
About the Manual

1.1 Introduction

Indians are exposed to multitudes of natural and man-made calamities and their vulnerability to disasters has always been exceedingly high due to high density of population. The number of people exposed to such disasters is increasing year after year for want of preparedness. The dislocation of large numbers of people during and after disaster necessitated us to provide basic amenities like drinking water and sanitation to prevent further hazards and risk for the displaced community. The experience of Tsunami in east coast, the earthquake at Kashmir and Gujarat taught us that micro level community based preparedness in water and environmental sanitation are very important in reducing the adverse impact of a disaster.

1.2 Effect

Disasters are events that occur when significant numbers of people are exposed to extreme events to which they are vulnerable. Consequences of disasters in India, trigger chain of events and reactions in our socio-political, cultural and geophysical environment for want of community based mitigation plan or preparedness.

Disasters may cause, or worsen emergency situations through the damage to the environmental health facilities and services which include:

- the provision of emergency water and sanitation services;
- the burial or cremation of the dead;
- vector and pest control, etc.

Since water is essential to life and health, in emergencies, it is often not available in adequate quantity and of good quality, thus creating a major health hazard. People can survive longer without food than without water. Therefore, planning an emergency water supply system requires preparedness at community level. The provision of water demands immediate attention from the start of an emergency relocation.

The preparedness in the community aims at:

- assuring availability of enough water
- allowing its effective distribution in the required quantities,
- providing water safe to drink.
- Providing for safe disposal of excreta.

This is despite the fact that many of the most common diseases occurring in emergency situations are caused by inadequate sanitation facilities and poor hygiene practices. In the Tsunami affected region, it was felt that the sanitation in temporary shelters was hampered by lack of experience and resources to support the field staff in providing facilities for huge displaced population. Unless the people are conscious and bold enough to face the situation, this basic infrastructure development or disaster

management cannot be fruitful during and after the calamity. Preparedness at the community level is much more effective than that of the individual level during actual calamity. Community preparedness facilitates community to face boldly the situation and overcome the shock of the disaster by minimizing the loss of lives and properties. They need not wait for the assistance to come from government/NGOs and they can do better if they are prepared.

1.3 Role of Panchayati Raj Institutions

It is possible to equip local community with knowledge and skill for disaster management. As a result, the community need not wait passively for the arrival of government machinery to manage the disaster.

Since India is a vast country with many villages, it is better to equip the Panchayati Raj Institutions to have the capacity to mitigate the disaster. The need for learning material has been realized in the last Tsunami and post Tsunami periods in Tamil Nadu.

1.4 Capacity of the Community

The capacity of the local people could be improved by providing adequate learning materials. Such materials can be used at village level with a little training & they would facilitate local community to reduce the impact of disasters on environmental health infrastructure, such as water supply and sanitation facilities.

Apart from natural disasters, in mega-cities environmental health conditions are poor at the best of times and catastrophic at times of man-made emergencies. They occupy increasingly dangerous places – e.g., on steep, unstable slopes, in flood plains and near hazardous factories (Bhopal, 1985)! Political turbulence in many regions of the country has also increased. Today, greater care is taken to avoid creating unnecessary dependence among affected communities and there is greater emphasis on supporting people to rebuild and recover as soon as possible by their own efforts after a disaster.

1.5 Purpose of the Manual

This manual will serve as a practical guide, calling attention for the need to link emergencies, disasters and development, at Block/ Panchayat level and identifies physical and social factors, processes determining disaster vulnerability and offers the reader a range of vulnerability-reduction options in development and disaster mitigation.

The manual presents a process, which can be followed to assess the water supply and excreta disposal needs and priorities, and to design an appropriate program to respond to those needs. It can also be used to select appropriate excreta disposal technologies, systems, and hygiene promotion interventions. The manual provides guidance on how to plan, design & construct systems and how to promote and maintain appropriate use of those systems.

1.6 Who Can Use this Manual?

This manual will provide local community and middle level program managers and field staff for preparedness in disasters emergencies with an overview of the technical aspects of environmental health management. These personnel may include, but are not restricted to, the following:

- Community leaders,
- NGO leaders and workers,
- PRIs

This manual is divided into several units with built-in exercise so that each unit can be taught or learnt with in local community and can be taught at the Village, Primary and Health sub-center levels.

This manual

- Emphasizes the immediate and long-term health priorities in emergencies and disasters.
- Considers environmental health needs in emergencies and disasters in terms of a set of interventions aimed at reducing community vulnerability.
- Provides guidance on environmental health actions in the prevention, preparedness, response and recovery stages of the disaster-management cycle.
- Provides approaches to decision-making.
- Describes simple, practical, technical interventions which can be implemented at local level by the community.
- Describes related aspects including training programs, information systems and community involvement.
- Outlines the need for the approaches of coordination and collaboration between all sectors.