



“Country Presentation”

An Approach to Disaster Risk Management in Nepal

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Presentation Outline:

- General Information of Nepal
- Disaster Profile
- Responsibilities of MOHA
- Challenges and Opportunities
- Way Forward
- My Responsibilities
- Expectation from VR Program





I. Nepal at a Glance

- Total Area:1,47,181 sq KM(848km L and193kmB)
- Elevation:70 M to 8848 M High
- Administrative Division: 5 Reigon,14 zones,75 districts,58 Municipalities ,and 3913VDCs
- Demography : 27.5 Million Population,1.94% average growth rate ,102 ethnicity, 92 languages, and 6 religion
- Socio-economic : 63.69 year life expectancy,86.5% literacy rate,25.4% poverty ,GDP per capitaUS\$536



I. General Information

- Geographical perspective:
 - Nepal is divided into three different parts:
 - Himalaya (comprising of and subdivided into snow mountains and higher snow mountains),
 - Mahabharat range (hills) and
 - Terai (the plain land).





I. General Con ...

- **Geographical perspective ...**
 - Mountain region occupies about 15% of the land, only 7.3% live in the high mountain
 - Terai occupies about 17% of the total land, 47.5% live in Terai area.
 - Hill region occupies about 68% of the total land, 45.5% live in Middle hill and Chure



I. General Con ...

- **Ecosystem (resource based):**
 - Nepal has five main categories of ecosystem:
 - forests,
 - wetlands,
 - rangelands,
 - agro ecosystems, and
 - mountain ecosystems





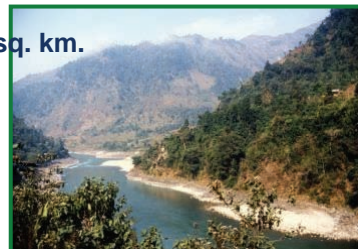
I. General Con ...

- **Ecosystem (resource based) ...**
 - Over 39% of Nepal's total geographic area is classified as forest, of which at least 23% is forested.
 - One quarter of Nepal's forest area is heavily degraded, which has led to loss of biodiversity, increased landslides, and soil erosion.



I. General Con ...

- **River system and river basins of Nepal :**
 - more than 6000 rivers and streams in Nepal
 - total length exceeding 45000 kms
 - drainage densities of about 0.3 km per sq. km.
 - **Major river basins**
 - Sapt kosi in the east,
 - Narayani in the center,
 - Karnali in the west and
 - Mahakali in the western most borders.



Out of the four basins, the three Sapt Koshi, Narayani and Karnali originate from the Tibetan Plateau and enter Nepal crossing Himalayas.



I. General Con ...

- Linkages between the environment and livelihoods of local communities :
 - forests supplying fuel wood,
 - compost used as fertilizers on farms,
 - grazing areas for domestic animals,
 - wetland and rangeland products used to secure the livelihood



II Disaster Profile in Nepal

Nepal falls in

- 20th top most disaster prone in the world
- 4th rank in the climate change vulnerability
- 11th rank in earthquake vulnerability
- 30th rank in flood vulnerability
- Kathmandu Valley is exposed to the greatest risk in earthquake vulnerability among 21 Megacities in the world.



II. Types of Disaster in Nepal

- **Floods** (Flood and Flash floods, heavy rain, glacier lake outburst floods. Almost 80% of the rainfall occurs during the monsoon period)
- **Landslides** (Mudslides, debris flow, landslides, avalanches),
- **Windstorms** (Thunderstorm, hailstorms, snowstorms, and windstorms),
- **Fires** (House fire, forest fire, and industrial fire),
- **Drought** (irrigation and drinking water supply) and
- **Epidemics** (Cholera, dysentery, dengue fever, and Japanese encephalitis)



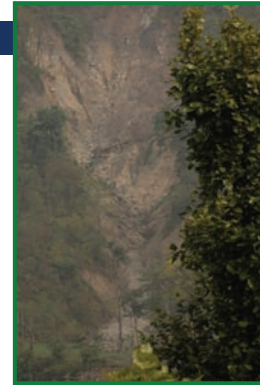
Disaster Scenario of loss of lives in Nepal (2000-2009)

| year | Flood & landslide | Earth-quake | Thunder-bolt | fire | Hails-tone | Wind-storm | epidemic | avalanche | total |
|------|-------------------|-------------|--------------|------|------------|------------|----------|-----------|-------|
| 2000 | 173 | 0 | 23 | 53 | 1 | 2 | 141 | - | 393 |
| 2001 | 196 | 1 | 39 | 26 | 1 | 1 | 154 | - | 418 |
| 2002 | 441 | 0 | 3 | 14 | 0 | 3 | 0 | - | 461 |
| 2003 | 232 | 0 | 42 | 16 | 0 | 20 | - | - | 310 |
| 2004 | 131 | 0 | 10 | 10 | 0 | 0 | 41 | - | 192 |
| 2005 | 141 | 0 | 18 | 28 | 0 | 0 | 34 | 21 | 242 |
| 2006 | 141 | 0 | 17 | 28 | 1 | 0 | 34 | - | 221 |
| 2007 | 216 | 0 | 35 | 34 | 18 | 1 | 9 | 9 | 322 |
| 2008 | 134 | 0 | 14 | 11 | 0 | 2 | 10 | 0 | 171 |
| 2009 | 135 | 0 | 7 | 35 | 0 | 0 | 462 | 2 | 641 |



II. Disaster Profile con ...

- **Major factors of floods and landslides**
 - soft soil,
 - sensitive Himalayan environment,
 - heavy monsoon rain,
 - deforestation,
 - over-farming,
 - unscientific farming methods
 - lack of reliable husbandry in animal farming and
 - development works initiated without consideration of the environmental effects



II. Major Policies Related to Disaster Management

- **Natural Calamity (Relief)Act, 1982**
- **Prime Minister Natural Calamity Rescue Fund**
- **Local Self Governance Act, 1999**
- **Three Year Interim Plan 2007-2010**
- **National Strategy for Disaster Risk Management, 2009**
- **Sectoral Policies: Health, Environment, Building, etc**
- **Draft of New Disaster Management Act**
- **Disaster Preparedness Plans in District Level**
- **Cluster Approach (Center to bottom)**



Sectoral Policies Related To Disaster Management

- **National Building Act, 2007,**
- **Building Code 1994**
- **Local Self Government Act, 1999**
- **Soil and Water Conservation Act, 1982**
- **Environment Protection Act, 1996**
- **National Agriculture Policy, 2004**
- **National Shelter Policy, 1996**
- **National Urban Policy, 2006**
- **National Water Resource Strategy, 2002**
- **Water Induced Disaster Management Policy, 2006**
- **Health Related policies**
- **Other Policies**

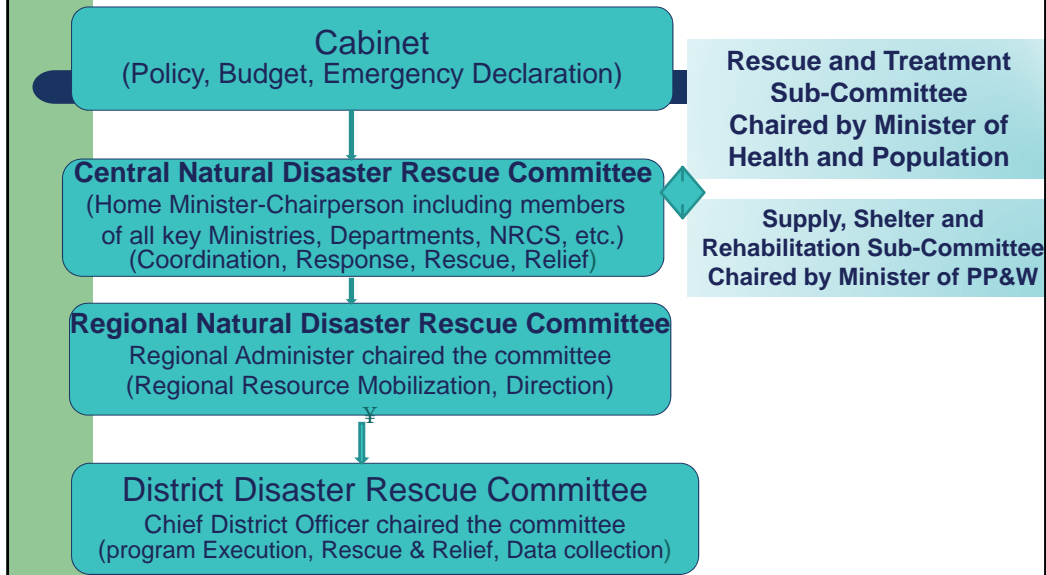


National Calamity Act, 1982 Features

- **Definition of Disaster and other important term**
- **4 Layers of Institutional Arrangement**
- **Defined Roles and Responsibilities of Structures**
- **Provisions of scale of prevention, preparedness and response activities**
- **Arrangement for relief operations**
- **Focus on protection of lives and properties**
- **Relief Fund (center to bottom level) & mobilization scheme**
- **Relief and non-relief items management**



Present Institutional Arrangement



III Responsibilities of MOHA

- The Ministry of Home Affairs (MoHA) is designated as the lead agency responsible for implementation of the Natural Calamity (Relief) Act, 1982
- Central Natural Disaster Rescue Committee (CNDRC), chaired by the Home Minister, is accountable for preparing and ensuring implementation of national policies
- MoHA's Disaster Management Section is under the Planning and Special Services Division



III Responsibilities of MOHA Con...

- **MoHA is also responsible for rescue and relief works, data collection and dissemination of funds and resources.**
- **Currently, various Government of Nepal agencies are assigned with different aspects of Disaster Risk Management.**
- **There is increasing involvement of the academicians, researchers, UN agencies, INGOs, local bodies and civil Society in disaster response.**



Policy Shift (Response-oriented to Risk-reduction) through National Strategy for DRM 2009

- **Background :HFA2005**
- **Vision :Disaster Resilience Nepal**
- **Objectives:**
 1. **Integration of Disaster Risk Reduction into sectoral development policies and planning**
 2. **Development and strengthening of institutional mechanism and capacities to build resilient communities**
 3. **Systematic incorporation of different approaches into Emergency Preparedness ,Response and Recovery Programmes**



Strategy ...

Directive Principles of DRM Planning :-

- Mainstream DRM into development plans
- Ensure life safety and social security
- Emphasize gender and social inclusion
- Adopt decentralized implementation
- Follow one window policy and cluster approach



Flagship Approach as Prioritized Plan



Five Flagship Program (2009 October)

- School and Hospital Safety
- Emergency Preparedness and Response Capacity
- Floods Management in the Koshi River Basin
- Integrated Community Based Disaster Risk Reduction Management
- Policy/ Institutional Support for Disaster Risk Management

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IV. Major Challenges: Scope of Reform

Policies Scope: To implement the NSDRM, immediate need of comprehensive new Disaster Management Act as well as other institutional reform from Centre to local level

Structural Scope: resilience Nepal. To curb with the hazard risk in different sector, the structural strengthening is a must and also equally important to coordinate and collaborate with major actor and stakeholders. Thus, ensuring a very pragmatic mechanism will only sustain the mission of disaster

Focus of the Act: Response



Ministry of Home Affairs, Kathmandu



IV. Major Challenges...

- **Economic Scope:** Less capacity of resource mobilization and other hand, we have scarcity of resource, i.e. maximization requirement.
- **Procedural Scope:** designing the Standard Operating Procedures (SoPs) is primarily required since long time. Other important part is less-participation of the community in each phase of disaster risk management is also required policy and attitude reform in decision maker as well as the local community.



IV .Major Challenges con...

- **Technology/Methodological Scope:** Dual dimension of proper utilization of the technological equipment and increasing the modern tools to mitigate the risk. It is tied with the financial and managerial capacity of the country.
- **Behavioural Reform :** Due to poverty and manipulating the nature but not compensating. Haphazard urbanization, pollution mismanagement are few instances of socio-cultural behaviour that should be changed drastically for the agenda of sustainable development.



V. Way Forward ...

- Giving intensive priority on multi-hazard mitigation and multi-sectoral preventive strategy .
- Enhancement of nodal agency institutional capacity in order to combat and cope with the hazard challenges
- Strong institutional base for effective implementation of DRM
- Behavioral-change; Awareness raising via educational and promotional means
- Resource mobilization and maximization to increase the efficiency and effectiveness of DRM



V . The Way Forward

- Moving forward with vision of National Strategy on Disaster Risk Reduction
- Mainstreaming DRR into Development from central to local level policy measures
- Prioritization of activities and executing through action plan with clear cut role and responsibilities of all stakeholders.
- Functionable expansion of Emergency Operation Center (EoC) to the lower level.
- Overall Collaboration ,coordination ,facilitation and integration into the development efforts



V . The Way Forward...

- Education, sensitization and awareness expansion activities throughout the vulnerable areas and community.
- Mitigation strategies to strengthen natural and artificial defenses and invest in local capacity-building;
- coordinate risk reduction measures at the regional, national and local levels
- Intensifying Preparedness with community empowered measures
- Briefly community-led DRR is a must for sustainable DRM.

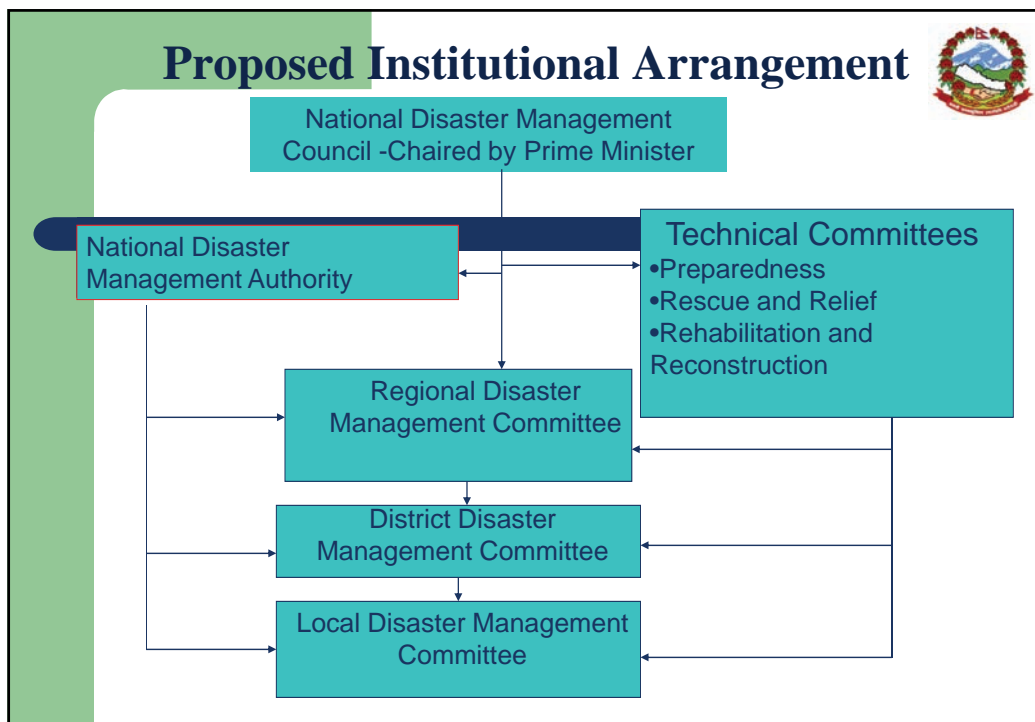


V. Way Forward ...

- Effective early warning and preparedness measures,
- Protecting water supplies
- Safeguarding hazardous materials, and
- Protecting Critical ecosystem for human well-being and biodiversity.



Proposed Institutional Arrangement



Purposed New Disaster Management Act



- Develop and strengthen new institutional mechanism, especially National disaster Management council(NDMC)
- Cover full cycle of DRM, prevention, Mitigation, emergency preparedness, response and recovery program.
- Decentralize disaster management at the local level.
- Wider coverage of disaster types both natural and non natural disasters.



VI .My Responsibilities at Present

(Desk Officer at Disaster Management Section of MoHA)

- To support in coordination with DDRC, RDRRC and other institutions for relief and response activities
- To collect the data from district and regional offices and create a database
- To assist in disaster preparedness planning (center to local)
- To work as a Management Committee member for Development of National Strategy of Early Warning System in Nepal



VI. My Responsibilities at Present

- To disseminate the information on the impact of the crisis
- To coordinate and supervise the work of project staff involved in the implementation of emergency rehabilitation operation
- To draft the operational strategies for meeting the emergency and rehabilitation assistance needs in consultation with experts , donors, UN agencies and other organization
- To assist in Thematic Group of Climate Induced Disaster for National Adaptation Program of Action (NAPA) to climate change
- Gender focal person of the disaster management section





VII. Expectations from VR Programme

- Enhance level of understanding on Disaster Risk Reduction
- Enhance professional skills and knowledge on community participation in disaster preparedness
- To be familiar with Japanese experiences and practices on disaster management
- To take active participation on ADRC activities
- To understand Japanese culture



Thank you!

Questions, suggestions / feedback

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