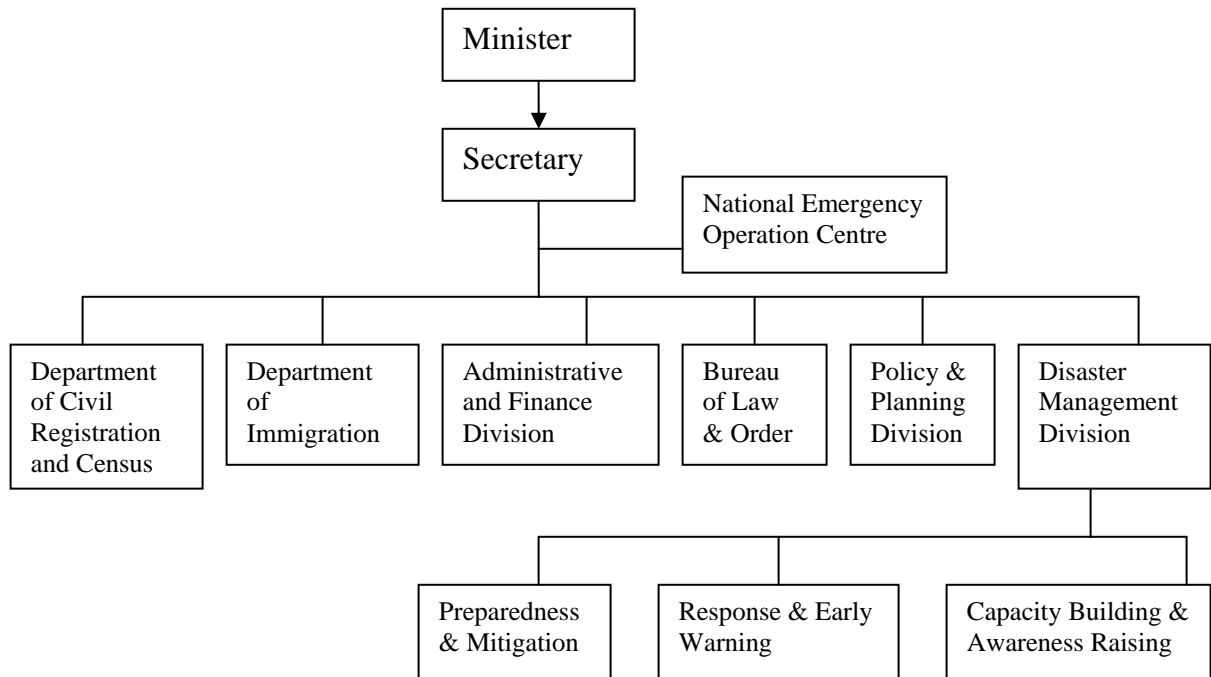


## Country Report : Bhutan

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- III. Professional Status: Sr. Program Officer
- IV. **Organization Chart**



## V. Back Ground: Disaster Situation in Bhutan

Bhutan has been very fortunate not to have experienced major disasters resulting in enormous loss of lives and property. However, in view of the geo-physical location of the country in one of the most seismically active region in the world, threats from potentially dangerous glacial lake outburst flow, emerging trends pointing towards climate change and global warming, increasing pressure on the environment from population growth, urbanization and economic development and recurrent damage to property due to flash floods, forest fires, landslides etc., the government is in the process of mainstreaming disaster risk reduction concerns in all development activities and developing a comprehensive disaster risk reduction strategy for the country.

The Disaster Management Division was set up under the Ministry of Home and Cultural Affairs towards the end of the year 2004 and the National Disaster Risk Management

Framework (NDRMF), the first comprehensive multi-stakeholder strategy with regard to disaster management in the country was formulated and endorsed in the year 2006. The NDRMF has been formulated keeping in mind the priorities identified in the Hyogo Framework for Action (HFA) and its eight components outlined below are aimed at fulfilling the HFA priorities.

## **VI. The National disaster Risk Management Framework**

The key objectives of the framework are :

- Promoting a disaster risk management approach instead of an ad hoc reactive approach to dealing with disasters;
- Recognizing respective roles of different organizations in disaster risk management;
- Establishing linkages between disaster risk management and the other ongoing activities in different development sectors

### **a. Component I – Establishment of institutional and legislative frameworks**

#### **Setting up decentralized multi-disciplinary coordination mechanisms**

At the National level, with His Majesty at the apex level, the Cabinet with the Prime Minister as the Chairperson is the highest decision making body. Under the Cabinet, the National Committee for Disaster Management (NCDM) is the highest executive body chaired by a Cabinet Minister on a rotational basis for a period of one year. The Secretaries of all Ministries including representative of the monk body and armed forces are members of the committee.

At the local level, each of the twenty districts will have a district disaster management committee. The district level committee shall be chaired by the Chief Executive Officer of the district administration and shall include representation from all line ministries/sectors, non-government organizations and the armed forces.

The block disaster management committee in each block of the twenty districts, will be chaired by the elected head of the block administration with representation from relevant sectors and village level functionaries.

#### **Legislative Frameworks**

At present the Ministry of Home and Cultural affairs is in the process of drafting the National disaster Management Act, the National Disaster Management Plan and the Guidelines for Disaster Management Planning at local levels.

**b. Component II – Hazard Vulnerability and Risk Assessment**

As per the National Framework the government will develop a multi-hazard atlas for the country, especially where there are human settlements. At present the Department of Geology and Mines, the Ministry of Trade and Industry has completed hazard zonation for GLOF in three of the most vulnerable districts. Also during the nation wide Housing and Population Census, the National Statistical Bureau has completed household mapping for the entire country. The risk assessment, especially for earthquake in populated towns and in the capital is under process.

The Ministry of Home and Cultural Affairs is in the process of collecting and compiling information on disaster occurrence, impacts and losses for the purpose of analysis and to inform the public and decision makers. The Ministry has initiated the formation of an inter-ministerial task force to present an update on the disaster risks and vulnerabilities, capacity needs assessment and to further the development of hazard/risk mapping for the whole country.

The Ministry through the inter-ministerial task force is planning to develop an integrated and comprehensive disaster management manual that would facilitate vulnerability risk assessment at the national and local levels and result in national and local disaster management plans.

**c. Component III – Early Warning System**

In Bhutan the development of early warning systems, especially in the case of Glacial Lake Outburst Flows (GLOF) is of utmost importance. Bhutan has 25 potentially dangerous glacial lakes, the overflow of which would cause extensive damage down stream without the institution of effective early warning systems.

At present Hydromet Services Division under the Department of Energy is responsible for hydro power planning, flood and weather forecasting. They are actively involved in flood warning and flood prevention measures through the 10 hydrological stations and 33 rainfall stations across the country.

The Department of Geology and Mines (DGM) under the Ministry of Trade and Industry in collaboration with the ICIMOD conducted a study, which has reported the existence of 667 glaciers and 2674 glacial lakes of which 25 are potentially dangerous lakes. The MoHCA in collaboration with DGM will be piloting an automated early warning system in two districts.

**d. Component IV - Disaster Preparedness Plans at all levels**

The MoHCA plans to hold a stake holders workshop to discuss the draft national disaster management act and the draft national disaster management plan. In line

with the national plan, each sector and agencies will make their own disaster management plans. An Inter-Ministerial Task Force/Steering Committee will be formed to endorse such plans and guidelines for disaster management planning and capacity building at the local levels.

At the local levels, the district disaster management committees and the municipal disaster management committees will be trained to make their own disaster management plans in accordance to the national plan and as per their own risk and vulnerabilities.

**e. Component V - Mitigation and integration of disaster risk reduction in development sectors**

The sector plans should be developed in line with the national plan and should include not only their response during emergencies but also preparedness and mitigation activities.

The government plans to develop disaster impact assessment guidelines for development plan and projects. This would ensure disaster risk reduction is integrated into development activities.

**f. Component VI – Public Awareness and Education**

So far, the Ministry has held awareness programmes in 7 Districts and has plans to cover the remaining 13 districts by 2008. The focus of the awareness was on making the people aware of disaster risks and the importance of being prepared. The districts were asked to come up with vulnerability assessment and form the district disaster management committee. The community leaders were also included in the awareness programmes.

Awareness campaigns were also done in all the high schools in Thimphu, the capital of Bhutan. In addition awareness was also conducted in high schools in 4 districts. The government also plans to incorporate disaster management studies into the college curricula, especially the engineering institutes and also develop curricula for primary schools.

**g. Component VII - Capacity Development**

Though the national framework is in place, the country lacks capacity in terms of infrastructure, technological, institutional and human resources. The national framework was approved only in 2006 and there is still much to do for its institutionalization.

The national framework calls for a community based disaster management. However its mechanisms in the form of district disaster management committees

and block disaster management committees still need to be put in place and their capacities built accordingly.

The Ministry of Home and Cultural Affairs, as the lead agency is planning to conduct a capacity needs assessment at the national and local levels required to operationalize the national framework and to bring together all stakeholders to formulate a national disaster management plan and develop a comprehensive disaster management manual and come up with the capacity building plan.

#### **h. Component VIII – Communication and Transportation**

As Bhutan has a rugged and mountainous terrain, we still need to establish better transportation and communications networks. There is still need to identify vulnerable communities, the means of reaching them and developing alternate routes and modes of transportation.

### **VII. On-going Projects**

The ongoing projects undertaken by the Disaster Management Division, MoHCA are :

1. An Earthquake Risk Reduction Project with the Ministry of Works and Human Settlement as an implementing partner. The project is a SAARC regional initiative and is focusing on reviewing existing building codes, setting up retrofitting models, raising awareness and coming up with disaster management plans in three pilot districts.
2. The division is in the process of presenting the draft disaster management act and national disaster management planning guidelines in a stakeholder workshop to finalize the two documents. During the workshop the participants will also review the tentative capacity building strategy, including the formulation of a comprehensive community based disaster management manual.
3. The division is also in the process of finalizing school disaster management planning guidelines, which will be presented to the all district education officers and head teachers for their endorsement and the division would guide the formulation of school disaster management plans for each school.
4. Together with the Department of Geology and Mines, the Disaster Management Division is also in the process of formulating a GEF funded project with UNDP. This project will seek to lower water levels of a potentially dangerous lake, establish an early warning system in the affected valleys and raise awareness and formulate disaster management plans for the pilot districts.

## **VIII. Challenges**

In carrying out the objectives prioritized in our national framework in line with the HFA, Bhutan faces many challenges, first and foremost being the lack of resources. Our challenges in raising awareness and creating information networks is compounded by the difficult terrain. Also, as disaster management is a new discipline in Bhutan, there is still need to raise awareness not only in the public but also at decision making levels. Therefore, disaster management activities have to compete with other development priorities instead of being mainstreamed into development activities.

There is also low technical capacity across sectors, especially in terms of mapping hazards, risk assessments and carrying out mitigation activities. Database and sharing of information in a synthesized manner is also a major challenge.

Bhutan still needs to strengthen the connection between disaster risk reduction and the development process.