Components of Disaster Risk management

Integrating the following four aspects into all parts of the development process leads to sustainable development and lessens post-disaster loss of life, property and financial solvency. Successful disaster risk management requires the implementation of all these four phases of the disaster management cycle.

1. Mitigation / Measures to be taken before and after an event

Mitigation lessens the likelihood and severity of disaster by implementing sustained actions, such as improved construction practice, to reduce or eliminate long-term risk to people and property. Mitigation of hazard impacts reduces the possibility of disaster and reduces the need for assistance. Actions include:
• Hazard assessment
• Vulnerability analysis
• Risk assessment
• Risk evaluation
• Vulnerability reduction/mitigation strategies (structural and non-structural)
• Integration of disaster risk reduction activities in all development activities making it mandatory, with a mechanism similar to EIA process or making it a part of the EIA process

2. Preparedness / Measures to be taken before and after an event

Preparedness lessens the severity of disasters by preparing people for disaster, developing plans to ensure an effective response and recovery and training people to implement plans after a disaster occurs. Preparedness includes:
• Prediction and warning for different disasters • Emergency preparedness (for monitoring, alert and evacuation, immediate disaster assistance to set-up medical operations, deployment of search and rescue teams and distribution of disaster supplies and equipment etc.)
• Education, training and public awareness

3. Response / Measures to be taken during and immediately after an event

To be ready for response with capability to provide rapid and efficient medical, rescue and emergency supplies, and equipment to those in need.
• Mobilisation
• Assessment
• Requirement analysis
• Rescue and evacuation
• Emergency assistance (medical care, shelter, distribution of food, water & supplies)

4. Recovery / Post disaster measures (long term after the disaster)

Recovery is implementation of actions to promote sustainable redevelopment following a disaster, including new building code standards and land use planning controls. Recovery consists of:
• Rehabilitation
• Reconstruction (During reconstruction it is absolutely necessary to consider mitigation measures including relocation, land use zoning etc.)
  - Rebuilding of houses and buildings
  - Financing for rebuilding
  - Repair of roads, bridges, water system etc.
• Psychological counseling
• Long-term assistance to rebuild the community is critical to survival