



Regional EGM on Community of Practice of Geo-referenced Information System for Disaster Risk Management (Geo-DRM) 23-25 April 2014, Bangkok, Thailand

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The Country Context

- ü Landlocked Himalayan Country in South Asia
- ü Federal Democratic Republic Country
- ü Area: 147,181 Km²
- ü Population: 29.5 million
- ü Multi-lingual, multi-ethnic, & secular country with diverse culture
- ü Uneven geographical terrain (ranging from 60 m in the south to 8848 m in the north from MSL)



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Nepal, the hotspot of Disasters

ü Nepal is a disaster prone country. Its rugged and fragile geophysical structure; high peaks, the angular slopes, complex geology, variable climate conditions and active tectonic plates make the country very vulnerable to a wide range of natural hazards (UNDP, 2004).

ü Nepal ranked 20th most disaster prone country in the world

ü Nepal ranked 11th most risk country to earthquakes

ü Nepal ranked 30th in terms of flooding

ü These are the major recurring disasters in Nepal: Floods, Earthquake, Landslides, Fire, Drought, GLOF, Avalanches, Hailstone, Windstorm, Thunderbolt, Cloudburst , Epidemics

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Act and regulation for Disaster Management

ü Natural Calamity Relief Act 1982 (Amended in 1982 & 1992)

ü Water Resources Act 1992

ü National Action Plan on Disaster reduction 1996

ü Environmental Protection Act 1996

ü Local self governance act (LSGA, 1999)

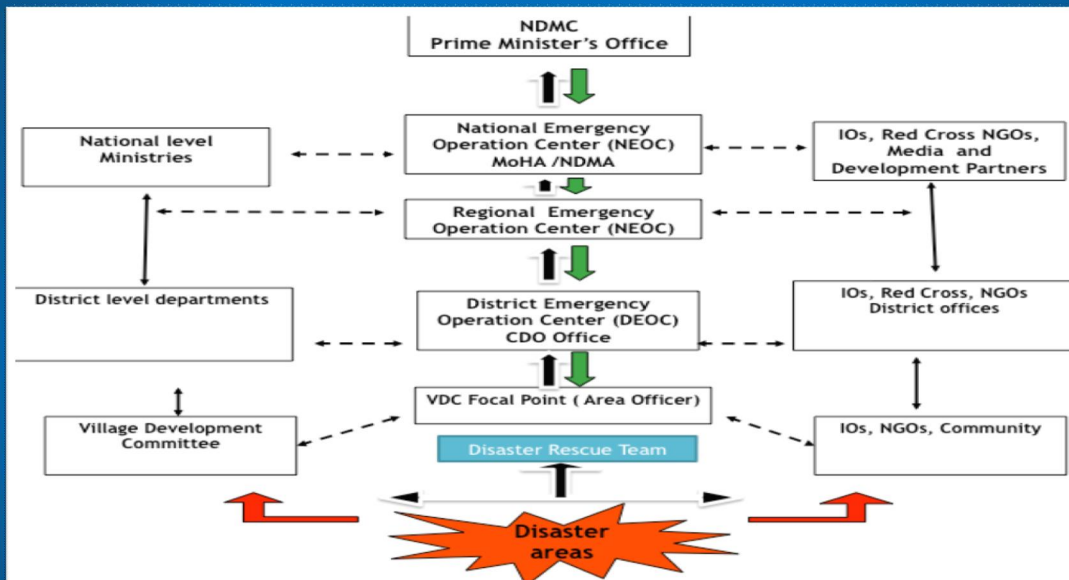
ü National Water Resource Strategy, 2002

ü National Water Plan, 2005

ü Three Year Interim Plan (2008-2010)

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Institutional Framework for Disaster Management



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Institution and Organization involved in Disaster Management

- ü Ministry of Home Affairs(MoHA)
- ü National Emergency Operation Center.
- ü Disaster Section.
- ü Different line ministries(MoLD, MoH, MoPP etc)
- ü Nepal Red cross society
- ü UN agencies(UNOCHA,UNDP,WHO etc).
- ü International agencies-KOICA,WFP, ICRC etc.
- ü Nepal Police, Nepal Army, Armed Police Force.
- ü Regional and District Administration Office.
- ü VDC, DDC, Municipalities.
- ü Disaster Preparedness Network(DP-NET),etc.

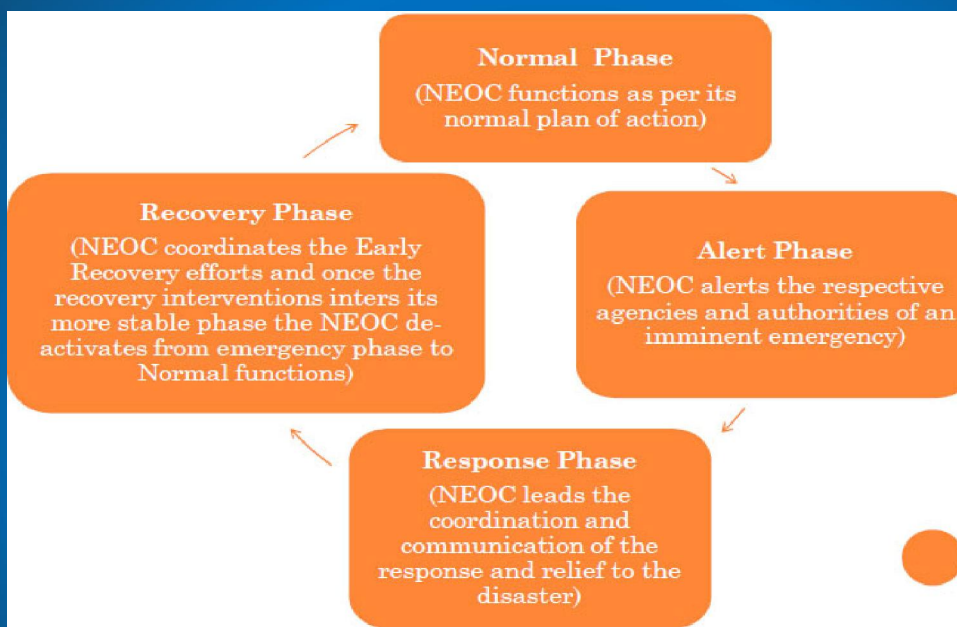
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Role of Ministry of Home Affairs

- ü Formulation of national policies and their implementation
- ü Preparedness and mitigation of disaster
- ü Immediate rescue and relief works
- ü Data collection and dissemination
- ü Collection and distribution of funds

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Operation Cycle of NEOC



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Rescue and Relief

- üCNDRC –policy making/recommendations
- ü Nepal emergency operation center-communication and networking.
- ü DNDRC,LNDRC-rescue and relief work
- ü Nepal police, Nepal Army, Armed Police Force, Nepal Red Cross Society, I/NGOS,CBOs.
- ü Search and rescue groups.
- ü Establishment of relief co-ordination center
- ü Assignment of institutions/persons in charge.
- ü Emergency health service.
- ü Providing relief goods to victims

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Need for Disaster Information Management System (IMS) in Nepal

- Despite the fact that the Nepal government and development partners spend significant financial resources on preparedness, mitigation and response every year, a comprehensive disaster database and a unified system of disaster information dissemination is still a key challenge
- There is lack of effective systems to monitor and archive disaster related data, and the mechanism to engage multiple stakeholders in information management processes

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Need for Disaster Information Management System (IMS) in Nepal

- Lack of a standardized national database on disaster for the implementation of immediate relief measures
- Ensure that response operations are focused upon the correct tasks, in the right order of priority

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Information Required

- *Pre-Disaster Situation.* collation and compilation of baseline data of the country and hazard (to improve the existing knowledge base), risk assessment, prevention, mitigation and preparedness
- *Post-Disaster Situation.* Real-time data of the disaster impact and resource to respond, plan for recovery and rehabilitation.

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Need of Geo-Portal

- Effectiveness of disaster risk management depends greatly on the efficiency in managing relevant information. In a disaster situation, authorities always need an up-to-date information, particularly the geospatial information to make decisions and actions quickly and timely
- There is a need of analyzing geospatial data in a geographical information system in the form of satellite imagery, and field data alone cannot be analyzed without geo-referenced system.

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Need of Geo-Portal

- The majority of information is spatial and can be mapped. Once information is mapped and data is linked to the map, disaster management planning will be in shape
- Disaster management personnel can expedite the formulation of mitigation, preparedness, response and recovery programs on the basis of linkage with geo-information system
- With the use of GIS, it can be identified the disaster management needs prior to an incident

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Sources of Data

- üMinistry of Home Affairs
- üHydro meteorological data – Department of Hydrology and Meteorology (DHM)
- üSatellite images, Land-use and topographic maps: Survey Department
- üDepartment of Health
- üAnd many others

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Geo-Portal

Geo-Portal is a web-based application and platform for developing geospatial information systems (GIS) and for deploying spatial data infrastructures (SDI). It is designed to be extended and modified, and can be integrated into existing platforms.

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index?reportId=5_5484

