CONSULTATION REPORT

National Disaster Risk Reduction Policy
and Strategic Action Plan - Nepal
2016- 2030

Submitted to:
Ministry of Home Affairs, Singh Darbar
through
United Nations Development Programme, Pulchowk,
Kathmandu, Nepal

Submitted By:
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Background

Nepal is exposed to various geophysical, climatic and biological hazards which each year kill hundreds of people and wreak vast damage and loss. Nepal stands at the top 20th on the list of the most multi-hazard prone countries in the world. It is ranked at the 11th in earthquake risk, 4th in climate change risk and 30th in flood risk. Main hazards in Nepal are earthquake, flood (including Glacial Lake Outburst Flood), landslide, drought, storm, hailstorm, thunderbolt, avalanches, cold-waves, forest fires and (GLOF). Floods, landslides, epidemic, thunderbolt and forest fires are recurring disasters. The Gorkha earthquake 2015 resulted in loss of 8891 lives and destruction of over a half million houses with economic loss of about USD 7 billion. An average of 300 people die each year due to floods and landslides only with annual economic damages exceeding USD 10 million. In the past 100 years, earthquakes have caused the most deaths of all disasters caused by natural hazards. However, floods have cost the most in damages. 33,482 people lost their lives due to various disasters from 1983 to 2015 (DWIDM1, 2016).

The Government of Nepal (GON) has promulgated various laws and policies to address disaster risk management. Key policies and acts include the Natural Calamity (Relief) Act, 1982 and National Strategy on Disaster Risk Management (NSDRM), 2009. The NSDRM, 2009 is based on Hyogo Framework for Action and encompasses strategies on every aspect of disaster management. Disaster Risk Reduction (DRR) and Climate Change Adaptation have become national priority and being institutionalized to support sustainable development in Nepal through the harmonization and mainstreaming process. The GON has embarked on a process to formulate its National Disaster Risk Reduction Policy and Action Plan: 2016-2030 in line with Sendai Framework for Disaster Risk Reduction taking into account the lessons learned and gaps identified through the implementation of NSDRM, lessons learned from 2015 Gorkha earthquake and other initiatives around climate change and Sustainable Development Goals. The process envisages engagement of government agencies, non-government organizations, private sectors and development partners to jointly review the efforts made so far and identify the future priorities. The outcome of the process will be an updated version of NSDRM, 2009 and DRR Policy documents. Practical Action Consulting Pvt. Ltd. (PAC Nepal) is providing technical support to this process. UNDP and AINTGDM are facilitating this process through funding support.

The National DRR Policy and Strategic Action Plan Management Committee has instructed the Policy Preparation team to make the process consultative and participatory. This consultation report includes the approach and methodology adopted to conduct the overall consultation process charted for the preparation of the National DRR Policy and Action Plan. It includes summary of discussions held as of date and the outcomes of the consultation. It also includes the guiding questions for consultations with key organisations and professionals engaged on DRM.

Objectives of the Consultation Process

The main objective of the consultation process is to assess and identify – What needs to be done and what are the priorities for national disaster risk reduction policy and strategic action plan. Besides, the consultation process also aims to learn from Nepal’s experience in implementing the NSDRM 2009, the challenges to implement the strategic action plan.

Expected outputs from consultation workshops/meetings are the following:

- Priority areas for DRR in Nepal
- Policy gaps corresponding to identified priority areas
- Priority strategic actions (short, medium, long terms) corresponding to identified priority areas
- Implementation mechanism
- Financing
- Monitoring and evaluation

Approach and Methodology

The approach and methodology that has been applied as well as will be continuous for the consultation process are follows:

- Management committee meetings
- Consultation meetings with individuals, government, non-government agencies
- Thematic working group workshops and meetings
- Key informant's interviews
- Meetings with donors and development partners
- National, Sub-national and district level workshops

Apart from the consultation meetings and workshops, the National DRR Policy and Strategic Action Plan preparation process will be widely disseminated through MOHA’s website www.drmportal.gov. The webpage will be designed to share the process including sharing of findings from consultations. A key aspect will be in designing a process to receive feedback from individuals and organisations.

Consultation Process

The overall consultation process comprises of series of consultations with representatives of relevant organisations. A draft list of organisations is presented in Annex 1. At the end of
December and in January 2017, seven consultations have been completed. The dates for National, sub-national and district consultations are yet to be decided, whereas the locations for these consultations have been confirmed as follows:

Sub-national level:
1. Nepalgunj
2. Pokhara
3. Biratnagar

District level:
1. Kailali
2. Jumla
3. Nawalparasi
4. Gorkha
5. Dolakha
6. Saptari
7. Panchthar

The following Table presents the supporting and hosting agencies for the consultation workshops in different levels:

<table>
<thead>
<tr>
<th>Consultation</th>
<th>Place</th>
<th>Support Agency, Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>National 1</td>
<td>Kathmandu</td>
<td>UNDP, AINTGDM, PAC, DPNet: Host</td>
</tr>
<tr>
<td>Subnational 1</td>
<td>Biratnagar</td>
<td>ActionAid, Plan, WVI, LWF, DPNet: Host</td>
</tr>
<tr>
<td>Subnational 2</td>
<td>Pokhara</td>
<td>Save the Children, DPNet: Host</td>
</tr>
<tr>
<td>Subnational 3</td>
<td>Nepalgunj</td>
<td>Save the Children, WVI, Plan, Oxfam, DPNet: Host</td>
</tr>
<tr>
<td>District 1</td>
<td>Jumla</td>
<td>MOHA, [to be confirmed]</td>
</tr>
<tr>
<td>District 2</td>
<td>Kailali</td>
<td>World Vision International, ADRA, CARE, LWF, PA</td>
</tr>
<tr>
<td>District 3</td>
<td>Nawalparasi</td>
<td>Save the Children, DPNet : Host</td>
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<tr>
<td>District 4</td>
<td>Gorkha</td>
<td>CARE, WVI, Oxfam</td>
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<td>District 5</td>
<td>Dolakha</td>
<td>Save the Children, ASB, Plan, Water Aid</td>
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<td>District 6</td>
<td>Saptari</td>
<td>DCA, Practical Action, LWF, Oxfam</td>
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<tr>
<td>District 7</td>
<td>Panchthar</td>
<td>MOHA, [to be confirmed]</td>
</tr>
<tr>
<td>National 2</td>
<td>Kathmandu</td>
<td>UNDP, AINTGDM, PAC, DPNet: Host</td>
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One-to-one consultations were conducted using a set of guiding questions. These questions have been finalised incorporating feedbacks from the experts. Annex 2 presents the Guiding Questions.

Consultation Meetings

All the consultations were conducted with reference to the guiding questions and the details of each consultation are presented in Annexes. The consultations were basically focused on the four priority actions of the Sendai Framework.

Following are the lists of consultations held:

1. **Consultation with Department of Water Induced Disaster Management**: This consultation meeting was held on December 28, 2017 at DWIDM office. The details of this meeting are presented in Annex 3.

2. **Consultation with Department of Soil Conservation and Watershed Management (DSCWM)**: This consultation was held on January 3, 2017 at DoSCWM office at Babarmahal. The details of this meeting are presented in Annex 4.

3. **Consultation with Department of Hydrology and Metrology (DHM)**: This consultation was held on January 4, 2017 at DHM office, Nagpokhari. The details of this meeting are presented in Annex 5.

4. **Consultation with Department of Mines and Geology (DMG)**: A one-to-one consultation was conducted on January 6, 2017 at DMG office, Lainchaur. Meeting note is presented in Annex 6.

5. **Consultation with Ministry of Population and Environment**: This consultation was held on January 9, 2017 at MOPE office, Singha Durbar. More details on the meeting are presented in Annex 7.

6. **Consultation with Department of Forest**: This consultation was held on January 12, 2017 at DOF office, Babarmahal. For more details, please see Annex 8.

7. **Consultation with Department of Urban Development and Building Construction (DUDBC)**: This consultation was held on January 27, 2017 at DUDBC office, Babarmahal. The details of this meeting are presented in Annex 9.

8. **Consultation with Department of Health Services; Epidemiology and Disease Control Division**: This consultation was held on January 29, at Teku. Meeting details are presented as Annex 10.

9. **Consultation with Prof. Vinod Menon, Founder Member, National Disaster Management Authority (NDMA), Government of India**: This individual consultation meeting was held on January 30 at Practical Action office. Details on this meeting are presented in Annex 11.

10. **Consultation with Management Committee at NEOC/ MOHA**: This was a regular meeting held on January 30, 2017 at NEOC/ MOHA Singha Durbar. The meeting note is presented in Annex 12.

11. **Consultation with Mercy Corp was held on 19 January 2017 at Mercy Corps Office, Sanepa.** The details on this meeting are presented in Annex 13.
Annex 1 Stakeholder Organizations

Government Organizations

The following Government Organizations will be consulted for developing DRR Policy and Strategic Action Plan.

1. Office of the Prime Minister and Council of Ministers
2. National Planning Commission
3. National Reconstruction Authority
4. Ministry of Home Affairs
5. Ministry of Population and Environment
6. Ministry of Education
7. Ministry of Federal Affairs and Local Development
8. Ministry of Information and Communication
9. Ministry of Forest and Soil Conservation
10. Ministry of Health
11. Ministry of Industry and Commerce
12. National Emergency Operation Centre
13. Department of Hydrology and Meteorology
14. Alternative Energy Promotion Centre
15. Department of Water Induced Disaster Management
16. Department of Soil Conservation and Watershed Management
17. Department of Irrigation
18. Water and Energy Commission Secretariat
19. Department of Agriculture Development
20. Department of Urban Development and Building Construction
21. Department of Mines and Geology
22. Civil Aviation Authority of Nepal

Non-Governmental Organizations

The following Non-Government Organizations will be consulted for developing DRR Policy and Strategic Action Plan.

23. Practical Action
24. Mercy Corps
25. Oxfam
26. Care Nepal
27. Handicap International Nepal
28. Nepal Society for Earthquake Technology (NSET)
29. Disaster Preparedness Network (DPNet)
30. Society of Hydrologists and Meteorologists – Nepal
31. Nepal Geological Society
32. Himalayan Landslide Society

Humanitarian Organizations

The following Humanitarian Organizations will be consulted for developing DRR Policy and Strategic Action Plan.

33. Nepal Red Cross Society
34. International Federation of Red Cross and Red Crescent
Development Agencies

The following development agencies will be consulted for developing DRR Policy and Strategic Action Plan.

35. United Nations Development Programme
36. Asian Development Bank
37. World Bank
38. Deutsch Gesellschaft für Internationale Zusammenarbeit (GIZ)
39. Japan International Cooperation Agency (JICA)
40. United States Agency for International Development (USAID)
41. Department for International Development (DFID)
42. Danida
43. Swiss Development Agency (SDC)

Inter-Governmental Organization

The following Inter-Governmental Organizations will be consulted for developing DRR Policy and Strategic Action Plan.

44. International Centre for Integrated Mountain Development (ICIMOD)
45. SAARC Disaster Management Centre (SDMC)
46. Regional Integrated Multi-Hazard Early Warning System (RIMES)

Private Sector

The following private organizations will be consulted for developing DRR Policy and Strategic Action Plan.

47. Nepal Land and Housing Developers Association
48. Nepal Insurer’s Association
49. Telecommunication companies (e.g. Ncell, Nepal Telecom)
50. Federation of Nepalese National Transport Entrepreneurs
51. Media (Nepal Forum of Environmental Journalist)

Research and Academic Institution

The following research and academic institutions will be consulted for developing DRR Policy and Strategic Action Plan.

52. Tribhuvan University (Central Department of Hydrology and Meteorology, Department of Geology, Institute of Engineering - Centre for Disaster Studies)
53. Kathmandu University (Himalayan Cryosphere, Climate and Disaster Research Center)
54. Pokhara University (Nepal Engineering College - Center for Disaster Risk Studies)
Annex 2 Guiding Questions

Section 1: General Information
1. Interviewee (Name, Position):
2. Contact No/E-mail:
3. Name of the Organisation:
4. Type of organization/Development Sector:
5. Division/Unit:
6. Geographic scale of work:

Section 2: Understanding Disaster Risk for Decision Making
Explore if disaster risk assessment(s) are undertaken by interviewee’s organization. Obtain information on how they are used for making decisions, their experiences, gaps and areas of improvements.
• Does your organization assess/map hazard/vulnerability/risks? If yes, then provide information on hazards, spatial extent etc. How often do you update risk assessment?
• Does your organization use risk assessments/ risk information for making decisions e.g. in identifying a project or in implementing a project? What are those?
• If risk information/ assessments are carried out, how is risk information shared within and outside of the organization? What could be the potential mechanism to share risk information?
• Do you work with other organizations to assess risks?

Section 3: Strengthening disaster risk governance to manage disaster risk
Obtain information on sector-specific policies/plans, guidelines and implementation mechanism devised to address disaster risk (including climate change risks). Examples are the national school safety strategy, efforts to mainstream DRM into operations, revised design standards, methodology and tools.
• Do you have sector-specific policies/plans and guidelines devised to address disaster risk?
• What is the current institutional set up (department/division/section) to address DRR in your sector?
• Do you have any suggestions on institutional set up to address DRR in your sector?
• How do you see the roles of NGOs and CBOs in disaster risk governance?
Section 4: Investing in Disaster Risk Reduction / Climate Change Adaptation/Building Resilience

Obtain information on investment/financing of DRR

- How are DRM activities financed in your organisation? What percentage of your organization’s budget is allocated for DRR?

- Are there contributions by the communities, if they are engaged in DRR process?

- Are there partnerships with the private Sector or with other government sectors or through bilateral/regional mechanism?

- What might be potential source of funds, flow of funds, utilization of funds, responsibility and accountability?

- Please suggest potential mechanisms for Community Based Risk Funds, which will enable communities to access these quickly in the event of disasters.

Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

Obtain information on disaster preparedness, response and recovery

- Do you have disaster preparedness and contingency plans, policies and programs in your organization? If yes, please mention those.

- Does your organization stockpile necessary materials to implement rescue and relief?

- What type of the recovery/reconstruction works are carried out by your organization following major disaster events such as the 2015 earthquake?

- What are the key improvements required in your sector for effective response?

- Do you have GESI policy/program in emergency preparedness and response? How can we ascertain effective and meaningful participation of women, children, elderly, people with disability and marginal communities in disaster risk reduction and management?

Name of interviewer: ............

Date........
Annex 3 Meeting Notes: Consultation with DWIDM

Section 1: General Information
Interviewee (Name, Position): Binaya Paudel / Pradip Kumar Manandhar (SDE)
Contact No/E-mail: 9841346917/9841235920
Name of the Organization: Department of Water Induced Disasters Management
Type of organization/Development Sector: Government
Division/Unit: Planning and Program Section
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making
Main working areas are Water Induced Landslides and River Training (Embankment) Works.
Preliminary Hazard Maps for 25 rivers using Satellite Maps have been prepared. However the coverage of those maps is only downstream side from the highway.
No any Landslide Hazard maps prepared till date. Recently a new division for landslide is established within the department that will be responsible for Landslide Risk Mapping. However, there are very limited specialists in the department to carry out such works.
There is no such clear mandate between the government departments regarding the responsibilities of landslide hazard management
Prepared hazard maps have not been used hitherto for planning and project design. Most of those are solely based on field survey and verification. However, the department is looking forward to use hazard maps in the upcoming flood control project in major six rivers
No coordination in sharing risk map and hazards map among line ministries. There is a lack of joint and coordinated work in hazard and risk assessment between the government agencies

Section 3: Strengthening disaster risk governance to manage disaster risk
Recently Water Induced Disasters Management Policy has been formulated. Drafting of Water Induced Disasters Management Act is in Process which is expected to get completed by this fiscal year. No separate sector-specific action plan till date.
There is no such separate institutional set up to address DRR in particular. There is a need of one umbrella organization (autonomous authority) for DRR and Disaster Management in Nepal.
There exists confusion between DHM & DWIDM in developing early warning system. A strong co-ordination mechanism between DHM & DWIDM especially in embankments works, data sharing etc. has to be developed. A separate Committee for facilitating such
mechanism thereby need to be formed. (Note: Forecasting incorporating sediment load can be more reliable)

There is a need of Land use planning policy for facilitating the DWIDM works and the DRR initiatives in Nepal.

No any collaboration with non-governmental organizations regarding embankment works, prevention and mitigation. Hence, there is a need for the mechanism for coordination with NGOs/INGOs.

**Section 4: Investing in Disaster Risk Reduction for Resilience**

The organization invests more than 90 percent of its capital cost into Disaster Risk Reduction, prevention and mitigation.

Due to the issue in identifying actual beneficiaries, there no such public contribution in the department DRR works, embankments construction in particular. However there is a provision of land contribution from people, no any cash contribution hitherto.

There have been no such regulations/guidelines in channelling funding from public and private sectors.

Main budgeting is from the Nepal Government. Currently ADB is also providing funding for the department projects and works

Due to the complication in funding disbursement during the disaster period (that happen to coincide with the fiscal year closing months), an emergency funding mechanism is needed for the effective disaster management.

**Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction**

There are no such disaster preparedness and contingency plans. But there is a provision of checking the stock piles primarily hardware stuffs like Gabion wire, nylon etc. The department is more focused on the prevention and mitigation works rather than the preparedness, rescue and relief

There is lack of proper regulation and standard operating procedures (SOP) for the activities of the department. So far the budget used to be very limited

Design Manual for embankment and river training works need to be developed. Code of river encroachment could be very effective in deterring the people settlements in the flood risk areas. It will also make the embankment and river training works smooth

General Policy for risk transfer/insurance is needed from Government side, not necessarily it has to be department specific

Since, the prevention, mitigation are more of technical works, so inclusive approach is not necessarily required
Annex 4 Meeting Notes: Consultation with DSCWM

Section 1: General Information
Interviewee (Name, Position): Dr. Prem Pd. Paudel
Contact No/E-mail: 9841519141/paudelpp98@gmail.com
Name of the Organization: Department of Soil Conservation and Watershed Management (DSCWM)
Type of organization/Development Sector: Government
Division/Unit: Planning
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making
- The major focus is on the catchment scale protection and management in tandem with Integrated Water Resource Management (IWRM)
- Landslide inventory mapping has so far been prepared for each district. After the major earthquake (2015), landslide hazard mapping have also been prepared for 14 districts. No any vulnerability maps developed until now.
- No such sharing mechanism within the department for risk information sharing in and out of the organization. Need of blending center for key development ministries for information sharing and facilitations

Section 3: Strengthening disaster risk governance to manage disaster risk
- No such guidelines developed for organizational operations and project activities. Stream bank protections are carried out in ad-hoc basis. So, standardization of methodology for risk mapping and management is necessary
- Need of government owned research institute (technical wing) for disaster risk management. A blending center for DHM, DWIDM, DSCWM, DMG and MOE should be established
- Landslide Management Consortium is established. It has separate working groups for landslide inventory and risk mapping, mitigation and capacity building. A separate committee for landslide management is proposed in 14th National Plan. Policy for the same is in draft stage

Section 4: Investing in Disaster Risk Reduction for Resilience
- The department invests 40-50 percent of its development budget in landslide management and soil conservation.
- There can be a kind contribution from the communities in project activities ranging from 10 percent to a maximum of 30 percent of project cost
- No collaboration with private sector till date
- There should be a provision of Emergency Fund to facilitate the disbursement of required funds during the disaster period (particularly for landslide management)
Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

- As a part of preparedness, the department conducts awareness program among the vulnerable including school education. However the focus is more on the prevention and mitigation especially river bank protection such as bio-engineering, embankment works.
- A separate Emergency disaster risk section needs to be formed within the department to make the response effective and timely. There also need to be provision of emergency funds.
- There is an active participation of women in soil conservation activities. Under the Power Program, the department is empowering the women in resource management. The department is looking forward a class-based inclusion in its project activities.
Annex 5 Meeting Notes: Consultation with DHM

Section 1: General Information

Interviewee (Name, Position): Rajendra Sharma (SDE) & Binod Parajuli (Hydrologist)
Contact No/E-mail: 9841574562/9841830763
Name of the Organization: Department of Hydrology and Meteorology (DHM)
Type of organization/Development Sector: Government
Division/Unit: Flood
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making

- Regarding the risk assessment, the department undertakes works related to preparation of flood hazard and inundation maps, assessment of danger and warning levels of major river basins of the country. No such further initiatives have been taken in risk and vulnerability assessment. However the organization is planning to undertake vulnerability and capacity assessment (VCA) related to flood hazards.
- There is still no such effective initiative for sharing hazard map to the local level. Also the intra-departmental sharing mechanism is very weak. There is a need of web-based sharing mechanism of data and maps. Public sharing mechanism requires enhancement.
- There is effective collaboration with other organizations mainly the research institutes and non-governmental organizations in developing hazard maps and risk assessment. (For instance, collaboration with LWF for making trans-boundary hazard maps, Practical Action & Mercy Corps for developing EWS etc.)

Section 3: Strengthening disaster risk governance to manage disaster risk

- No such sector-specific policy till date. However, the legal framework/Act is under progress. In the past, Early Warning Strategy has been drafted but did not get endorsed by the government. A guideline for department operation is already in place. Formulation of Standard Operating Procedures (SOP) for Weather Forecasting is in process.
- Current hydrological services is as per the basin approach while the meteorological operation is as per the development region.
- With the promulgation of the new constitution, the hydro-met services should be now as per the provinces. Responsibilities particularly for developing Early warning system, landslides monitoring etc. has to be pre-defined to avoid any confusion and likely duplication of works between the departments and line ministries.
- The flood forecasting section should be upgraded and strengthened.
Section 4: Investing in Disaster Risk Reduction for Resilience

- Main funding is from the government. Total of 20-25 percent of the departmental budget is invested in flood and weather forecasting (As a part of DRR). However, there is need of dynamic policy to gasp international funding as well
- Apart from the local government cost sharing, there is no such cost sharing from the community itself in the project activities till date
- There has been a recent initiation of cost sharing from the private hydropower companies via DDRC funding mechanism in sustaining the early warning system. DHM shares the cost by providing operation and maintenance services where by private hydropower companies shares 20 percent of the cost
- Although, bilateral funding is necessary for trans-boundary Rivers, there has not been any such initiation until now. However, there has been some contribution from regional organizations. For instance SMRC has provided several AWS and Radars to DHM via STORM project.
- No such insurance aspects considered for the risk transfer mechanism. Micro-finance, short-term load are the potential options for mechanizing Community Risk Based Funds in DRR

Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

- The key works in the disaster preparedness are the operation and maintenance of the hydro-met stations, rehabilitation and reconstructions of the same. There is no such focus on the rescue and relief aspect of the Disaster Management Cycle. Recently installation of telemetric stations in Mahakali river, Dunduwa river as well as update of stations in Babai river has been undertaken
- Major focus is on the early warning system. Apart from the EWS based on river and rainfall monitoring, the department also uses Probabilistic models to issue early warnings of floods to the public. Mass SMS system in the polygonal area (250 Km²) around the rainfall stations (Also called as early warning radius) has recently been operationalized
- Early Warning System (EWS) for Glacier lakes are also operating where redundant sensors are in place for continuous operation in case of any likely failure
- To ensure assess of all the public, early warning information via SMS is being disseminated in roman language. However, video services in National Media, voice alert etc. is needed to make the preparedness more inclusive. Disadvantaged groups need to be taken into account
Annex 6 Meeting Notes: Consultation with DMG

Section 1: General Information
Interviewee (Name, Position): Lok Bijaya Adhikari and Mukanda Bhattarai
Contact No/E-mail: 9858050888/9841837366
Name of the Organization: Department of Mines and Geology (DMG)
Type of organization/Development Sector: Government
Division/Unit: Seismological Section
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making
The main focus is on the seismic hazard (Earthquake). Seismic Hazard Maps were prepared in 2002 but it did not consider the strong ground motion, thus had seismicity bias. Recently with the technical assistance from JICA, seismic hazard map for Kathmandu Valley has been prepared, however it underestimated the observed maps by more than 75 percent. Insufficient seismic monitoring stations and network is the key for such underestimation.

There are not sufficient and reliable seismic hazard maps till date, vulnerability and risk maps are currently the way beyond.

Collaboration is mainly with the international organizations and research institutes to extend seismic monitoring stations in the country. China, Japan and France are the main countries working with the department for seismic hazard mapping.

Section 3: Identification of Sector-Specific Policies/ Plans and Guidelines
No any sector-specific guidelines and policy document made so far.

Currently, Seismology is just a section of the Department of Geology and Mines. There should be a separate body or the department that oversee and undertakes research works in related to seismic hazards like earthquake.

Since the roles are more of research works in natural science, so there are no such collaboration with local NGOs and national organizations.

Section 4: Investments for Disaster Risk Reduction / Climate Change Adaptation/Building Resilience
Overall 10 percent of the departmental budget is invested in the seismology section. Mainly the project works are being financed by the international research organizations. France is the lead in providing technical and financial resources for the research activities.
Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

Apart from the local awareness program, there are no any preparedness activities undertaken by the organization

Contingency plans are mainly for the technological parts of the seismic monitoring stations which is so far taken care by the collaborating agencies (France mainly)
Annex 7 Meeting Notes: Consultation with MOPE

Section 1: General Information

Interviewee (Name, Position): Raju Babu Pudasaini (Under Secretary)
Contact No/E-mail: 9841440338
Name of the Organization: Ministry of Population and Environment
Type of organization/Development Sector: Government
Division/Unit: DRR and Climate Change
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making

- Mainstreaming Climate Change in development trainings is being carried out in 61 districts of Nepal
- Sharing mechanism between the development ministries can be facilitated by regular meetings and presentations of current works, target objectives and achievements with respect to DRR and Climate Change
- Dynamic Networking for web based data sharing facilitates knowledge transfer and institutional memory
- Media Empowerment and mobilization in DRR can be very effective in information sharing and dissemination at local scale

Section 3: Strengthening disaster risk governance to manage disaster risk

- Disaster Risk Reduction Process should be operationalized in the local & community level. Emphasis should be given towards Community Based Disaster Risk Management
- There should be proper linkage between disaster management portal and climate change portal
- To make DRR more effective, there should be a clear provision of national recognition and reward for the quick impact. Educational intervention is the key for the longer term impact
- Mainly Planning Section of development sector ministries should sit together and formulate DRR policy and plans in coordinated manner
- Integrated Strategic Environment Assessments (ISEA) is required to mainstream disaster risk reduction and climate change adaptation in development plans of the country
- DRR should be one of the indicator in National and local planning. Planning and Policy should ensure DRR is properly linked to livelihood for its sustainability
Section 4: Investing in Disaster Risk Reduction for Resilience

- Investments is necessary in Research and Development activities
- Rather than eyeing for donor contribution, Government should take the lead in resource mobilization in DRR and Climate Change

Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

- Minimum Parameter required for build back better has to be linked with existing norms, guidelines and legal frameworks
- Environment Impact Assessments should be more focused on the potential stresses on the ecosystem services due to project implementations

Additional Remarks:

Simple and Flexible Policy can be smoothly implemented at the local scale. Target area should be clear and defined
Annex 8 Meeting Notes: Consultation with DoF

Section 1: General Information

Interviewee (Name, Position): Mohan Raj Kafle (Under Secretary)
Contact No/E-mail: 9849499331
Name of the Organization: Department of Forest (DoF)
Type of organization/Development Sector: Government
Division/Unit: Forest Management Section
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making

- The departments particularly oversee forest fire hazard. But most of the project activities like tree plantation works are interlinked with flood, landslides and soil erosion
- There are no such vulnerability and risk mapping of forest fire hazard developed so far. However, the department is collaborating with ICIMOD and other scientific institutes to capture the hazard event via satellite based information. Such satellite maps are being used in project identification and program development
- The district forest program and plans covers the risk assessment aspect of forest related disasters, but maps as such have not been developed yet
- Forest fire control room is in place to ensure smooth flow of information between the central department and its district level extensions. Recently a separate GIS unit is also established in the department to undertake data analysis and map the fire hazard prone regions. Districts which are most vulnerable to forest fire are already prioritized.
- Need for the development of Community Forest Fire Early Warning System

Section 3: Strengthening disaster risk governance to manage disaster risk

- Forest Act 1993 is the key legal document in the Forestry Sector. Also there is Forest Sector Policy-2000. Both of these failed to identify forest fire as hazard.
- Forest Fire Management Strategy of Nepal-2067 is in place that has so far identified the forest-fire sensitive areas of the districts. Five Year Periodic Forest Management Plans incorporates the plans and program related to the forest fire management
- Community Forest User Groups have been proved to be very effective in the forest fire management. So any relevant DRR interventions need to be streamlined through community forest user groups. Such user groups requires further strengthening
- A separate institutional set up is required for Forest Fire Management. Currently there is limited monitoring equipment’s and logistics. Also there is little clarity in the roles and responsibilities among the forest officials and related stakeholders.

Section 4: Investing in Disaster Risk Reduction for Resilience
• Only 2-3 percent of development budget of the department is spent on the forest fire management activities
• There is a huge community (Forest user groups) involvement in the forest sector. Compared to which, the allocated budget for forest management comes out to very less
• Private Sector involvement has been so far limited to production of woods, herbs etc. only
• The DRR related activities in this sector is mostly controlled from the community forest user groups. The community fund is also flexible and can be spent as per required in the various areas

Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

• Preparedness mainly concerns with the stockpiling of tools and equipment, human resourcing etc. Further several trainings and interactions with the community user groups are organized to build capacity and aware people about the prevention of forest fires. There need to provision of sufficient human resources and logistics for monitoring forest related disasters
• There is already a network of government officials, political parties, Security Personnel, Community Forest user Groups that need to be strengthen
• The Community Forest User Groups are formed on participatory and inclusive approach. Women access, representation and meaningful participation is more than 50 percent. Also the budgeting is inclusive. More than 25 percent of community funds is invested in livelihood improvement and resilience development

Additional Remarks:

There is very limited technical and financial resources for forest related hazard management. Every program related to the disasters has to be a priority one concern from the government
Annex 9 Meeting Notes: Consultation with DUDBC

Section 1: General Information

Interviewee (Name, Position): Raju Neupane, Senior Divisional Engineer
Contact No/E-mail: 9851213018
Name of the Organization: Department of Urban Development and Building Construction (DUDBC)
Type of organization/Development Sector: Government
Division/Unit: Housing & Disaster Management Division
Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making

- No such hazard map prepared so far. However in the aftermath of the Earthquake 2015, with the support from JICA, seismic hazard map for the Kathmandu Valley has been prepared.
- Although the building and infrastructure construction is subjected prior to soil condition assessment, no such hazard map that categorically ensures the vulnerability of the infrastructure development is in place hitherto.

Section 3: Strengthening disaster risk governance to manage disaster risk

- Mainly the department is responsible for the building codes and its updates. There is also a National Urban Development Strategy. Recently guidelines for Housing Development and Physical Infrastructures-2072 is formulated.
- Now onwards, all the Municipalities should implement building codes including the VDCs exceeding 1000 Households.
- The Disaster Management section within the Department is structurally and financially weak. Currently the section is under the Housing Division. A strong division solely for the Disaster Management should be established within the department.

Section 4: Investing in Disaster Risk Reduction for Resilience

- Nominal budget is allocated for the disaster management activities (comes out to be less than 1 percent out of departmental budget)

Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

- There is no any contingency planning for disaster preparedness and effective response in the department. Much of the work is done on ad-hoc basis. In the past, there have been some resettlement programs for flood victims in Banke Bardiya, Dang and Surkhet.
- Currently there are no such programs in the department. Much of the disaster preparedness, response and recovery works are now streamlined through National Reconstruction Authority (NRA). Different division within the department has been established after earthquake.
Annex 10 Meeting Notes: Consultation with DHS/EDCD

Section 1: General Information

Interviewee (Name, Position): Dr. Bhim Acharya (Chief of EDCD), Dr. Gunanidhi Sharma (Head of Disaster Management Section)

Contact No/E-mail: 9851096089/9851064774, drbacharya@hotmail.com/drgunish@gmail.com

Name of the Organization: Ministry of Health Services

Type of organization/Development Sector: Government

Division/Unit: Epidemiology and Disease Control Division

Geographic scale of work: National

Section 2: Understanding Disaster Risk for Decision Making

- The department oversee the biological hazards primarily the outbreaks of epidemics and health related problems or events related to disasters and its consequences.
- Health Sector Contingency Plans which also includes health hazard maps and vulnerability assessment have been prepared for 70 districts already. Such contingency plans are updated on annual basis. The annual work plan of the department is also based on the health risk assessment.
- Disaster surveillance system including early warning and reporting system is in place through 81 sentinels across the country. The department is looking forward E-reporting (Paperless).
- Recently the capacity assessment mainly relating to seismic vulnerability of 6 major hospitals of the Kathmandu Valley has been done from the financial support of DFID.
- There is already web-based information dissemination mechanism for 6 disease. In addition, the integrated disease surveillance system recently put in place can cover almost 30 diseases.
- Although there has been work regarding the trend analysis of outbreaks of epidemics, no such correlation with the climate related hazard has been done yet.

Section 3: Strengthening disaster risk governance to manage disaster risk

- Health Emergency Operation Centre (HEOC) in Ministry of Health is responsible for every activities related to health disaster. There is a separate SOP and guidelines for HEOC including the guidelines for Rapid Response Team (RRT) mobilization. However, HEOC is operates on ad-hoc basis, there is need of integrating the center within the organizational body.
- Disaster Management Division is operating as a section under EDCD which is in-fact requires established as a separate department. Further there is a need of re-structuring
of Disaster Management Division as per the new constitution. The Ministry of Health has separately prepared organizational structure of health services across the country

Section 4: Investing in Disaster Risk Reduction for Resilience

- About 10 percent of departmental budget is invested in disaster management activities.
- Technical as well as financial support is provided by WHO, USAID, DFID and Global Funds for EDCD to achieve the objective of this division
- The Rapid Response Team (RRT) is supported by UNFPA
- Private Sector do collaborate with the department but they are indeed funded by the development agencies
- There is health insurance system in place in 24 districts. Health subsidies is provided in case of road-traffic accident. Rules and regulation is necessary to bring private sector in the risk sharing mechanism
- Flexible funding is required in Regional Health Directorate for emergency outbreak

Section 5: Enhancing disaster preparedness for effective response and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction

- As a disaster preparedness, the department follows contingency plan, assessments of medicine stocks at all levels including strategic locations across the districts
- Provision of Mock Drills in the training manual and table top exercise.
- Inclusiveness is so far addressed in every health facilities and management plans/policies.
- **Earthquake 2015 Experience:**
  - Human resource was mobilized immediately in all 14 districts, health structures were heavily destroyed.
  - Initial communication and co-ordination was found haphazard. SO far there could not be proper recording system during the first phase of emergency
  - There was no such outbreaks of diseases/epidemics in the aftermath of the earthquake.
  - It was felt necessary that contingency plans should be there in every health related centers and the concerned personnel’s should be made aware about such procedures.
  - Seismically resistant structures as approved by DUDBC only get license for health facilities now onwards

Additional Remarks:

The DRR Policy and Action Plans should facilitate the timely release of budgets for new health related programs and activities proposed by the Department
Annex 11 Meeting Notes: Consultation with Prof. Menon

Consultation meeting with Prof. N. Vinod Chandra Menon, Founder Member, National Disaster Management Authority (NDMA), Government of India

Date: 30 January 2017
Venue: Practical Action Office
Participants: Gehendra Gurung, Dr. Dilip Gautam, Puja Shakya, Sumit Dugar

Discussed points:

- Suggested for an autonomous body (like National Planning Commission) for disaster management in the country.
- National Reconstruction Authority (NRA) can be under this autonomous body.
- The Disaster Management Act of India can be taken as a reference for this policy development. Prof. Menon will share the copy of it upon request.
- In India, there are 3 tier structures for disaster management:
  - NDMA (at the top)
  - SDMA (State Disaster Management Authority)
  - DDMA (District Disaster Management Authority)
- Prof. Menon suggested for similar kind of structure in Nepal too, after restructuring the Nepalese Government.
- After restructuring in Nepal, he recommends Provincial Disaster Management Authority.
- He also suggested having analysis or review of South Asia’s experience of having NDMA and institutional set up/mechanisms for disaster management. All the South Asian countries have NDMA, except Nepal and Bangladesh.
- The policy document should have mainstreaming and convergence of DRR and Climate Change in Sustainable Development Goals.
- NDMA should act as a Watchdog for the DRR mainstreaming in the country.
- There should be a dedicated disaster management personnel in the provincial or district or central level.
- He recommended taking the websites of – Flood Information Management System of Bihar, Indian Meteorological Department, NDMA, as reference and more information regarding Disaster Management in India.
- A National EWS will be helpful for the overall disaster management of the country.
- Prof. Menon is doing an analysis of SAARC Disaster Management Centre, in which comparison of SDMC and ASEAN was conducted and was found that the SDMC is weak compared to ASEAN, because of the intergovernmental issues.
Annex 12 Meeting Notes: Consultation with Management Committee at NEOC/MOHA

Date: 30 January 2017
Time: 11:00 am
Venue: NEOC, MOHA

Participants: Disaster Focal Person from Line Ministries, NPC, UN agencies, Donor representative (DFID), (the detailed participants list is presented in Annex)

Discussed and agreed points:

- Mr. Krishna B. Raut, Joint Secretary, MOHA welcomed the participants and facilitated the meeting.
- Mr. Krishna Kaphle from UNDP presented details on composition of Thematic Working Group (TWG) with lead and co-lead agencies. After discussion on the proposed Thematic Working Groups in detail, it is decided to adopt the proposed TWGs.
- He also presented the TOR of the National Thematic Coordinator, and Facilitator for each TWG.
- Role of National Thematic Coordinator was discussed as it may create confusion on the duplication of the roles and responsibilities of Practical Action Consulting.
- It was made clear that PAC’s role will be mainly to provide technical guidance to this policy development process. While, National coordinator’s role is focused on coordination between different TWGs, Government organizations, UNDP, PAC and other stakeholders.
- The host and lead organization for consultation workshops in Panchthar and Jumla are yet to be decided, for which Mr. Raut suggested the government is there to host the remaining workshops, if others are not forthcoming.
- The host organization for consultation workshop may be called as Supporting agency.
- In the individual consultations, Ministry of Finance should also be considered.
- Suggestions of policy development: a training centre on building construction should be planned and formed, in coordination with Universities and Relevant Government departments, which would be useful to all.
- There are pillars to strengthen the strategy, like: capacity development of institution and community; delivery in community
- The Management Committee suggested to draft the DRR policy and Strategic Action Plan in Nepali first and then translate to English later.
- A National Sharing Meeting will be conducted this week-first week of February.
- The dates for the district level and regional level workshops will be finalized soon after the National Sharing Workshop.
- It is suggested to put the National DRR policy information in the front page of the DRR portal, and also to put all the presentations of the meetings and consultation in the portal.

Annex: List of Participants
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Annex 13 Meeting Notes: Consultation with Mercy Corps

Initial findings from consultation on its support to risk assessment, governance of DRM, investments and recovery process

Mercy Corps has ongoing programs on emergency response and disaster preparedness in Nepal. It delivered emergency supplies and cash to 135,000 families affected by the April 2015 earthquake. It offered unconditional cash to 23,000 people so they could purchase emergency supplies or buy the items needed to repair their homes or create better shelters for their families. It has also helped families rebuild stronger and safer homes.

It considers the role of risk assessment key in informing decisions on disaster risk reduction and management. It has provided trainings to identify risks, build protections against floods, and educate residents on emergency response and coordination. It supports building capacities so that they can be prepared or mitigate the risk of contextual shocks and stresses. Except for local risk assessment required to design community based DRM, there are no ongoing program on risk assessment.

There are not any direct policy level work being supported by Mercy Corps. It works on advocacy with like-minded partners that are part of the Association of the International NGOs. Mercy Corps works with the grass root communities and identifies policy level challenges that are hindering the implementation of efficient disaster risk management and advocates with evidences in the form of case stories, research papers and lesson learnt.

Mercy Corps follows the LDRPM guideline in preparing the LDRMPs and in designing community based DRM projects. Past experiences reveal that the preparation of LDRMP is not guided by a proper risk assessment. Investments on high resolution risk assessment – targeting ward and VDC levels – would help formulate informed DRM programs. Such risk information also help mainstream DRR in other sectoral development works such as agriculture, water supply etc.

Mercy Corps’s other programs that contribute to the overall building of resilience includes agriculture production and markets, alternative livelihoods, financial services, WASH, nutrition, natural resources management.

Point of Contact: Mr. Sagar Pokharel, spokharel@mercy corps.org

Date: 19 January 2017