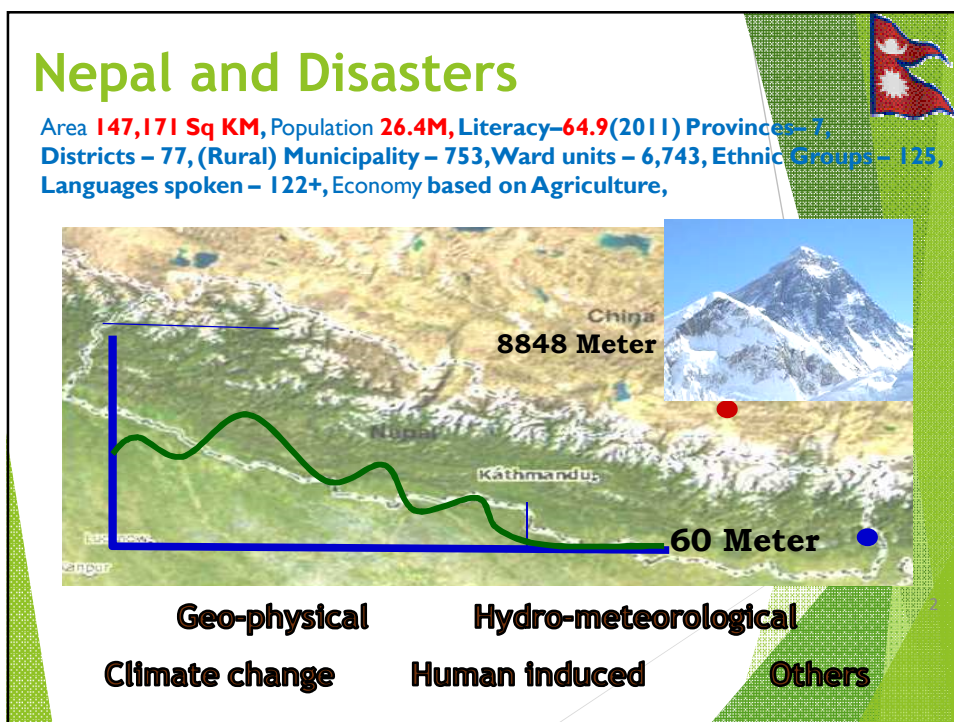
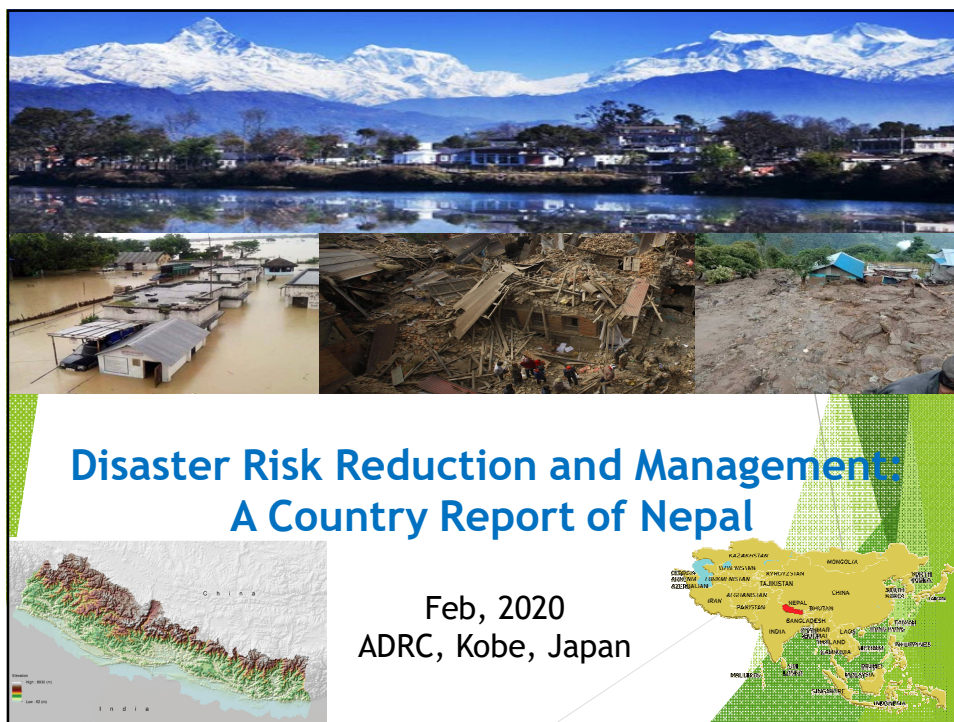
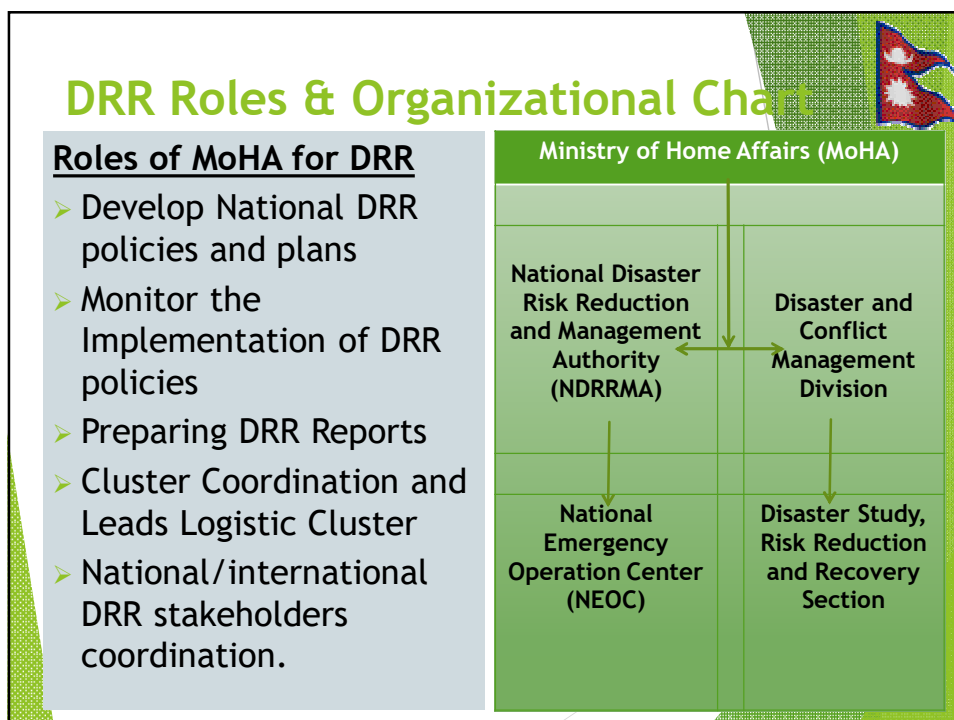
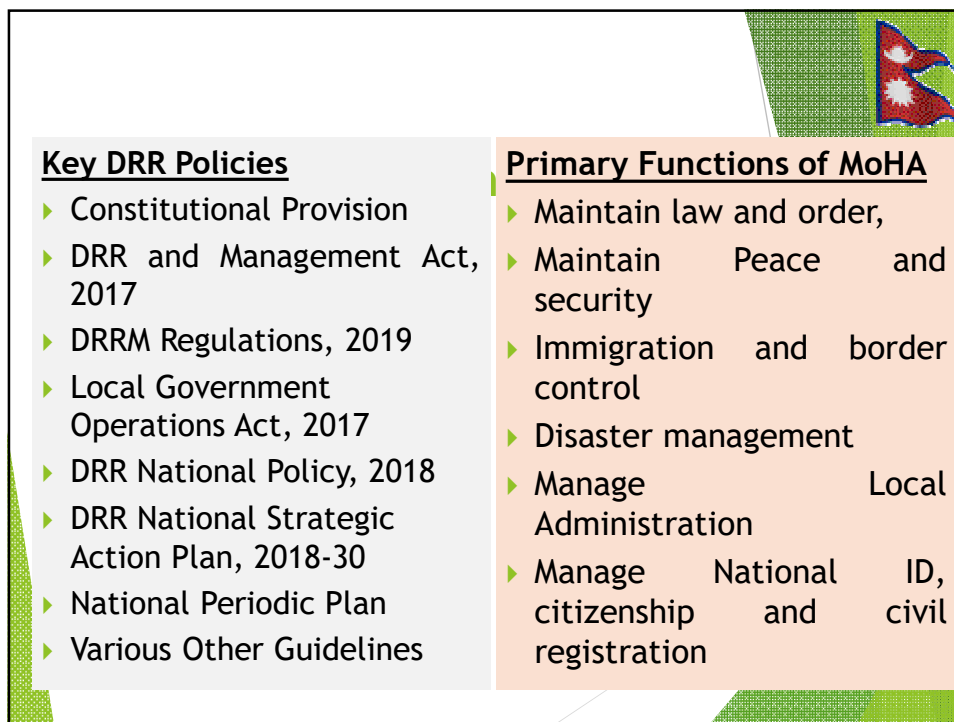


Disclaimer

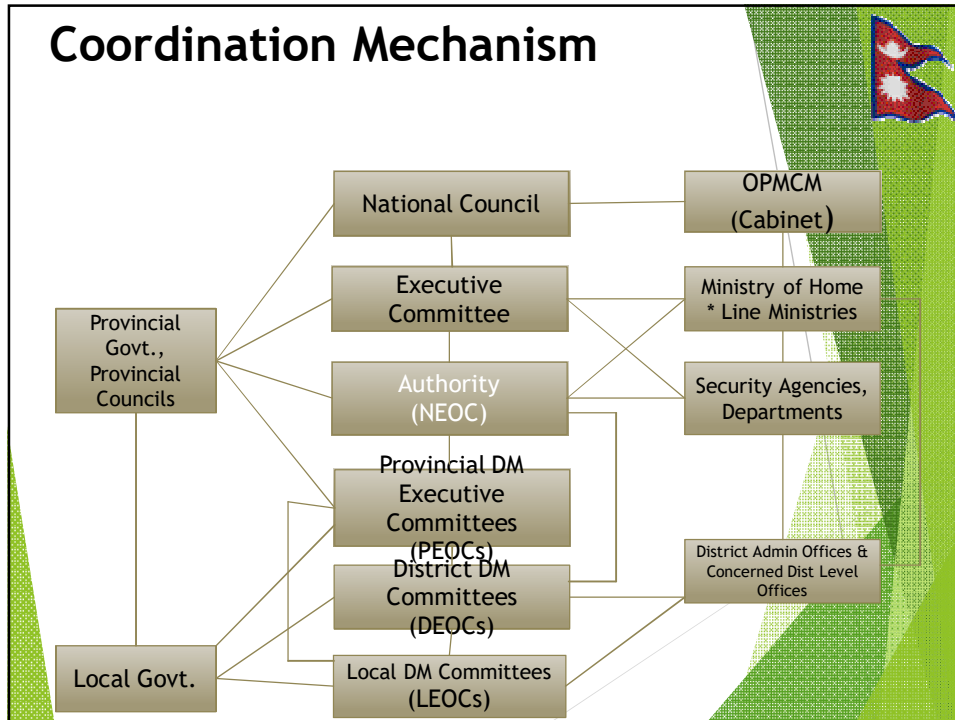
This report was compiled by an ADRC visiting researcher (VR) from ADRC member countries.

The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.





Coordination Mechanism



SFDRR Implementation

Nepal's roadmap to implement SFDRR is Disaster Risk Reduction National Strategic Plan of Action (2018- 2030)

4 Priority Areas, 18 Priority Actions and 271 Activities

Priority 1: Understanding Disaster Risk:

- ▶ **Assessments and database**
 - ▶ Initiate mapping and consolidate various multi-hazard risk assessments.
 - ▶ Comprehensive Disaster Information Management System (DIMS).
- ▶ **Capacity Building**
 - ▶ Capacity development of security forces for SAR.
 - ▶ Awareness program on DRM to government & non government stakeholders.
- ▶ **Monitoring**
 - ▶ Establish and expand Seismic stations, hydro-metrological stations, lightning detection centers.
 - ▶ Prepare Kathmandu valley soil liquefaction map.
 - ▶ Major glacier lakes monitoring and regular assessment system in place.
 - ▶ Forest and bush fire monitoring

SFDRR Implementation....Contd



Priority 2: Strengthening Disaster Risk Governance at Federal, Provincial and Local Level:

- ▶ **Institutional Arrangements**
 - National DRRM Authority (9th December, 2019)
 - DRRM Councils at Federal and Provincial Level and DRM Committees at all levels.
 - Institutional structures, identify focal person (units)
- ▶ **Policy backups**
 - DRR policies, laws, action plans.
 - Localization of DRR policies and legal frameworks
 - DRR and CCA are incorporated in local levels planning (LDCRP)
- ▶ **Engagements**
 - Disaster preparedness and response activities
 - Mainstream DRR in development plans
 - EOCs established at all levels
 - DRM Funds at all levels

SFDRR Implementation....Contd



Priority 3: Promoting Comprehensive Risk-Informed Private and Public Investments in Disaster Risk Reduction for Resilience:

Partnerships:

- ▶ **DRRM investments**
 - Public funds
 - Donors, Development partners, UN agencies, (I)NGOs
 - Private sector (Recovery and reconstruction)
- ▶ **Recovery program undergoing (Public+Partners+Private)**
 - 2015 Earthquake
 - 2017 Floods
- ▶ **Partnership initiatives**
 - Managed disaster funds at each level
 - Encourage private sectors to invest on DRR programs
 - Public and Private properties are identified as open space in Kathmandu Valley
- ▶ **Risk Transfer models**
 - Health Insurance, Livestock insurance, Social Security in place.
 - Karnali Province insured all its citizens for Disaster and Accidental incidents.

SFDRR Implementation....Contd

Priority 4: Enhancing Disaster Preparedness for Effective Response and to "Build Back Better" in Recovery, Rehabilitation and Reconstruction:

- ▶ Recovery, Rehabilitation and Reconstruction
 - National Reconstruction Authority is leads reconstruction activities as per the Rehabilitation Policy and Post Disaster Recovery Framework.
 - NRA supports disasters affected people with reconstruction needs
 - Apply "Build Back Better" principle in reconstruction
 - Enforcement of Building Code
 - Early warning system (Hydro-meteorological) disease surveillance system(EWARS)
- ▶ Preparedness for Response (Resource and Capacity)
 - DPRP LDCRP plans and simulation exercises
 - Enhanced SAR capacity of security forces, each of them have DRR schools.
 - Community-based disaster activities on mitigation and prevention
 - Regular updates of heavy equipment located in the strategic locations.
 - HSA at the center, FLBs at Province & MLHs strategic locations.
 - Warehouse at federal, provincial and local levels
 - Trauma centers at strategic Locations

Multi-hazard scenario of Nepal by its socio-economic loss, 1971-2018

Type of Disaster	No. of Incidents	Death	Human Loss			Houses Damaged
			Missing	Injured	Affected Family	
Fire	12694	1755		2176	265962	90044
Lightning	2143	1780		3235	7758	1000
Landslide	3729	5141	191	2053	559347	34094
Wind storm	298	21		95	1718	1279
Flood	4368	4628	87	615	3726261	230900
Epidemic	3474	16598		44992	513409	0
Avalanche	3	17	4	7	1	0
Snow Storm	7	97	7	0	10	0
Hailstones	134	9		24	3407	157
Earthquakes	175	9771		29142	890995	982855
Cold Waves	438	563		83	2441	0
Others*	1134	626	13	919	3214	2461
Total	28597	41006	302	83341	5974523	1342790
(Average)	608	872	7	1773	127118	28570

Source: NEOC, MoHA, 2018 *-Structure Collapse, drowning, boat capsized, animal attack and others

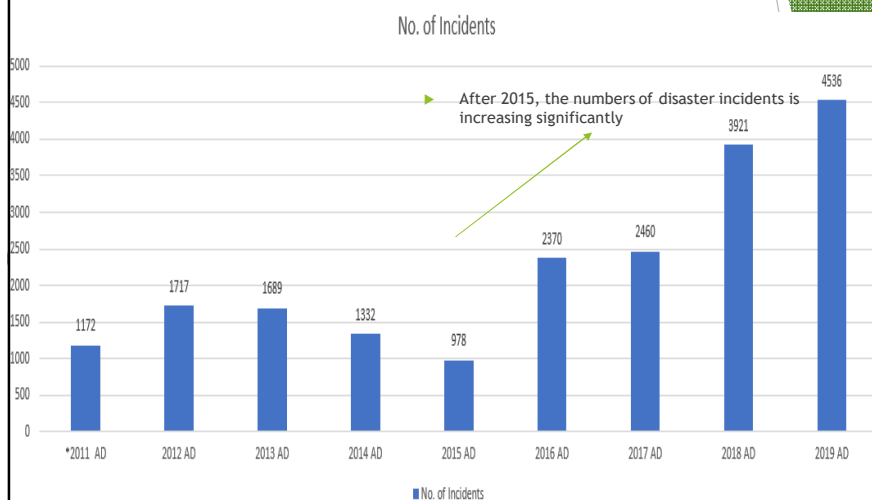
Loss and Damage by 2015, Gorkha ML7.6 EQ



	Disaster Effects (NPR million)			Distribution of Disaster Effects (NPR million)		Losses in personal income (NPR million)
	Damages	Losses	Total	Private	Public	
Social Sectors	355,028	53,597	408,625	363,248	45,377	-
Housing and Human Settlements	303,632	46,908	350,540	350,540	-	-
Health	6,422	1,122	7,544	1,394	6,150	-
Education	28,064	3,254	31,318	2,365	28,953	-
Cultural Heritage	16,910	2,313	19,223	8,948	10,274	-
Productive Sectors	58,074	120,046	178,121	158,079	20,043	17,124
Agriculture	16,405	11,962	28,366	25,813	2,553	4,603
Irrigation	383	-	383	-	383	-
Commerce	9,015	7,938	16,953	16,953	-	2,667
Industry	8,394	10,877	19,271	19,271	-	3,654
Tourism	18,863	62,379	81,242	75,105	6,137	6,200
Finance	5,015	26,890	31,905	20,937	10,969	-
Infrastructure Sectors	52,460	14,323	66,783	17,281	49,502	-
Electricity	17,807	3,435	21,242	15,569	5,673	-
Communications	3,610	5,085	8,695	1,712	6,983	-
Community Infrastructure	3,349	-	3,349	-	3,349	-
Transport	17,188	4,930	22,118	-	22,118	-
Water and Sanitation	10,506	873	11,379	-	11,379	-
Cross-Cutting Issues	51,872	1,061	52,933	1,755	51,178	-
Governance	18,757	-	18,757	-	18,757	-
Disaster Risk Reduction	155	-	155	-	155	-
Environment and Forestry	32,960	1,061	34,021	1,755	32,267	-
Total	517,434	189,027	706,461	540,362	166,100	17,124
Total (US\$ million)	\$5,174	\$1,890	\$7,065	\$5,404	\$1,661	\$171

Source: Disaster Preparedness and Response 2015 National Disaster Preparedness Commission Report

Trend of Disaster Events



Disasters Incidents

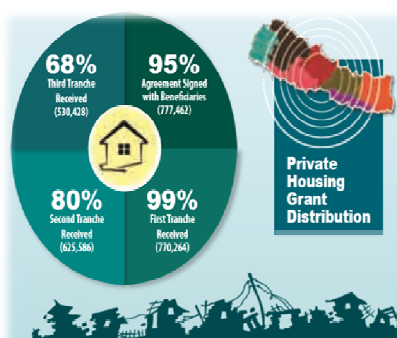
Disaster incidents and its impact in Nepal

(Year 2019)

No. of Incidents	Dead	Missing	Injured	Affected Family	Estimated Loss (NPRs)	No. of House Damaged
4,538	489	41	2,452	25,264	4,709,510,265	4,939
Top 5 Disaster claiming Human lives				Top 5 Disaster causing Financial loss in NPRs.		
Thunderbolt - 94 Landslide - 86 Fire - 78 Flood- 73 Windstorm- 40				Fire - 3,069,627,416 Flood - 1,063,495,249 Landslide- 405,186,000 Windstorm- 77,473,200 Snowstorm- 53,085,000		

Source: National Emergency Operation Center, MoHA; www.drrportal.gov.np

Reconstruction after 2015 Gorkha Earthquake M7.6



Private Housing Reconstruction

Houses Constructed	62%	481,868
Houses Under Construction	25%	192,692
Second Tranche Applicants		437,998
Approved Second Tranche Beneficiaries		434,833
Third Tranche Applicants		551,849
Approved 3rd tranche beneficiaries		549,817

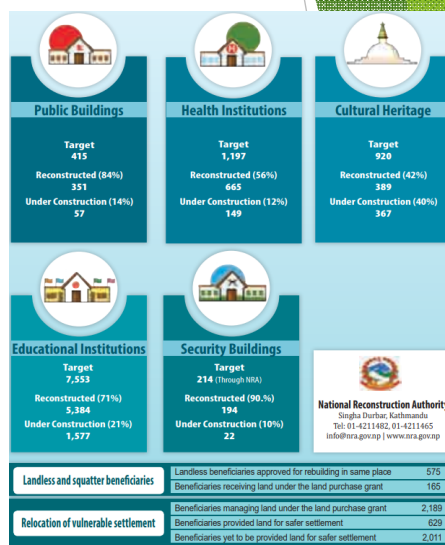
Figures as of December 31, 2019

Grievance Management

Grievance Registered	184
Grievance Re-surveyed	386,858
Grievance Addressed	386,858

Re-Survey and Re-verification

Re-survey Beneficiaries	125,411
Re-survey Beneficiaries	122,400
Re-survey Beneficiaries	185,000

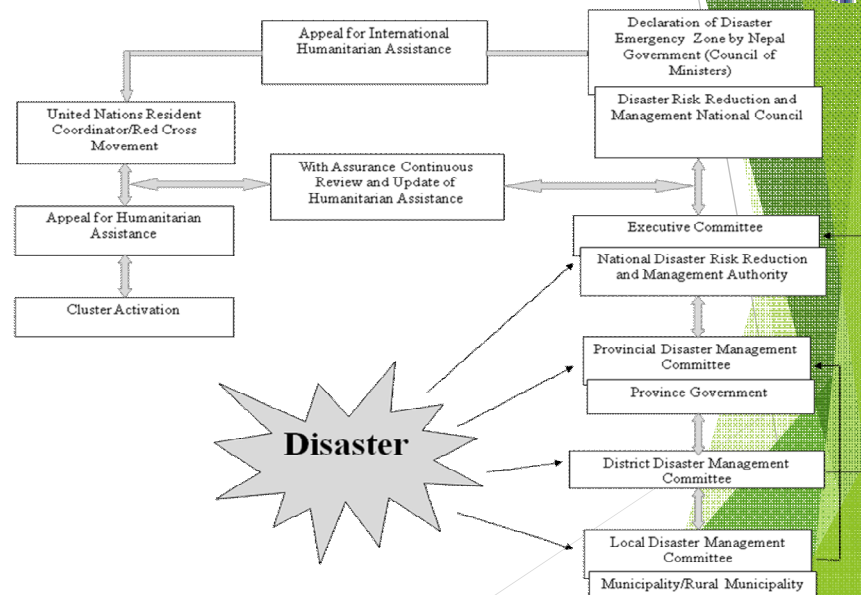


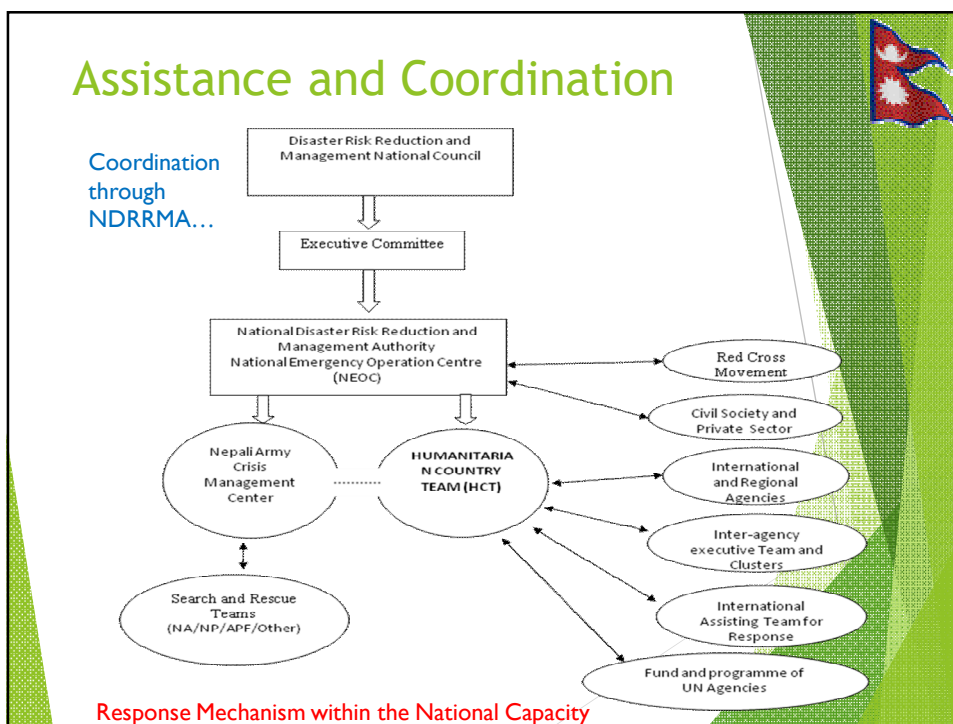
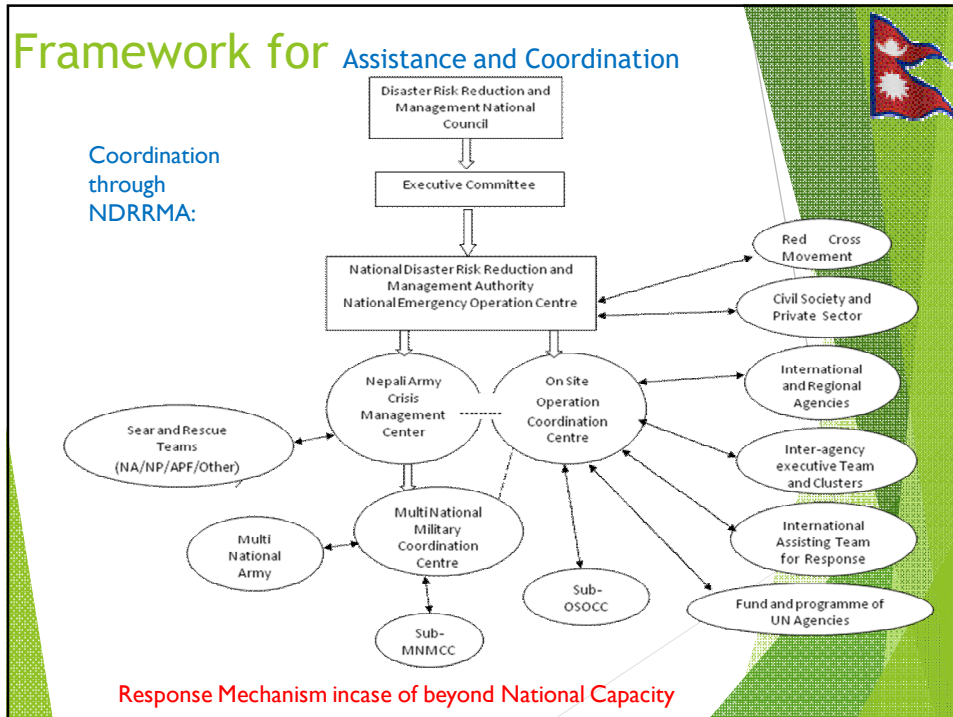
Response Policies and Frameworks

National Disaster Response Framework, 2019(Revised)

Cluster Approach	lead/co-lead
► SAR and Logistics Cluster	MoHA /WFP
► Health Cluster	MoHP /WHO
► WASH	MoUD/ Unicef
► Nutrition Cluster	MoHP/Unicef
► Emergency Shelter Cluster	MoUD/ IFRC
► CCCM Cluster	MoUD/IOM
► Food Security Cluster	MoALSD/WFP
► Education Cluster	MoEST/ Unicef, Save the Children
► Protection Cluster	MoWCSC/UNFPA
► Emergency Telecommunication	MOCIT/WFP
► Early Recovery Network Cluster	MOFAGA/ UNDP

Framework for Assistance/Coordination





Challenges:

► Mainstreaming DRRM

- Plans and activities of governments reflected and underscored in the for DRR are not substantiated in their annual programs and budgets.
- lack of tools to assess contribution of an investment in development sectors towards DRR.
- Understanding risk of different geographies, different communities, different hazards and different economic activities while scientific risk assessments are very limited.
- lack of common understanding between and within the new governance system stands as another challenge.

► Institutional strengthening and capacity building

- DRR approach has not come in front on the institutions . New policies are gearing up the concept.
- Scope and O&M of new NDRRMA is yet to be confirmed.
- SOPs and standards have not been fully developed
- Overlapping, lack of uniformity and common understanding
- Lack of adequate coherence in different national and international instruments



Challenges...

► Other challenges

- Information, technology and knowledge gap on the practical aspects of the DRRM
- Prevalence of new forms disaster, urbanization, unprecedented disaster.
- Aligning DRRM landscape with political transformation
- Uncertainty of risk due to climate change.
- Trans-boundary nature of hazards and need of bilateral, international efforts.
- Proper utilization of financial and other resources and the capacity available internally and externally with transparency.
- Disaster Information and Management System is developed and launched. The information and its continuity.
- Ensuring Inclusiveness.



Way forward:

- ▶ Better understanding of disaster risk through scientific research and comprehensive risk assessment
- ▶ **Formulation of additional necessary DRR policy measures, strategies, guidelines by 2020. (Land use plan, Early warning System etc.)**
- ▶ Institutional arrangements and set up of institutional structures (such as NDRRMA, EOCs).
- ▶ Implement actions of Strategic Action Plan - complete short-term, and initiate and complete long term as appropriate.(Building code)
- ▶ Bilateral and international cooperation regarding our priorities. (International support for technological transfer, knowledge management)
- ▶ Empowering province and local governments for effective leadership role in disaster risk management
- ▶ Ensure meaningful participation of women, person with disability, minority and vulnerable groups in the overall DRR program decisions and implementation.
- ▶ Develop international fund for DRR in developing countries
- ▶ Provide and share more data and evidence on the benefits of investing in preparedness.
- ▶ Effective and integrated implementation of DIMS.
- ▶ The disaster resilient livelihood options need to be promoted to strengthen community resilience
- ▶ Ensure appropriate technologies and innovations are in place to have the bigger impact on overall DRRM of the country.
- ▶ Develop multi hazard SAR capacity at all levels.



My Research:

Topic- A comparative study of legal instruments on disaster risk management in Japan and Nepal.

- ▶ Nepal has new governance system with new laws
 - ▶ There are DRR related acts, policies, plan and some guidelines at the Federal level
 - ▶ Province and local level are issuing new laws under the national umbrella
 - ▶ The guiding instruments for technical aspects is lacking
 - ▶ Many other things may lack
- Expected Results:**
- ▶ I. Identification of policy gaps in disaster risk management in Nepal
 - ▶ II. Prescribing the policy needs for emergency management and disaster risk reduction in Nepal
 - ▶ III. Enhance personal skill to work for DRR in Nepal

**Thank You
Dhanyabad
Arigato Gozaimasu**



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