

REPORT OF
A monthly Dialogue for DRR Policy and Practices
On
Climate Change and DRR Aspects in Nepal

31st May, 2011

Department of Water Induced Disaster Prevention
Pulchowk, Lalitpur

DPNet Nepal *Partnering Knowledge to Disaster*

Policy Dialogue on DRR Practice

Theme of the Day:
Climate Change and its Disaster Risk Reduction Aspects in Nepal

Key Speaker from:

1. Environment & Child Concern Organization (ECO-Nepal), Kathmandu
2. Natural Disaster Management Forum (NDMF) Nepal, Kathmandu
3. Practical Action, Kathmandu

Venue: DWIDP Hall, Pulchowk Lalitpur
Date: May 31, 2011
Time: 14:00

Our Strategic Partners:

This event is supported by:

Logos of partners and supporters: DPNet Nepal, UNDP Nepal, European Commission Humanitarian Aid, and ain (Asian Institute of Nepal).

Organized by
Disaster Preparedness Network Nepal (DP Net-Nepal), Kathmandu, Nepal
Supported by UNDP Nepal

ABBREVIATIONS AND ACRONYMS USED

CCA	Climate Change Adaptation
CSDRMA	Climate Smart Disaster Risk Management Approach
DPNet	Disaster Preparedness Network
DM	Disaster Management
DRR	Disaster Risk Reduction
DWIDP	Department of Water Induced Disaster Prevention
ERRRP	Earthquake Risk Reduction and Recovery Preparedness
GLOFs	Glacial Lake Outburst Floods
INGOs	International Non-Governmental Organizations
IPCC	Intergovernmental Panel on Climate Change
NAST	Nepal Academy of Science and Technology
NDMF	Natural Disaster Management Forum
NGOs	Non-Governmental Organizations
UNDP	United Nations Development Program
UNFCC	United Nations Framework Convention on Climate Change
UN	United Nations
UNISDR	United Nations International Strategy for Disaster Reduction

Climate Change and DRR Aspects in Nepal

1.1 BACKGROUND

Nepal, being a Least Developed Country, is highly vulnerable to the adverse impacts of climate change. Its topography varies tremendously from the very high altitude in the Himalayan mountain range to the Gangetic plains in the southeast. Rises in temperature and the associated changes to rainfall patterns (such as less frequent but more intense rainfall events) are likely to result in increasing frequency and intensity of floods, intermittent and/or longer dry spells and drought events and a growing threat from Glacial Lake Outburst Floods (GLOF). These climate-induced events are not only causing damage and loss of human lives and property; they also increase uncertainty and undermine the development process in Nepal.

Climate change is an emerging issue of global scale having deep impacts in local level. Nepal is among the most vulnerable countries to climate change since the annual mean temperature growth (0.06 degree Celsius) is at least six times higher than the global average. High mountains are warming faster (0.08 degrees C per year) than lower hills and plains (0.04 degrees C per year). Fast receding glaciers and growing number and size of glacial lakes in the Himalaya provide strong visual evidence of global warming effects at local level. Higher rates of mean annual temperature in high altitude regions mean severe impacts on local natural resources and environment such as faster melting of snow deposits in the Himalayan peaks and glaciers, undesirable changes in forest and vegetation compositions, and many uncertainties on weather characteristics.

The most vulnerable to climate change are the poor and marginalized who generally are least able to existing vulnerabilities, inequalities and exposure to hazards and will therefore impact most cope with disasters, live in areas most at risk to hazards and generally have the least information, knowledge and resources to reduce their risk. The predicted impacts of climate change will heighten on those least able to cope. Climate change affects forest ecosystems (and consequently the livelihoods of the poor living in and around the forest) in many predictable

ways. Global warming may cause forest modification through its migration towards the Polar Regions (or higher altitudes), changes in its composition, extinction of species, and the like. More than 70% of Nepal's people depend on agriculture and forestry interface for their livelihoods. Forest covers about one-third of Nepal's geographic area (5.8 million ha) and 21% of forests are under community management. Any climate induced changes in forest situation could therefore directly affect not only the environment of Nepal but also the lives of the majority of people.

Hence, DpNet-Nepal aims to open the common forum to discuss on Climate Change and Its DRR Aspects in Nepal and way forward climate change adaptation skills in the community. With the aim of disseminating the information and knowledge regarding the burning issues and climate change aspects, DpNet-Nepal offers a dialogue forum for mutual exchange of ideas, sharing of experiences, resources and information on the preparedness, risk reduction and management of disaster among its valued partners and other humanitarian community. The dialogue focuses on Climate Change and Its DRR Aspects and way forwards in the context of Nepal.

1.2 RATIONALE

The dialogue on **Climate Change and Its DRR Aspects in Nepal** organized by DpNet-Nepal with the support of UNDP Nepal updated the partner organizations, experts, professionals, policy makers and planners and shared climate change and disaster risk management strategies. The dialogue helped to share and explores the climate change adaptation skills and DRR practices in Nepal. It also developed documentation on mainstreaming CCA and DRR in development in Nepal and disseminate as for resource as future reference and research.

1.3 OBJECTIVES

The general objective of the dialogue program was to discuss and share the current patterns of climate change and its DRR aspects in Nepal. Following were the main specific objectives of the program:

- Update and share information regarding Climate change and Disaster Risk Management
- Congregate the qualitative and quantitative information on climate change

- Collection and Compilation of scattered resources/materials related to climate change and DRR

1.4 METHODOLOGY

- Presentation of climate change, disaster risk management, Challenges and climate change adaptation
- Interaction on climate smart, managing climate and impact and adaptation of climate change
- Collection of feedbacks of stakeholders, experts, practitioners and policy makers on climate change, managing climate and mainstreaming CCA & DRR in development
- Publish a compiled shared learning bulletin maintaining the DpNet-Nepal Web portal and email groups and shared among the partners

1.5 PARTICIPANTS

Altogether 28 participants representing from different 22 organizations were participated on the program. They were representatives from Government Agencies, Un Agencies, international NGOs and local NGOs working in DRR sector. Similarly, the university teachers, students, practitioners, researchers and social workers and youth groups were also participated in the program.

1.6 DATE VENUE AND TIME

The dialogue program was held at DWIDP Conference Hall, Pulchowk, Lalitpur from 2.00 PM to 5.00 PM on 31st May, 2011.

2. PROCEEDINGS/CONTENTS

The program was chaired by Mr. Surya Bahadur Thapa, Treasure of DpNet-Nepal. The chief guest of the program was Mr. Gauri Shankar Basi, Deputy Director General of Department of Water Induced Disaster Prevention, Pulchowk, Lalitpur. The program was started with welcome remarks of Mr. Deepak Poudel, Executive Member of DpNet-Nepal. Mr. Poudel, welcomed all the participants, presenters and highlighted the objectives of the program. He expressed that DRR and CCA should be mainstreamed into development planning.

SPECIFIC THEMES OF THE DIALOGUE

1. Climate Smart Disaster Risk Management Approach (by Dinanath Bhandari, Practical Action)
2. Managing Climate Change: Coping Disaster Challenges (by Ram Chandra Neupane, ECO-Nepal)
3. Mainstreaming CCA and DRR in Development (by Deepak Poudel, NDMF)

2.1 PRESENTATION SESSION

Mr. Dinanath Bhandari, Project Manager from Practical Action has presented the paper on **Climate Smart: Disaster Risk Management**. The paper focused on interlink of development, disaster risk management and climate change adaptation in Nepal. He said, climate change is the additional burden of the country like Nepal. The Paper highlighted on the need for an integrated approach to disasters, development and climate change. Climate Smart Disaster Risk Management (CSDRM) is an integrated social development approach that aims simultaneously to tackle changing disaster risks, enhance adaptive capacity, address poverty, exposures, vulnerability and their structural causes and promote environmentally sustainable development in a changing climate. Explaining the three interlinked pillars of action of CSDRM approach he clarified that most of the disasters are related to climate change and climate change has increased the frequency and rate of disasters globally. The efforts made by various humanitarian organizations and governments for disaster management is very less at the scale of disaster occurrence.

The paper highlighted the context of climate change and all concerned parties and stakeholders should have common understanding and need to come up with holistic approach to address poverty and development. Disaster and climate change both hinder the development achievements. Similarly, there is a high possibility of increasing disaster occurrence in local level to global level due to climate change. Environmental depletion is a disaster in itself and its increasing day by day. Climate change is an environmental challenge for sustainable livelihood and development. More study and research should be made regarding climate change and mainstreaming it in development planning.

Finally, he concluded his presentation informing on changing disaster risks and coping uncertainties. He said, we need to minimize underlying risks of natural hazards, improve social processes. The improved ecosystems - healthy ecosystems often provide natural defense and environmental degradation is a hazard in itself. The consideration of climate change impacts should be made while designing DM/DRR plans and implementation. He stressed on the better coordination for information sharing and actions.

Mr. Ram Chandra Neupane, Chairperson of ECO-Nepal presented the paper on **Managing Climate Risk: Coping Disaster Challenge**. The paper especially focused on the vulnerability, climate change process, causes of climate change, greenhouse gas emission and managing climate risk. He informed that Nepal's climate change vulnerability is most associated with the following factors-rapidly melting glaciers, changing rain pattern, deforestation, increasing hazards, increasing extreme weather, food insecurity and epidemics etc. He highlighted that natural process and human interference are the cause of global warming. Presenting the status of key Green House Gas Emission, he explained about managing climate risks and coping disaster challenges. The presentation showed that climate risks could be managed through rain water harvesting, improvement of degraded land, mitigation of river bank cutting, promoting Community Forest Users Groups, climate and other such activities. He informed about coping disaster challenges through raising mass awareness, participatory planning, promotion affordable Early Warning Systems and promotion indigenous knowledge, skills and technology. Finally he concluded his presentation focusing on mainstreaming DRR into development and need to advocate the issues making consortium to bring proper disaster policy.

Mr. Deepak Poudel, chairperson of NDMF presented paper on **Integration and Mainstreaming DRR and CCA into Development system**. The paper concerned on the climate change process relating social and ecological systems in human and natural systems. He highlighted on the IPCC projection relating to the changes on climate by end of this century. According to the presentation the change on surface air temperature will increase by 1.1-6.4. °C. There will be more precipitation at higher latitudes & less precipitation in the most subtropical area. Highlighting on the CC projection in Nepal he explained on the extreme weather impacts in

Nepal. He clarified that extreme weather events in future are likely to increase the number and scale of disasters but at the same time, the existing methods and tools of DRR provide capacities for adaptation to climate change.

Mr. Poudel emphasized on the integration of DRR and CCA into national development plan. Disaster and climate change risk analysis must be integrated into national development planning. Capacity building is required at local, national, regional and global level. Focusing on the three areas of action of UNISDR and UNFCCC for the integration showed the difference between coping and adaptation. He presented that mainstreaming climate change adaptation describes a process of considering climate risks to development projects, and of adjusting project activities and approaches to address these risks. He informed that there is a strong correlation between climate change and disasters.

He concluded his presentation highlighting on the awareness rising amongst policy makers and practitioners on concept, practice of DRR and CCA. Increase the involvement of international, national, local Government and private sector into DRR. He said, it is important to save development projects from climate-related disasters by identifying climate change threats.

2.2 DISCUSSION

After the presentation session, discussion session was made among the participants and the presenters on the reflection of the presentations. In the discussion, the participants have put their query regarding the issue of climate change, fresh data on the impact of climate change, gaps, challenges and needs of some policies and plans that could be taken for mainstreaming DRR & CCA into national development planning.

Mr. Hari Karki from **Mission East** stated that the information and data regarding the climate change need to be updated. Similarly, **Mr. Madan K. Suwal** from **NAST** also commented that most of the data should be reanalyzed about climate change and its impact in Nepal. **Mr. Gauri Shankar Basi** from **DWIDP** expressed that DWIDP has conducted many training programs on water induced disasters but it couldn't achieve its target. **Ms. Chandra Laxmi Hada** from

UNDP/ERRRP put her query concerning the tools used in Koshi Flood in mainstreaming DRR into development plan.

Mr. Gauri Shankar Basi, Deputy Director General of Department of Water Induced Disaster Prevention and Chief Guest of the program thanked all participants, presenters for their active participation, constructive ideas and feedback. He appreciated the program and expressed that such program is very useful to share the information, discuss issues and come up with innovative ideas regarding DRR and climate change. He said that there is lacking for fund allocation in DRR by the government and more research work should be carried out. He added that we need to find out the gaps on policies and advocate mainstreaming DRR into development plan. He concluded his remarks highlighting on the participation of community people in DRR and climate change as a first responder of any kind of disasters.

Mr. Surya Bahadur Thapa, Treasure of DPNet-Nepal and Chair of the program delivered closing remarks. He thanked all the participants and presenters for their valuable and positive comments and feedback. He expressed that community initiatives should be increased through awareness rising and capacity building programs. He thanked Deputy Director of DWIDP for his active participation and positive feedbacks in the program. He concluded the program highlighting to the coordination and collective efforts for the effective implementation of the DRR programs. Finally, he thanked all the participants for their participation and DWIDP for providing the program hall and announced the closing of the program.

3. OUTCOME/CONCLUSION

The dialogue was very successful and various positive comments and views were gathered throughout the program. The papers presented by the professionals shared the information regarding the climate change and its DRR aspects in Nepal. The interest shown by the participants in the discussion that followed presentation session was exciting. The reflection of climate change impacts should be analysed while designing DM/DRR plans and implementation. We need to focus on better coordination mechanism for information sharing and put more efforts and actions. It is realized that more advocacies are needed to bring DRR good Policies and Acts.