



Nepal :Experience, Gaps and Needs in Disaster Risk Reduction and Climate Change Adaptation Planning and Financing



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and Members of Nepalese Delegation



Nepal ... with multiple disasters



(Photo By: Pradeep Man Dangol / ICIMOD, 23 November 2012)



(Image Courtesy of Nagarik Daily, 18 June 2013)

One Disaster and Two Death per day in Nepal, in an average of 35 years data, DisInventar





Major Disasters in Nepal

- | | |
|---------------|-----------------------------------|
| 1. Flood | 7. Drought |
| 2. Landslide | 8. GLOF |
| 3. Earthquake | 9. Avalanches |
| 4. Epidemics | 10. Windstorm |
| 5. Fire | 11. Thunderbolt |
| 6. Hailstone | 12. Cold-waves and loo (Hot-Wind) |

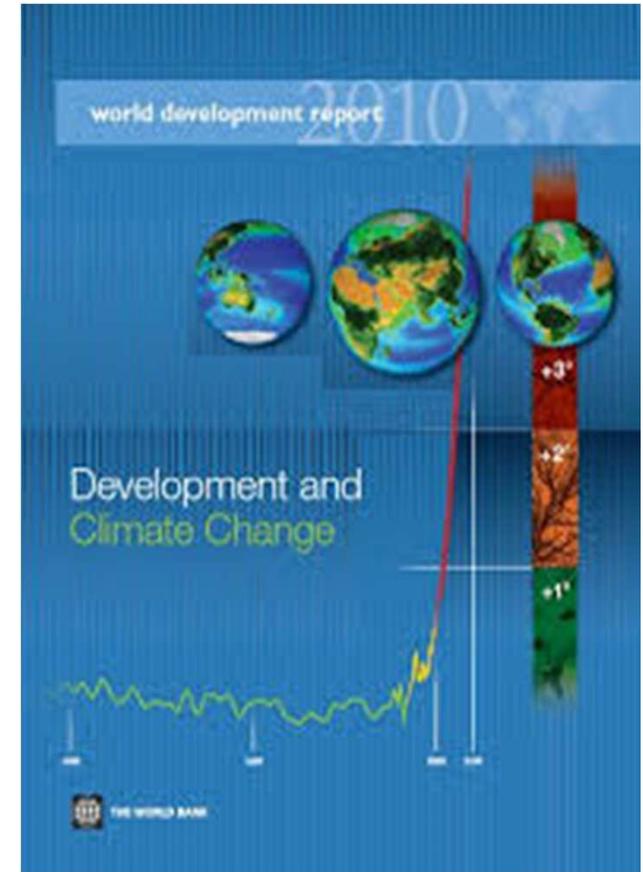
Frequent Disaster : Landslide and Flood..

Earthquake is likely to happen !!!!



Nepal's vulnerability to natural hazards; ...The Reality

- Nepal Ranks 11th- in terms of Earthquake (GRIP/BCPR/UNDP , Study Report by NSET)
- 6th to climatic hazards (UNDP-2004 “Reducing Disaster Risk”), now it’s 4th
- 30th in terms of floods: (UNDP / BCPR, 2004)
- Kathmandu, 21st most vulnerable city of the world;
- Natural Disaster HOT SPOT: Nepal (World Bank, 2005)
- In an average: “1 disaster and 2 deaths per day” (DesInventar data base 1971 - 2007, MoHA - www.desinventar.net)
- Nepal lies on Seismic Active Zone, according to Geological Study



Major Past Natural Disasters



- The great earthquake of 1255 has damaged palaces, temples, and houses in the Kathmandu Valley and killed one-third of its population. The reigning monarch, Abhaya Malla, had died six days after the earthquake as a result of injuries sustained during the event.
- 1934 (1990 BS) Great Earthquake with magnitude of 8.4 on the Richter scale, leaving 8519 people losing the lives
- 1988 (2045 BS), Udayapur Earthquake with 721 deaths, 6553 people injured, 64174 private buildings, 468 public houses, 790 government buildings damaged

Koshi Flood 2008

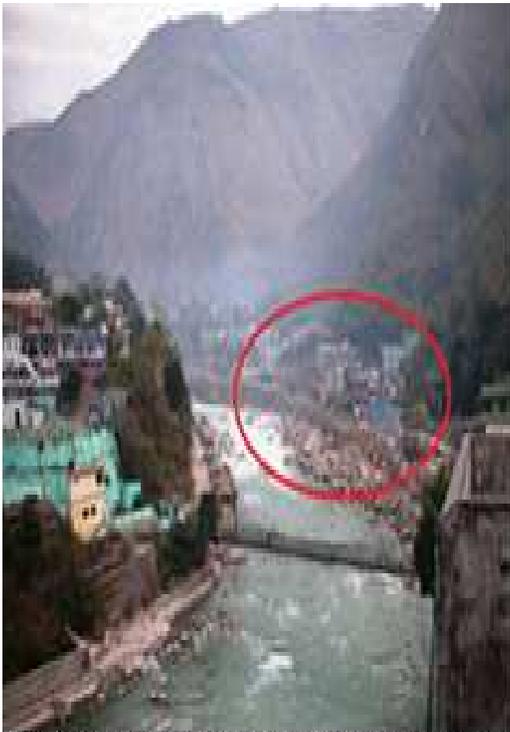
- 2008 Big Flood at Koshi River/River embankment collapse, living 2.7 million people affecting (both at Nepal and India) and around 200 people death
 - Rescue and Relief Standards, 2007 (1st revision in 2008 and 2nd in 2012 Jun)
 - Prime Minister Disaster Response Fund Guideline 2006, (1st revision in 2008)
 - PM Natural Disaster Response Fund (from 2006) activated intensively
 - Disaster Related Funds at Line Ministries, in process of creation from 2008
 - National Strategy for DRM, 2009
 - The Cabinet at OPMCM takes active role from 2008
 - National Risk Reduction Consortium (NRRC) 2009-2014, chaired by Home Secretary from 2009
 - Five Flagship Program 2009-2014 from 2009
 - Rescue and Treatment Sub-committee chaired by Health and Population Minister play active role from 2008
 - Supply, Shelter and Rehabilitation Subcommittee, chaired by Urban Minister play active role from 2008
 - National Platform on Disaster Risk Reduction, 2008
 - National Emergency Operation Center at National Levels and Regional/District Emergency Centers (EOCs) from 2010
 - SAHANA Program for data collection, processing and for dissemination from 2011
 - Publication of Disaster Report started, till date the reports are of 2009, 2011, 2013
 - Disaster Preparedness and Response Plan (DPRP) Guideline, 2011
 - Local Disaster Risk Management Guideline, 2012

Major Recent Natural Disasters



Flood in Mahakali River at Darchula in 2013

Flood in 2013, Swapped a major part of residential land at the district headquarter Darchula



(Photo By: Pradeep Man Dango / JCMOD, 23 November 2012)



(Image Courtesy of Nagarik Daily, 18 June 2013)



2013/06/17, Because of heavy rain, two night continuously flooded in Mahakali River, swapped 156 houses just in district headquarter Darchula. Floods and landslides caused by heavy rains in May 2013 hit 29 districts of Nepal. A total of 69 people were killing, 29 people injured and 2,079 families (approximately 12,474 people) were displaced due to the flood and landslide in 2013 (NDR, 2013).

Major Recent Natural Disasters



2012 (May 5) A great avalanches induced flood at Seti River, near Pokhara, taking life of 72 people, collasping around 30 small houses and damaging millions of worth



2012 (May), a big fire in Siraha District, burning around 1000 houses affecting 2063 people



2014 (August), Sunkoshi Blocked by big landslide, affecting around thousands of people in upper and lower river stream and Killing or missing 152 people also with main commercial road blocked to China for almost one month.



Cost of Losses and Damaged

- 3.32 Billion NRS in 2013

Government of Nepal
 Ministry of Home Affairs
 National Emergency Operation Center
 Loss of Lives and Properties from Disaster
 2013 A.D. (January 1st to December 31st)

S.No.	Type of Disaster	No. of Events	People			Affected Family	Animal Loss	House Destroyed			Estimated Losses (In Rs.)
			Death	Missing	Injured			Comp.	Partly	Shed Destroyed	
1	Air Crash	2	1	0	24	0	0	0	0	0	0
2	Avalanche	6	8	8	0	0	30	0	0	0	0
3	Boat Capsize	6	7	19	11	0	0	0	0	0	0
4	Cold Wave	2	2	0	0	0	0	0	0	0	0
5	Drowning	3	7	0	0	0	0	0	0	0	0
6	Earthquake	3	0	0	0	0	0	11	32	0	0
7	Epidemic	1	4	0	0	0	0	0	0	0	0
8	Fire	1021	59	0	115	1620	613	2029	149	510	1854907534
9	Flood	266	132	132	5	892	131	263	108	7	1293552790
10	Landslide	97	87	22	57	174	148	135	60	14	264131458
11	Heavy Rainfall	57	5	0	17	12	66	46	12	8	8089000
12	Wind Storm	11	3	0	3	0	0	1	3	0	2100000
13	Thunderbolt	212	146	0	286	12	548	25	29	14	2812000
TOTAL		1687	461	181	518	2710	1536	2510	393	553	3425592782

Cost of Losses and Damaged

- 16.8 Billion NRS in 2014 (January to Dec)

Government of Nepal
Ministry of Home Affairs
National Emergency Operation Center
Loss of Lives and Properties from Disaster
2014 (January 1st to December 31st)

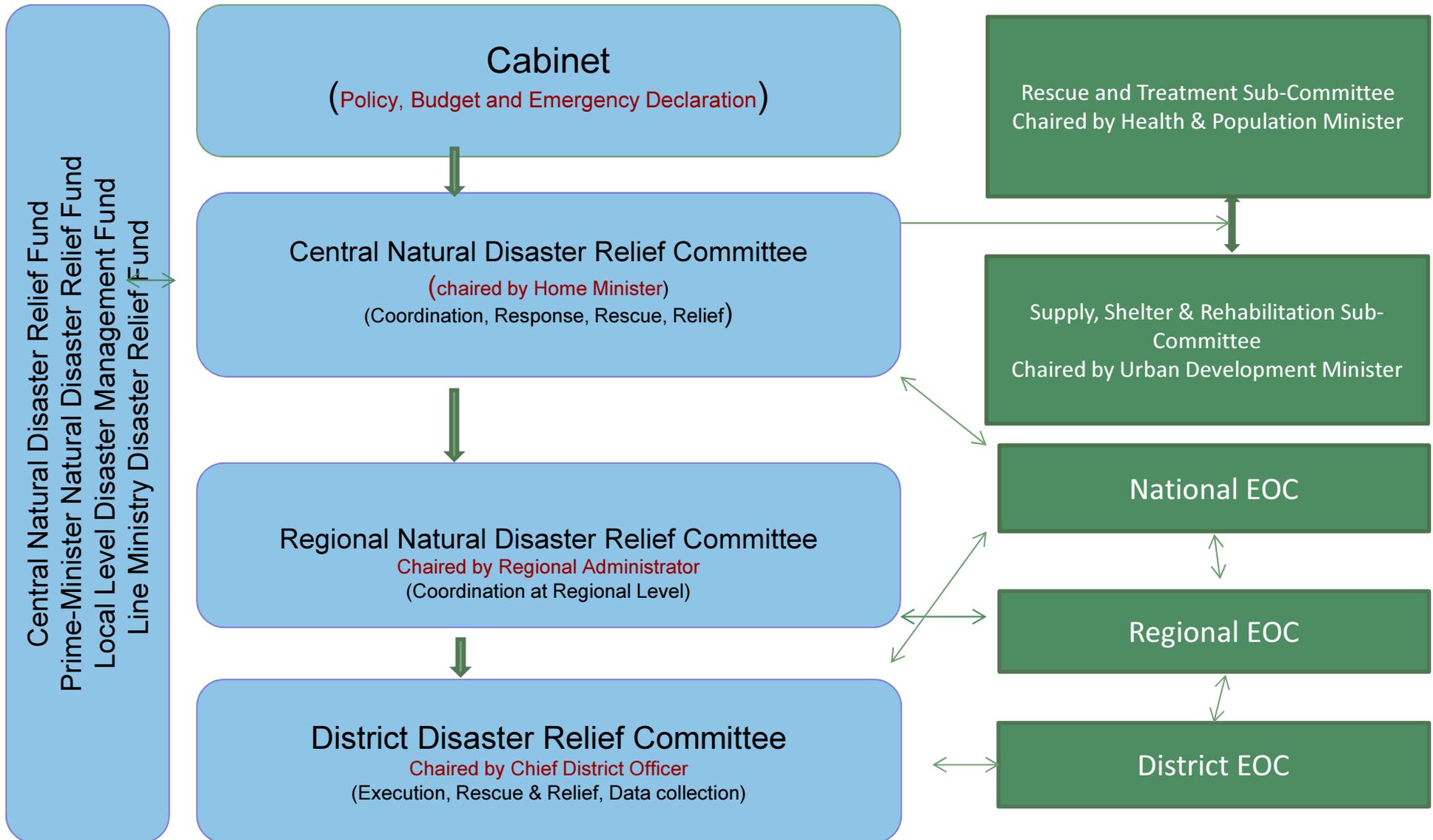
S.No.	Type of Disaster	No. of Events	People			Affected Family	Animal Loss	House Destroyed		Shed Destroyed	Estimated Losses (in Ra.)
			Death	Missing	Injured			Comp.	Partly		
1	Air Crash	1	18	0	0	0	0	0	0	0	0
2	Avalanche	2	13	6	7	0	0	0	0	0	0
3	Boat Capsize	2	9	6	0	0	0	0	0	0	0
4	Cold Wave	0	0	0	0	0	0	0	0	0	0
5	Drowning	20	13	10	1	0	0	0	0	0	0
6	Earthquake	0	0	0	0	0	0	0	0	0	0
7	Epidemic	12	12	0	0	0	0	0	0	0	0
8	Fire	958	67	0	98	194	743	1255	172	727	1707276800
9	Flash Flood	0	0	0	0	0	0	0	0	0	0
10	Flood	65	129	133	36	36514	4437	8622	24447	2	14917613938
11	Hailstone	0	0	0	0	0	0	0	0	0	0
12	Landslide	75	113	129	96	491	69	143	37	14	23665979
13	Rainfall	0	0	0	0	0	0	0	0	0	0
14	Wind Storm	15	3	0	9	0	0	0	23	0	11562000
15	Thunderbolt	177	99	0	227	5	80	2	3	10	10346000
16	Asaina Pani	1	0	0	0	2608	0	0	0	0	135065000
17	High Altitude	1	1	0	0	0	0	0	0	0	0
18	Heavy rainfall	20	6	0	6	0	9	12	4	3	4377000
19	Snow Storm	4	35	7		0	0	0	0	0	0
TOTAL		1353	518	291	480	39812	5338	10034	24686	756	16809906717



Existing Institutional Instruments

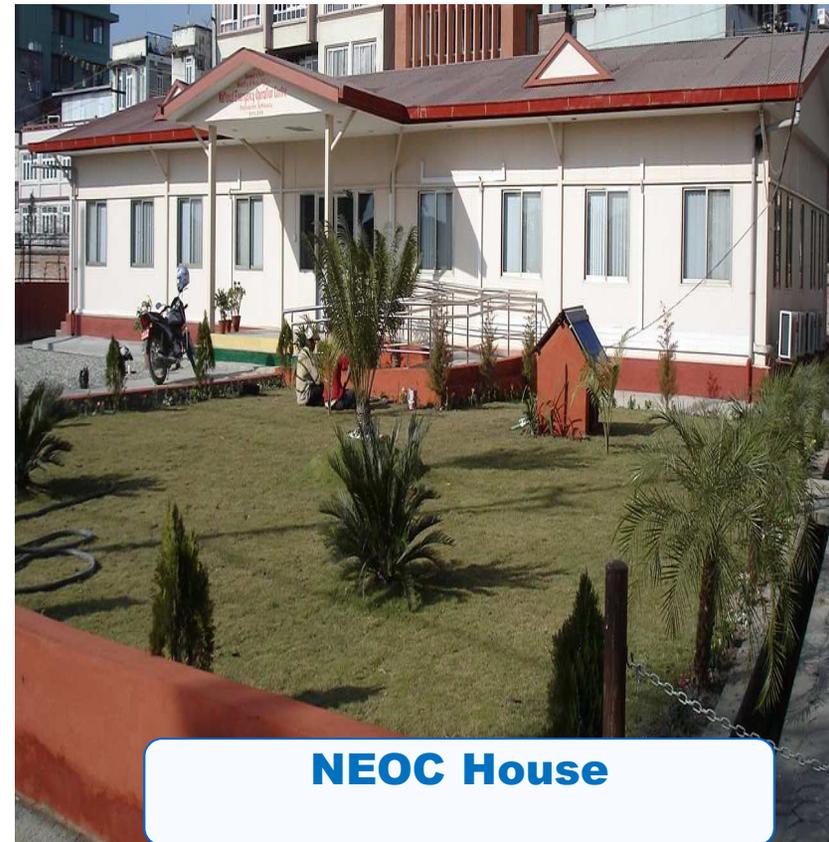
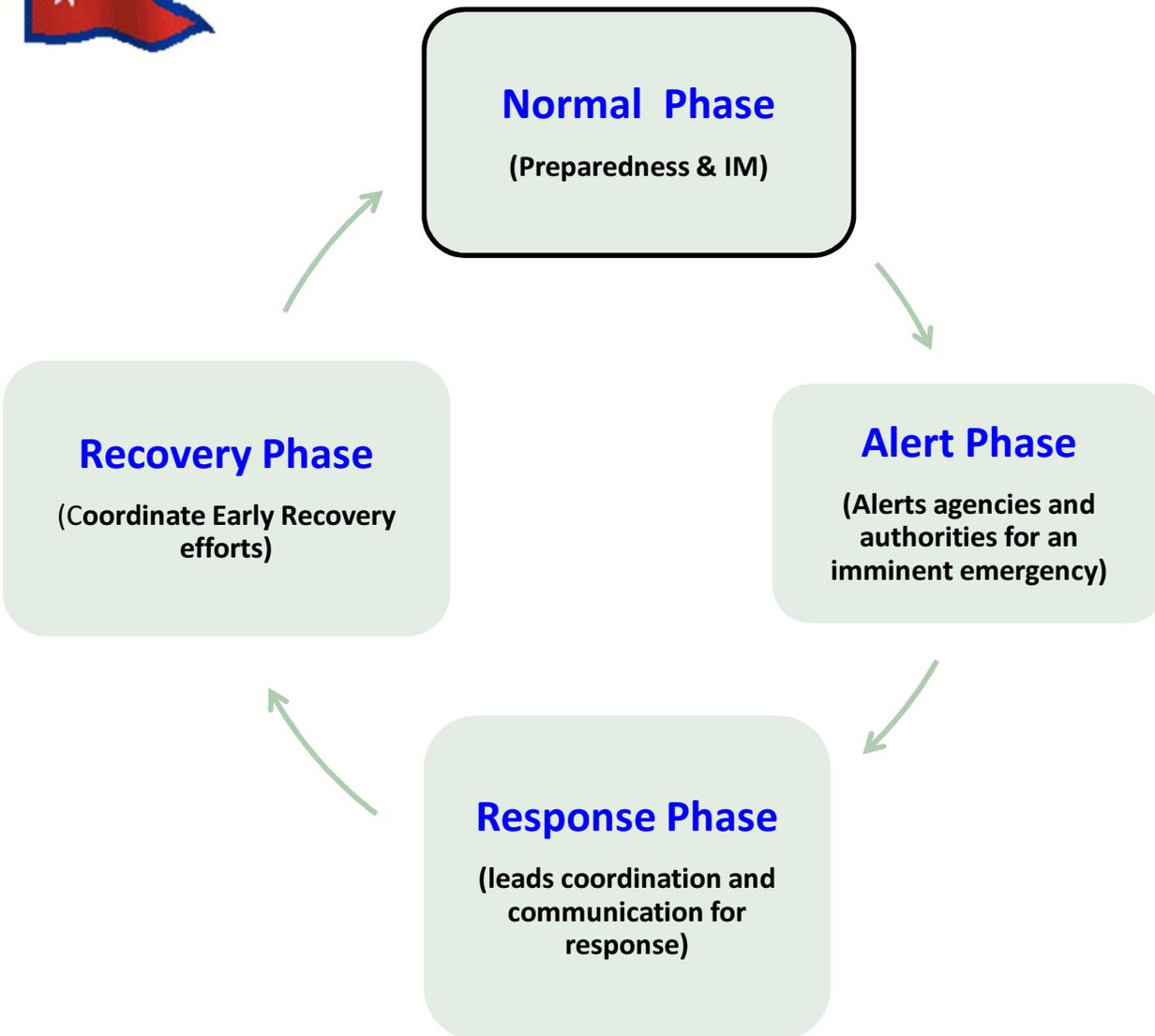
- Natural Calamity (Relief) Act, 1982, till date two amendments in 1989 and 1992
- Local Self Governance Act, 1999
- Government Work Division Regulation, 2012
- National Strategy for Disaster Risk Management, 2009 with 29 Strategies
- Rescue and Relief Standards, 2007, till date two amendments in 2007 and 2012
- National Disaster Response Framework, 2012 with 49 different actions
- Disaster Preparedness and Response Plan Guideline, 2011
- Local Disaster Risk Management Guideline, 2012
- Prime Minister Disaster Response Fund Guideline 2006, 1st amendment 2007
- Post-Disaster Dead-body management Guideline, 2012
- Decision about Open Space in Kathmandu Valley by Cabinet on 2013
- National Strategic Action Plan on Search and Rescue, 2014
- Guideline for the relief to cold-wave victims, 2012
- National Platform on Disaster Risk Reduction in 2008, now turned as a loose-network from 2012
- National Disaster Management Act, 2014 (in process)
- Funds
 - Prime Ministerial Disaster Relief Fund
 - Central Natural Disaster Relief Fund
 - Line Agencies Disaster Relief Funds
 - Local Government Disaster Relief Funds
- NRRC/Five Flagship/11 Clusters/NGOs Networks/DRR Platorm

Institutional Framework (in line with 1982 Act)





National Emergency Operation Centre (NEOC)





Disaster Preparedness and Response

- Activities based on National Strategy on Disaster Risk Management 2009 ;
- Risk Reduction/Flagship Program
 - School and Hospital Safety
 - Emergency Preparedness to Response
 - Flood Management
 - Community Managed DM
 - Policy and Institution Focus
- NRRC/Consortium, chaired by Home Secretary
- Cluster Approach in DM, 11 Clusters with their contingency plans
- Guidance Note for preparing the Disaster Preparedness Plan;
 - District Disaster Preparedness and Response Plans (DPRP)
 - Local level Disaster Risk Management Plan (LDRMP)
 - District Disaster Management Plan (DDMP)
 - » Initiation of Harmonization
- National Disaster Response Framework with 49 Activities
 - Strategic action plan formulation initiated in line with NDRF
- 83 Open Spaces and more evacuation site
- 36 District, 5 Regional & 5 Municipal EOCs
- National and local level simulations
- GoN and UN has jointly signed an Model Agreement (Customs Procedures);



Unofficial translation

Government of Nepal
Ministry of Home Affairs

National Strategy for Disaster Risk Management, 2009



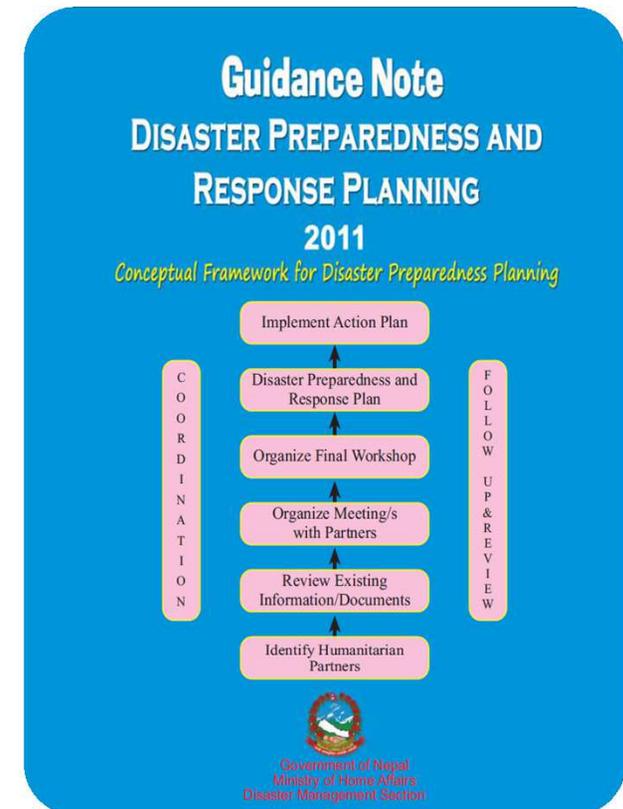
(Approved on 11 October 2009)

(ybbbaaq au 11 qzmpa 2009)



Cont...DPR Initiatives

- National Strategy on Search and Rescue, approved by Cabinet
 - Two Medium Team
 - Seven Light Team
 - Community Base SAR Teams
- National Strategy on Early Warning System (in process)
- Dead Body Management Guidelines approved and in place
- APF Disaster Management Training Centre
- Tribhuvan International Airport Contingency Plans
- Awareness raising programs at various level
- Common messages for disaster response, along with common disaster frequencies
- DRR Focal Point, assimilation of Environment and DRR Focal Points
- Approved Recovery Framework
- Retrofitting of Public Schools and Hospitals initiated
- Community base DRR initiations



Disaster Financing

- Central Disaster Relief Fund
 - District Disaster Relief Fund
 - Government Allocation Fund
 - Bilateral and Multilateral support
 - NGO,s, CBO,s, and Personal contribution
-

“Climate Change Budget Code 2013” is recently introduced by the Government of Nepal.

- About 5.4 percent of total budget is directly related to climate change adaptation and about 4.9 percent is indirectly related environment and climate change and others natural preservation and conservation.
 - About 10 percent of the total budget from the Government CC Adaptation.
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Climate Change Adaptation Planning and Financing Continue..

- **Climate Change Adaptation Financing**
 - PPCR (Pilot Project for Climate Resilience) 86 Million USD by GEF (26 Million Loan)
 - LAPA (Local Adaptation Plan of Action) 17 Million USD by DFID
 - Up scaling Renewal Energy 60 Million Grants USD – 140 Million Loan by GEF
 - Eco-system based adaptation 6Million USD (Fast track fund)
 - LDC,s Fund 14 Million USD
 - Multi-stakeholder Forestry 23 Million USD
 - Green Forest support by USAID 30 Million USD (outside the Govt. Framework)
 - Others fund
-

Gaps Challenges and Needs

- Lack of awareness among people on DRR issues
 - Capacity building at all levels
 - Establishment of Well functioning institution mechanism
 - Lack of coordination among the Ministries and lack central to grass roots levels relation
 - Mainstreaming DRR into national development process
 - Lack of proper Act, rules and regulation
 - Weak Governance
-

Needs and Priorities

- Difficult terrain and weak logistics resulting in delayed response
 - Implementation of NSDRM, 2009, only 5 strategies are officially implemented in the name of five flagship program, rest 24 need to have proper implementation
 - Establishment and management of warehouses with sufficient stockpiling
 - Communication equipment, transportation in emergency and other infrastructures
 - Strengthen the capacity of existing fire services and other emergency services like health and utility services
 - Implementation of National Building Codes
 - Management of evacuation sites, declared 83 open spaces
 - Endorsement of EWS Strategic Action Plan and Establishment of Early Warning System
 - Expand EOCs at regional, district and municipal/ VDC levels
 - Strengthening the technical and financial capacity to implement plans successfully
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1. Shift from Response focus to preparedness focus DM System (building code, preparedness, mitigation, proper awareness etc.)
 2. Mainstreaming DRR into development planning, implementation and monitoring & Evaluation both at Center and Local level
 3. New DM Act, having equal focus on all phase of DM Cycle
 4. Establishment of National Disaster Management Agency
 5. Implementation of all 29 Strategy of NSDRM, 2009
 6. Implementation of National Disaster Response Framework, NDRF, 2013 of 49 Action Plans
 7. Separate SAR Force in Nepal, with specific SAR Capacity

Most important thing is the Political Priority within the country and Nepal deserve an International Attention to progress accordingly along with HFA goals and in line with HFA2 priorities in future



Thank you
