In crisis or emergency, the leader is supposed to act immediately. There is little time to consult, delegate or involve other members. Since prompt action is required, *autocratic* leadership is appropriate. During the transition or post-disaster phase, a more participative *and supportive* style, and a less autocratic or directive one is desirable. During reconstruction, mitigation or preparedness planning a *participative and achievement* oriented style is suitable. For example, in undertaking reconstruction activity, adoption of a particular housing technology, the community, artisans and local masons can be involved. The disaster managers can adopt *informal* styles of functioning. They are to come out of their command and control hierarchies and bureaucracies and attempt to build networks. With the increasing scale and complexity of disasters, one needs to move always from the concept of one person, one team and one organisation to a collective model and manage the issues related to such calamities. Leadership is to be diversified across all levels and groups.

Conflict Resolution

Conflicts are natural and inevitable outcomes of any team effort. There are bound to be differences of opinion and views. Creighton (2004) identifies five basic sources of conflict. These include:

Relationship Conflict: This is conflict rooted in poor communication, misperceptions, dueling egos, personality differences, etc. This kind of conflict produces strong emotions and often must be addressed before people are able to resole other forms of conflicts.

Data Conflict: This conflict results from a lack of important information, or contradictory information or misinformation.

Values Conflict: This occurs when people disagree about what is good or bad, right or wrong, just or unjust.

Structural Conflict: This happens when the situation is set up in such a way that a conflict is built in. The structure that causes the conflict may be the way, in which the roles and relationships had been defined, or unreasonable time constraints, unequal power or authority, unequal control of resources or geographical or physical constraints.

Interest Conflict: This occurs over substantive issues (money, physical resources, time), procedural issues (the way the dispute is to be resolved) or psychological issues (perceptions of trust, fairness, desire for participation, respect).

Hence managing disaster situations calls for handling human relationships and inter personal behaviour. There are several agencies, organisations, personnel and community, who are involved in disaster management activities. Hence, conflict resolution assumes significance. The traditional view considered conflicts as organisational abnormalities that have effect on organisational performance. But over time, the works of several social scientists considered

conflict a normal process, which can rejuvenate the organisation. Mary Parker Follett, an administrative theorist, views that it is possible to conceive conflict as not necessarily a wasteful outbreak of incompatibilities, but a normal process by which socially valuable differences register themselves for the enrichment of all concerned. She suggests three methods to deal with conflict - *Dominance, Compromise and Integration*.

The disaster manager initially needs to analyse the root causes of the conflicts. This includes the issues causing the conflict, the substance of the problem, real and perceived differences, the feasibility of the issue to negotiation, etc. Then on the basis of the nature of the conflicts, the disaster manager can resolve through negotiation, mediation, arbitration or adjudication. Irrespective of any technique adopted for conflict resolution, the disaster manager needs to take cognisance of certain values. These include:

- Respect for all the parties involved in the conflict
- Participation and Empowerment
- Justice; and
- Understanding diverse views and perspectives.

Disaster manager has to realise that conflict can lead to innovation and change. Instead of eliminating, it can to be managed effectively to ensure organisational efficiency. In managing interpersonal relations, motivation of the personnel is another important factor. The basic principles disaster manager has to keep in view are:

- Self motivation which enables the manager to understand what motivates the personnel
- Align or tune the goals of the employees with the goals of organisation
- Understand / identify the motivating factors of personnel; and
- Establish suitable organisational policies and procedures and employee performance systems to motivate the personnel.

What is important is the manager has to reinforce the self worth of employees by reassuring them of their value to the organisation. In this Section we have attempted to orient you with certain key managerial principles and techniques. These facilitate the tasks of disaster manager. But the disaster manager may not be able to arrive at solutions to all the problems they encounter. But due to the exposure, they learn certain lessons that are helpful in handling situations in future. There are some important lessons that the disaster manager need to be aware of which we shall now briefly discuss.

18.5 KEY LESSONS FOR DISASTER MANAGER

The disaster manager has to be well aware of certain key lessons that shall guide his / her activities. These include:

- Disasters are events that have peculiar characteristics and hence there can be no general theory of management that can provide a set of prescriptive rules. The management principles are to be applied as per the situation with certain amount of innovativeness and creativity.
- Disaster managers need to demonstrate risk taking, creative and entrepreneurial behaviour.

- Natural disasters call for leadership skills. The MIT Sloan's pioneering Distributed Leadership Model (DLM) moves away from "command and control" in favour of "cultivate and coordinate". During disasters leadership is required at all levels. The DLM requires understanding the context in which one is operating, developing productive relationships and networks, visualising the desired outcome and inventing ways of working together to realise the vision.
- Every disaster, the disaster manager is to realise, is different and requires a plan based on the resources and within the available limitations prevailing at that time.
- The disaster manager needs to bring together multiple stakeholders, who can address the crises.
- Capabilities to absorb the situation, work out multiple scenarios, introduce innovation have to be strengthened.
- Excessive reliance on any technique or technology is to be avoided. Alternative arrangements need to be made to deal with the crises. For example at times technology does not come of use. Any failure of telecommunication links, virtually leads to collapse of emergency operation. This occurs in many situations. Hence disaster managers need to be aware of this and anticipate and plan for alternative system.

Disasters are inevitable and no community or country can be exempted from it. The consciousness about the impact of disaster is making everyone realise the need to reduce its influence. One such effort is to sharpen the skills of disaster managers and strengthen their ability to be prepared for the crises. The disaster manager need also to learn certain lessons form the past experiences and put together the managerial acumen, techniques, and interpersonal skills and manage the crises.

18.6 CONCLUSION

Effective management of disasters requires the disaster manager discharging certain important managerial functions, and being equipped with key skills and techniques. The application of this helps in handling of situation of crises and bringing events under control. We have discussed the broad set of activities the disaster manager is expected to discharge during disaster situations and also in normal times. The disaster manager has multidimensional roles to perform in managing the organisations, operations and people. The Unit highlighted some of the important facets of these roles. The Incident Command System about which we have dealt in the Unit is an important management tool that puts together planning, command, control and coordination of activities during a disaster. The disaster manager can utilise this tool in managing a disaster. Certain skills such as decision making, planning, strategic management, project management and leadership facilitate the functioning of disaster manager. The Unit highlighted some of these skills and techniques. Since disasters are inevitable, the disaster manager assumes an important role and has to put together the managerial acumen, skills and techniques and some lessons from the handling of disasters. The Unit attempted to bring out these issues.

18.7 KEY CONCEPTS

ABC Analysis : It is the analysis of range of items in an orgaisation on cost criteria. A-items are considered very important

which consume high costs and hence need tight controls on usage. B-items are of intermediate cost centre, which require moderate control while C-items are of low cost centre.

Gantt Chart : It is a horizontal bar chart developed as a production control tool in 1917 by Henry L. Gantt, an American engineer and social scientist. It depicts activities and shows progress of the execution of activities. The beginning and end of the block in the chart correspond to the beginning and end date of the activity.

SWOT Analysis : It stands for Strengths, Weaknesses, Opportunities and Threats. It is a methodology used to aid strategic planning, to evaluate the strengths, weaknesses, opportunities and threats involved in a project or activity, on the basis of which a decision is made.

VED Analysis : It is the process of analysing the intrinsic value of the investments for achieving the objectives of the organisation.

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18.9 ACTIVITIES

1) Make a checklist of activities, you as a disaster manager, would discharge on receiving a cyclone alert.

2) In managing a disaster, which leadership style would you prefer to adopt? Give reasons.