

Draft

REVIEW PAPER

A SITUATION ANALYSIS REPORT
SUBMITTED TO ACTIONAID
INTERNATIONAL NEPAL
LAZIMPAT, KATHMANDU

SUBMITTED BY:
DHRUBA RAJ GAUTAM
RESEARCHER
BANESWOR, KATHMANDU

EMERGENCY & DISASTER SITUATION ANALYSIS: 2004

**Emergency & Disaster Management Theme
Livelihood and Economic Rights Department
ActionAid Nepal Kathmandu**



act:onaid
nepal

**ActionAid Nepal
November 2004
Kathmandu**

(Date: 25 November 2004)

**ACTIONAID Nepal
GPO Box 6257
Kathmandu
Nepal
Tel: +977 1 7736477, 4410929, 4419115
Fax: +977 (1) 4419718
E-mail: mail@actionaidnepal.org**

Copyright © ACTIONAID Nepal 2004

ACTIONAID Nepal reserves all rights of ownership of the original material in this Report, but readers are free to make use of it for non-commercial purposes in the course of development work. ACTIONAID Nepal asks, however, that proper acknowledgement be given whenever the Report is so used, and that a copy of any document prepared with the assistance of original material quoted from this Report be sent to ACTIONAID Nepal, for inclusion in the ACTIONAID Nepal resource center.

Acknowledgements

I would like to express my heartfelt gratitude to the ActionAid Nepal (AAN) for entrusting me with the task of studying the 'Disaster 2004 Status, Response and the Ways Forward'.

I am particularly grateful to Mr. Shyam Sundar Jnavaly, Theme Leaders of AAN for coming up with a conceptual framework for this study and providing me with illuminating insights. I found his feedback on and suggestions about methodology especially helpful.

I would like to express my sincere appreciation to Mr Manish Thapa for helping me the management of primary and secondary information. In the initial stages, Mr Bishnu Dayal Roy and Samir Dhakal contributed a lot especially during the field work. Their supports in facilitating the consultation process and interaction meetings are very helpful. I would like to thank all the stakeholders for their invaluable suggestions and feedback, which, in fact, constitute the basis for the preparation of this report. I would like to express my sincere thanks to all community people to whom the focus and discussions and key informant interview are made. Thanks for their immoral ideas and experiences to manage the disaster and emergency at local level.

While preparing this report, especially for the typing and desk top, many people helped me especially Sita Bhandari, Ashok Bhujel, Suman Phuyal and Gauri Manandhar. I am confident that this review report will be very helpful for all organisations, scholar, academicians and agencies involved in disaster management. Any error in judgment or in the text of this report is the responsibility of the author.

Dhruba Raj Gautam
Baneshwor Height, Kathmandu, Nepal

Acronyms

ADPC	:	Asian Disaster Preparedness Centre
ADRC	:	Asian Disaster Reduction Centre
CBDP	:	Community Based Disaster Prevention
CBOs	:	Community Based Organizations
CDO	:	Chief District Officer
CIDA	:	Canadian International Development Agency
CNDRC	:	Central Natural Disaster Relief Committee
DADO	:	District Agriculture Development Officer
DDC	:	District Development Committee
DFO	:	District Forest Office
DFO	:	District Forests Officer
DHO	:	District Health Office
DIO	:	Divisional Irrigation Office
DLAs	:	District Line Agencies
DNDRC	:	District Natural Disaster Relief Committees
DoHM	:	Department of Hydrology and Meteorology
DOI	:	Department of Irrigation
DoMG	:	Department of Mines and Geology
DPTC	:	Disaster Prevention Technical Centre
DSCO	:	District Soil Conservation Officer
DSCWM	:	Department of Soil Conservation and Watershed Management
DSLO	:	District Livestock Office
DWIDP	:	Department of Water Induced Disaster Prevention
E&DM	:	Emergency and Disaster Management
FGDs	:	Focus Group Discussion
FNCCI	:	Federation of Chamber of Commerce and Industries
GLOF	:	Glacial Lake Outburst Flood
GOs	:	Government Organizations
GTZ	:	Technical Cooperation of the Federal Republic of Germany
HAIS	:	Humanitarian Assistance Information System
HMG	:	His Majesty's Government
ICIMOD	:	International Centre for Integrated Mountain Development
IDNDR	:	International Decade for Natural Disaster Reduction
INGOs	:	International Non Governmental Organizations
IRCS	:	International Red Cross Society
IRTC	:	Irrigation and River Training Committees
JICA	:	Japan International Cooperation Agency
KII	:	Key Informant Information
LDO	:	Local Development Officer
LNDRC	:	Local Natural Disaster Relief Committees
LWS	:	Lutheran World Service
MOEC	:	Ministry of Education and Culture
MOFSC	:	Ministry of Forest and Soil Conservation
MoHA	:	Ministry of Home Affairs
MOIC	:	Ministry of Information and Communication
MoLD	:	Ministry of Local Development
MOPE	:	Ministry of Population and Environment
NAP	:	National Action Plan
NAPA	:	National Adaptation Program of Action
NC	:	Nepali Congress

NDRA	:	Natural Disaster Relief Act
NDRR	:	National Disaster Relief Regulation
NGOs	:	Non Governmental Organizations
NPC	:	National Planning Commission
NRCS	:	Nepal Red Cross Society
QRT	:	Quick Response Team
RNA	:	Royal Nepalese Army
RNDRC	:	Regional Natural Disaster Relief Committee
RTSC	:	Relief and Treatment Sub-Committee
SP	:	Superintend of Police
SSRSC	:	Supply, Shelter and Rehabilitation Sub-committee
TOR	:	Term of Reference
TU	:	Tribhuvan University
UML	:	United Marxist Leninist
UMN	:	United Mission to Nepal
UNDP	:	United Nations Development Program
USAID	:	United State Agency for International Development
VDC	:	Village Development Committee
WECS	:	Water and Energy Commission Secretariat
WFP	:	World Food Program
WID	:	Water Induced Disaster

Table of Content

INTRODUCTION, OBJECTIVES, RATIONALE AND METHODS	1
1.1 INTRODUCTION/BACKGROUND	1
1.2 OBJECTIVE OF THE STUDY	2
1.3 STUDY METHODOLOGY	2
1.3.1 DESK STUDY (RELATED POLICIES, LEGISLATION AND OTHER DOCUMENTS)	2
1.3.2 MEETING WITH RELEVANT CENTRAL AND DISTRICT LEVEL STAKEHOLDERS	2
1.3.3 FIELD VISITS OF EASTERN TERAI DISTRICTS	2
1.3.4 DEBRIEFING MEETING WITH RELEVANT DISTRICT LEVEL STAKEHOLDERS (DLSS)	3
1.3.5 ANALYSIS AND REPORTING	3
1.4 SCOPES AND LIMITATIONS	3
OVERVIEW OF CURRENT PLANS, STRATEGIES POLICIES AND LEGISLATION	4
2.1 OVERVIEW OF CURRENT ACTION PLANS, STRATEGIES, POLICIES AND LEGISLATIONS	4
2.1.2 NATURAL DISASTER RELIEF ACT (NDRA)	4
2.1.3 DISASTER PREPAREDNESS PLAN OF HIS MAJESTY'S GOVERNMENT OF NEPAL	5
2.1.4 NATIONAL WATER RESOURCES STRATEGY FORMULATION (2002)	6
2.1.5 TENTH FIVE YEAR PLAN (2002-2007)	9
2.1.6 NATIONAL ACTION PLAN (NAP)	10
2.1.7 NATIONAL ADAPTATION PROGRAM OF ACTION (NAPA)	11
2.1.8 THE CONSTITUTION OF NEPAL (1990)	12
2.1.9 RIVER CONTROL POLICY	12
2.1.20 WATERSHED MANAGEMENT POLICY	12
2.1.21 FORMULATION OF A COMPREHENSIVE RIVER LAW	12
2.1.22 LOCAL SELF-GOVERNANCE ACT (1999)	12
2.1.23 BUILDING ACT (1987) AND BUILDING CONSERVATION ACT (1993)	13
2.1.24 BIODIVERSITY STRATEGY (2002)	13
RISKS, DIASATER, VULNERABILITY AND LIVELIHOOD	14
3.1 RISKS AND RISKS MANAGEMENT	14
3.2 DISASTER SITUATION AND RELIEF RESPONSE	14
3.4 MITIGATION MEASURES OF RISKS: A COMMUNITY EFFORTS	29
3.5 DISASTER MANAGEMENT: THE ROLES OF VARIOUS STAKEHOLDERS	30
3.6 CONSEQUENCES OF DISASTER	30
3.7 DISASTER PREPAREDNESS	31
3.8 MYTHS OF PEOPLE ABOUT DISASTER	32

3.9 ROLE OF RIGHT HOLDERS IS CRUCIAL	33
3.10 WHO AFFECTS FIRST FROM DISASTER	33
3.11 THE PERCEPTIONS OF COMMUNITY FOR DISASTER MANAGEMENT	33
3.12 LEVEL OF AWARENESS IN THE DIFFERENT PHASES OF DISASTER MANAGEMENT	34
3.13 DISASTER MANAGEMENT	34
3.14 BENEFITS OF DISASTER PREPAREDNESS	35
3.15 ROLE OF MAIN AGENCIES IN MANAGING THE DISASTER	35
3.15.1 DEPARTMENT OF WATER INDUCED DISASTER PREVENTION (DWIDP)	35
3.15.2 MINISTRY OF HOME AFFAIRS (MOHA)	36
3.15.3 MINISTRY OF LOCAL DEVELOPMENT (MOLD)	37
3.15.4 DIVISIONAL IRRIGATION OFFICE (DIO)	37
3.15.5 DEPARTMENT OF SOIL CONSERVATION AND WATERSHED MANAGEMENT	37
3.15.6 DEPARTMENT OF HYDROLOGY AND METEOROLOGY (DHM)	37
3.15.7 BILATERAL ORGANISATIONS, RESEARCH INSTITUTIONS	38
3.15.8 THE ROLE OF LOCAL GOVERNMENT	38
3.16 HAZARDS	39
3.17 TYPE OF HAZARDS AND THEIR IMPLICATIONS	39
3.18 VULNERABILITY AND ITS CAUSES	40
3.19 PRIORITISATION OF VULNERABILITY IN THE EXPERIENCES OF PEOPLE	43
3.20 WAYS OF MINIMISING VULNERABILITY	43
3.21 THE EXPECTATION OF COMMUNITY TO MITIGATE VULNERABILITY CONDITION	43
3.22 LIVELIHOOD AND VULNERABILITY SITUATION	44
3.23 SUSTAINABLE LIVELIHOOD FRAMEWORK TO REDUCE THE VULNERABILITY	44
MAJOR PROBLEMS AND CHALLENGES	46
4.1 PROBLEM AND CHALLENGES	46
4.1.1 INSTITUTIONAL PROBLEMS AND CHALLENGES	46
4.1.2 SOCIAL PROBLEMS AND CHALLENGES	47
4.1.3 ADMINISTRATIVE PROBLEMS AND CHALLENGES	48
4.1.4 TECHNICAL PROBLEMS AND CHALLENGES	48
4.2 MAJOR LEARNING	48
4.2.1 POLICIES AND LEGISLATIONS	48
4.2.2 KNOWLEDGE AND PRACTICES	50
4.2.3 INSTITUTIONAL SET-UP	51
4.3 THE WAY FORWARD	52

4.3.1 RECOMMENDATIONS FOR CENTRAL AND LOCAL GOVERNMENT AGENCIES	52
4.3.2 RECOMMENDATION FOR NGOS, INGO, BI-LATERAL AGENCIES	53
4.3.3 RECOMMENDATION FOR CBOS AND COMMUNITY PEOPLE	53
ANNEX – 1 LIST OF REPORTS CONSULTED	56
ANNEX 3 : TOOLS AND TECHNIQUES USED DURING THE FIELDWORK	58
ANNEX 4 : COMPOSITION OF VARIOUS COMMITTEE	58

Executive Summary

- 1. Disaster is unexpected phenomenon, which damages the natural calamities such as flood, fire etc. The ways of minimizing the disaster effects are multifarious. Its consequences are poor services of infrastructure, less agriculture productivity, poor drinking water, and irrigation and hydropower facilities. Migration, starvation, deaths, beggary, suicide, disability and illness. It also causes significant economic loss, erosion in social and financial capitals, psychological dislocation and widespread physical injury and death. Especially the poor and disadvantaged people are more vulnerable from the disaster because of their poor access to and control over the available resources.**
2. Still there is orthodox thinking that disasters are occurred as the wish of god, so cannot be protected or prevented. These types of thinking are still deep rooted in the people's mind. As people are still believed in fate, they became more vulnerable after disaster.
3. In this background, the major objectives of the study are review the policy and national priority for disaster particularly focusing the impact of emergency and disaster in Nepal. The broad framework of this study is to review the disaster in light of the year 2004. The study methodology includes review of secondary documents; designing of instruments (checklist, guide questions), interaction with duty bearers, right holders and stakeholders; collection of field data, and analysis and reporting.
4. In Nepal, some initiation on formulation of strategy and legislation are seen to cope with the emergency and disaster problems. There are various plans, strategies, policies and legislation that have been spelt out for the provision of the disaster management. These policies, plans and strategies includes Natural Disaster Relief Act (NDRA), Disaster Preparedness Plan of His Majesty's Government of Nepal, National Water Resources Strategy Formulation (2002), Tenth Five Year Plan (2002-2007), National Action Plan (NAP), National Adaptation Program of Action (NAPA), The Constitution of Nepal (1990), River Control Policy, Watershed Management Policy, Formulation of a Comprehensive River Law, Local Self-Governance Act (1999), Building Act (1987) and Building Conservation Act (1993), Biodiversity Strategy (2002). People have little knowledge about national policy, strategy and Acts. Both state and private sectors are responsible for it. To cope with disaster effects, people participation and the role of civil society and broad range of stakeholders interaction are needed. Community based disaster management initiatives are still poor. There is no appropriate preparedness approach for disaster in advance mobilizing the human and natural resources.
- 5. The main concept of the disaster management is of two folds: risk reduction and risk transfer. The activities fall under the category of risk reduction are: plan pre-disaster with immediate post disaster response, identify hazard prone areas, establish early warning system, raise awareness level of people, and disseminate information for creation of temporary housing and life support systems. Similarly, risk**

transfer can be managed by establishing the insurance of property and crops. There are two types of reasons social/institutional reasons and technical.

6. When disaster strikes in the community, the priority becomes the management of risks, because if they are managed ineffectively it can lead to another disaster. In order to avert danger and vulnerability from risks, formulate both short and long-term mitigation strategies and measures are needed.
7. It is necessary to make inventories of potentially dangerous landslides based on the risk of harm. For this, the knowledge of local people is vital so inter-stakeholders interaction meetings have to organise time-to-time to share the ideas and expertise/technical backstopping. Relevant studies and the demonstration plots have to be commenced partnering with the communities to motivate/encourage the through practical exercises.
8. Good coordination among the various stakeholders is fruitful to implement the disaster mitigation measures at local level. And effective coordination is possible if their roles and responsibilities are defined and analysed properly. No one can deny the fact that leadership skills of all stakeholders are needed to manage the disaster efficiently. So, to enhance the leadership skills of community, the role of community, NGOs/CBOs, market and government.
9. Until now, disaster is understood as a purely the science of geo-physical and engineering knowledge. As a result, the important of social and institutional knowledge in the shadow. But gradually, these knowledge is given to emphasis. The indigenous knowledge, skills and experience of the local people are very much instrumental for disaster management. There is general tendency that, people depend on government and NGOs/private sectors even when for small-scale disaster. Apart from these simple measures, analysis of threats vulnerability, analysis of capacity building, formulation of risk mitigation strategy, setting targets, yearly action plan preparation, implementation are equally important to mitigate the disaster.
10. Disaster preparedness and its mitigation are not only the responsibility of duty bearers, stakeholders but of right holders also important. Many communities in disaster prone areas have successfully demonstrated that it is possible to marry disaster mitigation initiatives, social security programs and help improve the resilience of communities vulnerable to natural disaster.
11. Every year, thousands of families especially from the eastern terai are being homeless. These homeless people are settled under the tent and plastic roof for the temporary relief programs. Mostly disadvantaged, minorities caste group, poor families are affected from disaster. Due to the poverty, unemployment, dry season and storm, the people living near by the disaster-affected area are being under the situation of vulnerability. Among them, pregnant women, disable people, old aged people are found more vulnerable. The poor, family residing near by the rivers, people residing in the laps of Churia, people displaced by the landslides and floods are affected from disaster.
12. The effectiveness of disaster management is based on the strong co-ordination among the government and private agencies. Community initiatives and local techniques on disaster are not still fully recognized by both state and private sectors.

13. Disaster preparedness is an important to minimise the effect on the disaster. It helps to prepare secure place, conserve people's life and wealth, decrease in the injured cases during disaster, save the infrastructures from destruction and develop capacity of the community to tackle with disaster. The preparedness activities also help to provide immediate rescue during disaster, formation of local organization to resolve the disaster problem and disseminate adequate information and supports during disaster. Sometimes disaster helps to increases solidarity among the people and groups thus increase their collective bargaining power and supports for influencing their own agenda.
14. The vulnerability situation depends on family, community and hazards. Due to the socio-economic condition and lack of awareness among the people of the community, they are not been able to face these hazards, so there condition is being vulnerable day by day. Other hazards related to vulnerability also depend on the availability of foods.
15. The absence of local government, it is very difficult to get realistic information about the disaster victims. Hence, it is difficult to identify who are actually victims and who are not. Sometimes there is a manipulation in the victims lists. As a result, they are deprived from the services i.e. relief.
16. In the rural area, people run their livelihood through agriculture, livestock, daily wage labor, forest products, small business, service and foreign employment. The livelihood is disaster victims who reside in the lap of Churia largely depends upon the collection of firewood from forest. Some people run small vendor shops, tea shops nearby highway. Majority of them have low income group, who are dependent and work as daily wage labours. Those people who have some vocational skills such as carpentry brick maker and able to cope with disaster than people who have no skills. The sustainable livelihood framework helps to motivate people why collective action is necessary and hence helps in increasing their participation and solidarity.
17. There are many problems and challenges that are considered as obstacles in managing the emergency and disaster in time. Problems and challenges are categorised in to four folds i.e. institutional, social, administrative and technical. The institutions involved in the rescue and relief work are inactive because of poor institutional capability. Despites of several efforts, coordination is still poor both at centre and districts. The inter-minister coordination is also weak. The rehabilitation process is often complex and expensive. NGOs are involved in relief and rescue not in rehabilitation program. Though policies clearly spelled the provision of adequate support and rescue effort, but the committees are not providing relief to the affected people.
18. Due to poor awareness level of people, the distribution is not transparent. Due to lack of education, ignorance, training and exposure, the perception of some rural people is that natural disasters are the act of god and consequence of fate. The problem of unemployment also discourages the people to think about disaster in advance. They are suffering from vicious circle of poverty. Due to the existing conflict, NGO's are not willing to work in conflict affected area,

but till now there is no notice that Maoist are barriers in the disaster management. Only well-off and elites have access to support from DNDRC as majority of the members are from the representatives of district line agencies (DLAs) and some social worker but not from disaster victims. Till now, natural disaster never a political commitment and election agenda for the politicians.

19. Lacks of sufficient resources are the major problems. The process to *Nikasa* (release the fund) of government is very complex. Though there is a provision of central, regional district and local level support fund in the policy but in some district there is always more than enough fund whereas in some needy district there is scarcity of funds. The agencies involved during rescue and relief have no clear-cut job description. So, it is a matter of disputes and conflicts.
20. Lack of technical manpower available on time is also the problem. Due to difficult geo-physical condition, inadequacy of infrastructure facilities, the transportation materials are difficult to deliver. The first reason of flooding in the terai for several days to months is due to haphazard construction from VDC funds without technical supervision.
21. Among the disasters, water-induced are more crucial and repeated every year. People have lack of knowledge about the provisions of Building Code. The available information and knowledge are sufficient to formulate simple policy and plan of action.
22. Now it is time to think towards the provision of crops and livestock insurance to encourage the people in the disaster and emergency activities. The disaster laws of Nepal are basically focused on post-disaster relief and response, but it is equally important in preparedness too, which includes the right to notice of the future disaster of the vulnerable people. Natural Disaster Relief Regulation (NDRR) yet to be formulated through it is essential.
23. The agencies working in disaster sector have some sort of technical knowledge on mitigation, early warning system, emergency rescue and relief operation, rehabilitation and recovery plans.
24. Emergency management trainings are necessary to the people who have to involve directly in the emergency not for the people who work in the centre and just guide others. It is equally important to disseminate the information on how emergency and risks could be mitigated at local level through series of public education materials in form of pamphlets, posters, emergency manual, documentary show and miking. The information on risk mapping and zoning should be disseminated to relevant agencies, local authorities and communities to impart knowledge and practice on risks and immediate plan of action to mitigate (i.e. relocate villages, distribute the relief, manage temporary settlement). It is equally necessary to organize the formal and informal meetings at local level to review the findings of the past studies and research. It helps to change the perspectives of people and motivate them in action. Disaster management issues have to be addressed both at community level through the literacy text and to university level through text book.
25. The disaster and emergency plans/policies can only enforce if there is strong institutional set-up. Disasters can be mitigated with the use of technical expertise of relevant agencies (government, non-government and private sectors). The meetings of CNDRC is only limited during the emergency period.
26. Adequate funds and resources are needed for repair and maintenance of infrastructure but before it, concrete plans should be formulated specifying the role of agencies involved. Effective coordination among the central and local government is necessary to translate the plan in to action. For it, MoHA should take the lead role. The low-cost technologies are needed to establish the early warning systems, risk mapping of hazard prone areas. Disaster management component should be incorporated in five-year plans more minutely as priority sector. The MoHA should take active role in the amendment of Act. In light of

its amendment, the basic preparation for the formulation of regulation should be carried out. It is better to allocate a separate agency (autonomous) to deal all sorts of disaster preparedness, mitigation and rehabilitation works. The government should formulate the plan of action to enforce the Building code and disseminate its major provisions to all. The government should establish the human rights of disaster victims (sustainable environment rights, housing and habitation rights, social security rights and institutionalise rights) with an integrated approach. The role and responsibilities should define more clearly.

27. There should be joint initiatives of government, I/NGOs and private sectors for rehabilitation. The resettlement and rehabilitation program should be brought as a package program. There should be the provision of proper monitoring and evaluation of ongoing activities. The NGOs can be mobilised to manage the relief material (collection and store in the disaster prone area for quick delivery). The rescue groups should be formed and trained properly.
28. It is necessary to strengthen the capacity and capability of local people and CBOs. If so they can do preliminary rescue and relief works right after the disaster. Intensive awareness campaigns should be organised for review the primary roles, and priority activities to be carried out right after the disaster. It will help to minimise the destruction. In order to win the trust of local people, all activities should be transparent and the activities should be planned and prepared in the participatory ways. Meetings and interactions should be conducted among the stakeholders for the formulation of simple strategies on low-cost-mitigation measures. In order to adopt mitigation measures, it is important to identify the level of threats and extent of vulnerability. Emphasis should be given to conserve natural resources especially forest and land.
29. To improve the livelihood of people, they have to rehabilitate and given special skills to cope with disaster. Crop diversification is also needed to open the opportunity of agriculture labour through out the year. In order to improve the governance, social vulnerability and natural hazards should be dealt together. The formation of policies and legislations is pro poor and marginalized. There is need to detail study on how the society is gradually developed by managing the various types of disaster and emergencies, what were the coping strategies in the past and which can be still viable to replicate etc. Disaster and emergency can be managed if the actors opens to interact, discuss with the victims to identify the common problems and effective resource management. For it, awareness, institutional development and political commitment are needed. Disaster and emergency programs should be dealt with economic and right based prospective. The total investment of rehabilitation could be reducing drastically if serious on the preparedness programs. The relief assistance programs should be made simple s that even illiterate people can access to get the relief. The role of NGOs should be widened in managing the relief as much as simple. Structured formats should be discouraged.

CHAPTER I

Introduction, objectives, rationale and methods

'The effective strategy on natural disaster prevention not only saves billion worth of wealth but also saves the lives of thousand people from being devastated. If the money invested in the relief and reconstruction be invested judiciously on sustainable development activities then it will reduce the risk of war and natural disaster. It is not easy to implement natural disaster prevention activity and culture. The investment invested in the prevention of natural disaster can only be seen in future'

-Kofi Anan (1999), General Secretary United Nations.

1.1 Introduction/Background

Disaster is unexpected phenomenon, which damages the natural calamities such as flood, fire etc. It damages the infrastructures, erodes the valuable agriculture land and losses of thousand of lives and livestock. So it is important to manage it. The ways of minimizing the disaster effects are multifarious. It has to be dealt with from both social/institutional and technical perspectives. Due to frequent floods and chronic landslides, Nepal is regarded as highly disaster prone area. These disasters are the consequences of tectonic movements of the young Himalayas and unpredictable meteorological conditions of the country.

There are many reasons for the heavy disaster. Haphazard development activities without maintaining the norms (road, buildings), deforestation, provision of khoriya¹, and encroachment of flood plains are some of the immediate reasons. Disasters completely disrupting existing development efforts. Its consequences are poor services of infrastructure, less agriculture productivity, poor drinking water, irrigation and hydropower facilities. Migration, starvation, deaths, beggary, suicide, disability and illness are the major consequences of the disaster. It also causes significant economic loss, erosion in social and financial capitals, psychological dislocation and widespread physical injury and death. Especially the poor and disadvantaged people are more vulnerable from the disaster because of their poor access to and control over the available resources.

Still there is a orthodox thinking that disasters are occurred as the wish of god, so cannot be protected or prevented. These types of thinking are still deep rooted in the people's mind. As people are still believed in fate, they became more vulnerable after disaster. In the other hand, people have not much awareness and skills to fight against various means of disasters (floods, drought, landslides, and fires) that kill thousand of people every year. Hence, in this context, the

¹ Khoriya is the activities in which poor people unofficially encroach or capture the forestland and clean cultivation. It invites the heavy soil erosion and landslides that affect the people of downstream.

contribution of preparedness, its mitigation activities to prevent the effects of the disasters are very crucial.

1.2 Objective of the Study

The major objectives of the study are:

- **Review the policy and national priority for disaster particularly focusing the impact of emergency and disaster in Nepal and its impact on economy (service and infrastructure, agriculture productivity, and governance etc) at macro level, and**
- **Assess the vulnerability context of the poor people (livelihood, basic needs, social security, human rights etc.) at micro level focusing the disaster-affected community (poor, women, children, dalit and ethnic minorities).**

1.3 Study Methodology

The broad framework of this study is to review the disaster in light of the year 2004. The study methodology includes review of secondary documents; designing of instruments (checklist, guide questions), interaction with duty bearers, right holders and stakeholders; collection of field data, and analysis and reporting. The study is carried out using the following methods and procedures, which are given in the chronological order.

1.3.1 Desk study (related policies, legislation and other documents)

At first, a number of documents and relevant books, journals, reports related to study theme are collected from various relevant institutions and reviewed in order to understand the context (refer annex 1 for the list of reports consulted).

Various documents and relevant reports related to study theme were collected and reviewed to understand the policies and strategies. Learning were documented in the sequential order.

1.3.2 Meeting with relevant central and district level stakeholders

Meetings were organized at the three levels. Some people from relevant line agencies such as DWIDP, Ministry of Home Affairs (MoHA), Nepal Red Cross Society (NRCS), Humanitarian Assistance Information System (HAIS) and various other people consulted in Kathmandu (please refer the annex: 2 for the people consulted during field work). Similarly, interaction meetings were also conducted with the relevant district level line agencies such as District Administration Office, District Forest Office, Nepal Red Cross Society, District Development Committee, District Health Office, District Livestock Office, District Agriculture Office, District Irrigation Office etc. Some NGOs/CBOs officials and VDC office-bearers were also consulted. The main purpose of these meetings was to record the perception and views emergency and disaster management.

1.3.3 Field Visits of Eastern Terai Districts

A total of nine districts from eastern terai (viz. Rautahat, Sarlahi, Mahottari, Dhanusha, Siraha, Saptari, Sunsari, Morang and Jhapa) were taken for the field study.

The field visits comprises the interaction visits to the disaster prone areas, interact with disaster victims people, organise the focus group discussions (FGDs), key informant interviews (KII) and observation (learn how people coping with disaster). The FGDs were organised with the same interest group to record their perceptions, impressions and feedback, especially for the emergency and disaster management. KIIs were with the key officials of various institutions to get general impression in the process (refer annex 3 for the list of tools and techniques used). The belief and perception of disaster affected people and how they actually managed the disaster during and after the disaster were also recorded from KII.

Some participatory tools and techniques such as Venn relationship (information about the organizations working in the sector of disaster management and interrelationship among them), access mapping (records access to and control over the resources), time line (The disaster faced by the community in the past), and trend analysis (increasing and decreasing trends in certain variables and their reasons) and seasonal analysis (the risk affected months) were used as part of the primary information collection. Hazard mappings/the suggestion of district stakeholders were used to select the VDCs and wards for the purpose of field visits.

1.3.4 Debriefing meeting with relevant district level stakeholders (DLSs)

Debriefing meetings were also conducted in each district with DLSs after the field visits. Its purpose was to share the impression that got from the field and validate the information.

1.3.5 Analysis and reporting

The information and data collected from the desk study, interaction meetings and field visits were synthesised in a systematic order. The information were coded and edited for further analysis. Some charts, photographs, case studies and factual statements were also included. Finally, a draft report was produced. The final report was made after incorporating the feedback and suggestions of senior team of Action Aid Nepal.

1.4 Scopes and limitations

As spelled out in terms of reference (ToR), following scopes are specified in this review.

- *Situation Analysis:* Review the disaster management practice in Nepal with special reference to current disaster 2004 and their impact (includes field visit of disaster stricken areas of eastern terai districts). Impacts of emergency and disaster in economy. Identify the needs and the support provided to disaster victims.
- *Policy Analysis:* Review the existing policies and legislation related to disaster. Emergency and disaster management in 10th five-year plan Government frame works, strategy and action plans

(stakeholders Analysis), legal provision (compensations to victims) gaps role of donors and civil societies and shortcomings on E&DM. Records the perception and saying of various stakeholders (both government, non government and private sectors).

- *Case studies:* Assess how the disaster victims are managing emergency and disaster through their own knowledge and skills. Assess the vulnerability context of the poor by emergency and disaster at local level and impacts of disaster in the lives of poor and marginalized people (women, children and *dalits*) focussing peoples (basic) rights and state obligations.
- *Conclusion:* Provide analytical findings and furnish set of recommendations on emergency and disaster management in Nepal. Recommend the best ways to address both learning from policies/legislation and local knowledge/practices to improve the livelihood of disaster victims people. Suggest programmes and policy influencing /advocacy works for AAN.

CHAPTER II

OVERVIEW OF CURRENT PLANS, STRATEGIES POLICIES AND LEGISLATION

2.1 Overview of Current Action Plans, Strategies, Policies and Legislations

In Nepal, some initiation on formulation of strategy and legislation are seen to cope with the emergency and disaster problems. There are various plans, strategies, policies and legislation that have been spelt out for the provision of the disaster management. Here is the brief overview of these policies, plans and strategies.

2.1.2 Natural Disaster Relief Act (NDRA)

Before 1982, there was no disaster policy in Nepal. In that time, relief and rescue works were carried out as voluntary social works. Later, it has been amended two times in the year 1989 and 1992. It clearly specifies the provision of a Central Natural Disaster Relief Committee (CNDRC). In order to support the CNDRC and allocate the roles and responsibilities, five other committees are envisioned such as Relief and Treatment Sub-Committee (RTSC), Supply, Shelter and Rehabilitation Sub-committee (SSRSC), Regional Natural Disaster Relief Committee (RNDRC), District Natural Disaster Relief Committees (DNDRC) and Local Natural Disaster Relief Committees (LNDRC). The rationale of CNDRC is to formulate and implement the policies and programs regarding natural disaster relief work, and to undertake other necessary measures. Moreover, the CNDRC prepares specific norms for relief assistance, in cash and/or in kind, to be distributed to disaster victims of affected areas. The role of RNDRC is to provide necessary advice and suggestion to the CNDRC, help execute policies and directives of the CNDRC, and operate effectively the rescue, relief and rehabilitation work. The rationale of other three committees are to undertake natural disaster relief works immediately. The RTSC and SSRSC are activated at the time of very serious natural disasters, while CNDRC and DNDRC are active during the monsoon. In order to provide immediate rescue and relief works, these roles and responsibilities are clearly spelled out in the Act. The functionality of RNDRC and LNDRC can be activated as and when necessary, so are not much functional (refer annex 4 for the composition of these committees). Only in Sunsari, the role of LNDRC was found. They prepared the LNDRC at VDC level.

The CNDRC provides necessary funds, resources and relief materials to the DNDRC as per the request to distribute the relief for disaster victims. Thus, rescue operations and relief assistance are being carried out and provided basically by the DNDRC in the close co-ordination and co-operation with other district agencies and various other stakeholders in the district.

The CNDRC organises meetings as and when necessary under the chairpersonship MoHA. It can invite concerned Member of Parliament representing the district affected by a natural disaster to share the situation, ideas, and prepare the plan of action to deal with disaster. Apart from this, it sets the norms and standards are amended by CNDRC time to time. According to recent provision:

- Up to Rs. 10000 would be provided as relief assistance to the family of a dead victim.
- Injured persons shall be provided the facility of treatment in the nearest hospital or health post. Seriously injured people will even be airlifted and taken to the advanced hospital.
- If a house has been destroyed in a natural disaster, then up to Rs. 3000 would be provided to the owner of the damaged house. If there is a threat of disaster or the house is not safe to live, in that condition, Rs. 2000 would be provided to the owner for temporary settlement. Seven kilos

of rice or an amount of Rs. 125 would be provided as foodgrain assistance and Rs. 500 would be provided for the clothing and utensils for a homeless person.

- Those who have completely lost their land and crops and have nothing to eat, shall get an amount of Rs. 500 as an immediate relief assistance. Sufferers from the natural disaster will also get timber at cheap rate to construct a house.

Shortcomings: The NDRA is silent to describe the duties and responsibilities of all the disaster management related agencies other than the Ministry of Home Affairs. Duties and responsibilities of various other disaster management agencies have to be reflected in National Disaster Relief Regulation (NDRR), as every detail could not be stipulated in the Act. In order to deal with disaster and emergency, the role of regulations is important. Regulations provide not only a formal basis for counter-disaster action but also supports plans, organizational arrangements, preparedness measures and response action. Unfortunately, there is no NDRR formulated so far. So the functionality of NDRA is sometimes challenging.

Similarly, the role, functions and the duties of all district disaster management related agencies, the problems of co-operation, coordination and mutual understanding among various district disaster management related agencies are not reflected in NDRA.

Implications: Disaster victims do not always receive immediate, efficient and effective rescue and relief services. Delayed relief-works often being serious and unpleasant result, and duplication of relief works has also been experienced, mainly due to the absence of dialogue and mutual understanding among related agencies. In addition, some of the district agencies try to shift their responsibilities to others, as there are no clear-cut job descriptions in the Act. Thus immediate amendment in NDRA is necessary, and clear-cut job description of all the disaster management related agencies is needed to aware the agencies in their duties. Though the functions and duties of the DNDRC are to coordinate between local committees, formulate district level plans and submit to the regional committee, monitor and report the natural disaster relief work. But the preparation of advance plan and submits to regional level committee is never done.

2.1.3 Disaster Preparedness Plan of His Majesty's Government of Nepal

The Disaster Preparedness plan of His Majesty's Government of Nepal includes the following activities. These activities are broadly categories in to three headings: social, institutional and technical.

Social activities

- Measure the competencies of awareness raising, training, rehearsal and simulation activities.
- Formulates the policies on the role of NGOs, local communities, private sectors and people's participation especially women and socially disadvantaged groups in emergency and disaster.
- Emphasis the role of indigenous knowledge and skills of the communities in rescue and relief work.

Institutional activities

- Measure the effectiveness of national policies and plans for institutional arrangements, and legal framework.
- Measure fire-fighting capabilities in fire prone areas (specially in terai).
- Establish disaster management information system and stock piling of emergency supply materials.
- Incorporate environment impact assessment for disaster reduction development planning.
- Promote regional and sub-regional cooperation between countries experiencing same types of hazards.
- Establish a documentation centres on disaster activities, learning and the way forward.

Technical activities

- Measures related to geographical, hydrological and meteorological hazard assessment and environmental engineering studies.
- Infrastructure specific and hazard specific preparedness measures
- Risk assessment for development planning.

Implications: Though the disaster preparedness plan of HMG/Nepal is started to envisioned the social and institutional activities in the plan and polices but they still insufficient and have not enough background so that on the basis of it, the activities could be strengthened. The important facts that plan and polices are pro-technical. As a result, the plan and policies are not able to implement properly to manage the disaster.

2.1.4 National Water Resources Strategy Formulation (2002)

His Majesty's Government of Nepal with the support of World Bank and Canadian International Development Agency (CIDA) is formulating a long term National Water Resources Strategy. This strategy also highlighted the importance of water induced disaster management. The focus of the water induced disaster management during the first five years of the plan is to enhance institutional capabilities for managing water induced disasters. It is clearly said that in the following ten years, effective measures will be adopted to manage better water-induced disasters. The long-term goal of this strategy is to make Nepal's water disaster management system fully functional, effective and responsive as people's needs. The total program is expected to directly address the needs of the poor and marginalized people, thereby contributing to improved living conditions for the poorest sectors of the Nepali population. Altogether nine programs have been identified under this strategy. The programs and their key elements are presented below:

Water Related Disaster Management Policy and Program

The key elements are:

- Amend the existing river management policy (at present in the draft form) to include the aspects related to mitigation of landslides, debris flow and glacial lake outburst floods (GLOF).
- Initiate actions to prepare WID related Acts and Regulations.
- Prepare management guidelines.
- Develop and implement capacity development program in all WID related institutions particularly in DWIDP, DNDRC, DSCWM and DoHM.

Risk/ Vulnerability Mapping & Zoning Program

The key program elements are:

- Prepare flood risk maps for all priority areas.
- Verify priority areas by ground inspection.
- Prepare revised flood plain zoning regulations.
- Discourage and restrict settlements in high- risk areas.

Disaster Networking and Information System Improvement Program

The key elements are:

- Establish and activate disaster forecasting and early warning systems covering floods, landslides (mass wasting) and debris flow.
- Make provision of necessary equipments, related to flood, cloud burst and GLOF forecasting to DoHM and furnish with adequate radio as well as other communication equipment.
- Form and strengthen CBOs/NGOs, INGOs, civil societies be made aware and provided support to strengthen their capacity related to disaster management.

Community Level Disaster, Preparedness Program

Key elements are:

- Develop and review evacuation plans at least once every year.
- Conduct rehearsals/drills exercise with key stakeholders at frequent intervals at different locations.
- Form standing committee to support search and rescue program with necessary facilities at district as well as local level (vulnerable localities).
- Provide training and exposure to identify groups in rescue operations.

Relief and Rehabilitation Measures:

The key elements are:

- Prepare emergency response, rescue and relief.
- Arrange and delivery for disaster relief supplies.
- Help to store relief supplies in five regional headquarters.
- Identify and assign responsibility to different organizations for handling of relief and rehabilitation works.
- Plan emergency shelter and feeding to victims.

Activation of International Inundation Committee

The key elements of the programs are:

- Activate existing bilateral inundation related committees.
- Re-examine inundation policies.
- Enhance the exchange of data and information as well as formal/informal interactions at field level.

River, Landslides/Debris Flow and GLOF Management Program

The key elements are:

- Identify, prioritise and develop management plans for high-risk areas.
- Develop plan to make flood forecasting and warning system and disaster preparedness effective and functional.
- Implement non-structural measures such as afforestation with peoples participation involving CBOs/NGOs and women groups for river bank protection and conservation of watershed areas of critical rivers.
- Implement structural measures such as river dikes, spurs construction, check dams and embankment construction with the help of community group.

Implement Disaster Reduction / Mitigation Measures

The Key elements are:

- Conduct the studies of potential flood reduction / mitigation measures.
- Reduce flood damages from rivers.
- Recommend low cost technology to fight against serious floods, and
- Select and identify some civil and/or bioengineering actions and study to determine their technical, environmental and economic viability.

Strengthen Institutional Set-up and Capacity

The key elements are:

- Provide necessary resources to build the capacity of staff and improve the human resource development with adequate resources (human and cash).
- Provide DHM as an authorized institution for implementing and managing a flood warning system.
- Transfer the DOI's responsibility to DWIDP.
- Authorize MoHA for planning and implementing disaster relief/rehabilitation measures.

The strategy also set the following indicators to achieve the above-mentioned programs.

- By 2007, potential disaster zones identified by type and located on district maps.
- By 2007, emergency relief materials are available in all five regions.
- By 2017, infrastructure for mitigating predictable disaster put in place in 20 districts.
- By 2017, warning system established and functioning, encompassing the country, and
- By 2027, social and economic losses reduced to levels experienced in developed countries.

Implications: Altogether nine programs such as water related disaster management policy and program; risk/vulnerability mapping & zoning program; disaster networking and information system improvement program; community level disaster, preparedness program; relief and rehabilitation measures; activation of international inundation committee;

river, landslides/debris flow and GLOF management program; implement disaster reduction/mitigation measures; and strengthen institutional set-up and capacity. These plans are very much optimistic and difficult to achieve the target. But very simple and community based disaster mitigation measures (simple-technology and cost effective) are designed, which are the urgent needs.

2.1.5 TENTH FIVE YEAR PLAN (2002-2007)

The tenth five-year plan has given high priority for water-induced disaster prevention. The major goals are envisioned as follows.

- Formulate policies, guidelines related to water induced disaster management.
- Collect information through participatory hazards mappings.
- Prepare flood plan management guidelines.
- Help to strengthening of inundation committee/other groups involving in the disaster.
- Mobilise external resources in water induced disaster prevention sector.
- Prepare master plan for river and landslides management.
- Prepare inventory of rivers flowing to/from neighbouring countries, and
- Strengthen institutional set-up to execute the in the efficient manner.

THE TENTH PLAN SPECIFIED VERY CLEAR STRATEGIES. THE STRATEGIES SPELLED OUT THAT WATER-INDUCED DISASTERS ARE DAMAGING A LOT OF FERTILE AGRICULTURAL LANDS, VITAL INFRASTRUCTURES, LIVES AND PROPERTIES ETC. POOR AND SOCIALLY DEPRIVED PEOPLE ARE MOSTLY AFFECTED BY SUCH DISASTERS CAUSING ADVERSE EFFECT ON 'POVERTY REDUCTION'. SO, PROPER MANAGEMENT OF WATER-INDUCED DISASTER IS CONSIDERED AS IMPORTANT ACTIVITY FOR SUSTAINABLE DEVELOPMENT OF THE COUNTRY. IN THIS CONTEXT THE FOLLOWING MAJOR STRATEGIES IN THIS SECTOR ARE ENVISIONED WHICH ARE HEREUNDER.

- Formulate water induced disaster prevention policy and guidelines and institutional strengthening.
- Prepare the modalities for effective implementation of water induced disaster prevention/mitigation activities and create awareness for minimise the magnitude of disaster.
- Design integrated planning and management between DWIDP and Department of Soil Conservation and Watershed Management (DSCWM) by utilizing local skill, material and peoples' participation.

Major Policies

- Formulate policies, action plans and modalities for institutional development/capacity building.
- Strengthen security measures, awareness and coordination.

- Utilise local skills and knowledge and participation in disaster management.

Major Programmes and Implementation Process:

The tenth plan mentions the major programmes related to water-induced disaster are as follows:

- Formulate policy, rule, regulation and guidelines for the institutionalisation of water-induced disaster management as a regular program.
- Delineate water-induced disaster areas and prepare water-induced hazard maps.
- Develop and disseminate appropriate and low-cost technology through model construction works.
- Provide information regarding the probable disasters due to floods and landslides through the establishment of forecasting systems and public awareness.
- Build the strong coordination among agencies related with water-induced disaster management.
- Activate bi-lateral committees related with the inundation problems of Indo-Nepal borders.
- Implement work plan for the management of flood plains, and
- Implement the projects and programmes for water-induced disaster mitigation.

Major Outputs

Enhancements of institutional capabilities to manage water-induced disasters are considered as short-term output. Similarly, effective measures to manage water related disasters and mitigate their adverse effect and functionality of water induced disaster management are regarded as medium term and long term output respectively.

Implications: Though the roles are clearly defined, but there is no proper coordination between watershed management and DWIDP. As usual the plans formulated by Tenth Plan also not materialize properly. One of the important weaknesses in implementing such plan is due to lack of separate institution dealing on disaster management and prevention. Another reason is there are not sufficient resources to execute the activities as spelled out in the Tenth Plan. It is general trend that the budget is always sanctioned at the final quarter of the fiscal year. So this is also on important obstacles to implement the plans.

2.1.6 National Action Plan (NAP)

Nepal constituted a high level *National Committee* for International Decade for Natural Disaster Reduction (IDNDR) in the decade of 1990s with the initiation of the United Nations. This committee formulated policies for disaster management. The plan has specified priority groups, activities and executive agencies to be undertaken in the field of disaster management.

The NAP also specifies the responsibilities of various disaster actors, with specified time frames within which they implement their disaster reduction tasks by formulating special plan of action and mobilize the available resources in the given period.

Measures related to geographical, hydrological and meteorological hazard assessment:

Priority activities: Landslides hazard assessment; landslides hazard mapping of selected areas; assess existing data on landslides; introduce remote sensing techniques for landslides detection; collect, compile, produce and disseminate landslides hazard maps and reports; planned engineering and environmental geological studies; engineering and environmental geological mapping; hydrological meteorological hazard studies; preparation of flood hazard map; preparation of debris flow hazard map; preparation of glacial lake location map; preparation of rainfall intensity map; establishment of flood forecasting and warning system; improvement of hydro meteorological observation network; and collect, compile and disseminate flood hazard maps. In order to carry out these activities,

institutions like Ministry of Forest and Soil Conservation (MOFSC), Tribhuvan University (TU), DWIDP, Department of Mines and Geology (DoMG), DoI, Department of Hydrology and Meteorology (DHM) and Water and Energy Commission Secretariat (WECS) will be responsible.

Awareness Raising Program

Priority activities: Awareness raising through mass media; distribution of pamphlets, posters and other materials; preparation of documentary film, slides for public show; inclusion of disaster management course in secondary school syllabus; poetry, debate and essay competition (every year); and organise regional and national conference among GOs, NGOs and INGOs every year to share the learning. For it, Ministry of Information and Communication (MOIC), MoHA, DWIDP, DHM, Ministry of Education and Culture (MOEC) will be responsible to execute the activities.

Training/Rehearsals/Simulations

Priority activities: Community leaders training program at local level, disaster management training at various levels, conduct rehearsals and simulations in vulnerable areas. The NRCS, DNDRC, MoHA, local NGOs will be responsible for it.

Disaster Management Information System

Priority activities: Establish and maintain a communication system in all 75 districts with access to centre; encourage support and expand local communication practices; establish a National Disaster Management Information System for disaster information collection and dissemination. Agencies like MOIC, MoHA, Royal Nepalese Army (RNA), Police Headquarters, INGOs and NGOs will be involved to implement these activities.

Implications: The NAP has specified priority groups, activities and executive agencies to be undertaken in the field of disaster management. So it is more progressive than other plans. It advocates the importance of local knowledge and skills as well as the people's capacity and awareness along with technical measures to mitigate the disaster.

2.1.7 National Adaptation Program of Action (NAPA)

A draft NAPA document address that temperature and rainfall changes affected the ecology of the mountain region, thereby greatly affecting the socio-economic activity of downstream population through the natural calamities and disaster.

Nepal is formulating NAPA with the involvement of multi-disciplinary team, which was coordinated by Ministry of Population and Environment (MOPE). The document regarding the process for the NAPA preparation is in the endorsement pipeline by MOPE officials.

2.1.8 The Constitution of Nepal (1990)

The Constitution of the Kingdom of Nepal is the masterpiece of all laws and legislation. Unfortunately, it does not say anything about the right to get relief and protection from disaster in particular, it can be found under the right to life and individual liberty under article 12. Right to life has meticulous dimensions. The supreme court of Nepal has interpreted the right as to include the dignified life embodying the right to shelter, health, clean environment etc. So, in this view, it can be said that the human rights with respect to the disaster response, such as right to protection, right to rehabilitation, right to resettlement from any disaster can be defined under this constitution.

2.1.9 River Control Policy

'River control policy' is developed by Department of Irrigation in 1992. It emphasizes the need for a new comprehensive approach to flood mitigation and river control through use of local material, instead of relying solely on gabion-wires; incorporation of bio-engineering in river control facilities, combination of structural and non-structural measures, and capacity-building/institutional development of community organisations for flood mitigation measures.

This draft policy has also stressed the need for a more systematic approach to river control in the terai and the establishment of river classification, design criteria and databases.

2.1.20 Watershed Management Policy

The watershed management policy is developed to conserve the watersheds. It envisions helping people meet their local needs by improving lands and increasing agricultural productivity through proper conservation and mitigation of watershed resources in an integrated approach.

The major focus of this policy is implement integrated watershed management by linking forestry, agriculture, livestock, water and land use to help people better conserve and manage land and water resources. The policy emphasizes on mobilising the local community as well as raising their awareness through user groups.

Implications: Not clear to delineate the roles and responsibilities of various institutions, duplication in the programs, and egoism among the organisation.

2.1.21 Formulation of a Comprehensive River Law

The DWIDP, is planning to develop a preliminary draft of a Comprehensive River Law to provide the guideline for overall river management and administration in consultation with the concerned stakeholders.

***Implications:* This law is able to aware the stakeholders related to River management by specifying the its crucial phenomenon and ways to measures the mitigation.**

2.1.22 Local Self-Governance Act (1999)

The Local Self-Governance Act (1999) is silent about the provision of disaster management. So there is no provision of flood and landslide related disaster prevention plan in this Act. Even the Act does not spell about the role of local institutions on disaster management. It has given mandate to the higher-level institutions to execute the rescue and relief programs through local institutions.

So clearly, local bodies have to work in the various disasters as instructed by the higher institutions. The Act has the provision of taking permission by ratifying the map while carrying out local level construction work.

***Implications:* There is no provision about the disaster and its consequences mentioned in this Act. Though disasters have to be**

mitigated at local level with the help of community based institutions but it is not reflected in the Act.

2.1.23 Building Act (1987) and Building Conservation Act (1993)

Even in Building Act (1987) and Building Conservation Act (1993) have spelt about the management of natural disaster. But this act has not been able to be enforced in all parts of Nepal. Building Act spells for the construction of houses on the secure place whereas Building Construction Act spells about Do's and Don'ts while construction of houses. These provisions are made considering mitigation the damage of earthquake.

Implications: But there is no provision of mitigation of damage imposed by the flood and landslide related natural disaster. Till now there is no provision of separate Act to mitigate the damages imposed by floods and landslides.

2.1.24 Biodiversity Strategy (2002)

The country's Biodiversity Strategy (2002) also listed several climate-related risks such as flooding and sedimentation as threats to biodiversity. And the report prepared for the UNCCD COP-4 (in 2000) addressed impact desertification of land degradation and climate change.

In the nutshell, people have little knowledge about national policy, strategy and Acts. Both state and private sectors are responsible for it. To cope with disaster effects, people participation and the role of civil society and broad range of stakeholder's interaction are needed. Community based disaster management initiatives are still poor. There is no appropriate preparedness approach for disaster in advance mobilizing the human and natural resources.

CHAPTER III

RISKS, DIASATER, VULNERABILITY AND LIVELIHOOD

3.1 Risks and Risks Management

The main concept of the disaster management is of two folds: risk reduction and risk transfer. The activities fall under the category of risk reduction are: plan pre-disaster with immediate post disaster response, identify hazard prone areas, establish early warning system, raise awareness level of people, and disseminate information for creation of temporary housing and life support systems. Similarly, risk transfer can be managed by establishing the insurance of property and crops. Risks are immediately apparent for those whose livelihood is entirely depend on irrigated agriculture.

Due to the heavy rain and storm during the monsoon and long drought in the dry season are the major risks of rural people. Its consequences are fear, danger, accidents, injures and lose of the wealth and property. It also reduces the psychological strength of the people. The risks are also increasing due to the poor institutional set-up and poor capacity and capability of the community. Risks are not always technical, but they are social/institutional too. The major reasons of risks are found as follows.

Rain Affects Terai, floods Losses lot of properties

In Sarlahi, over 40 VDCs have been affected by the rise of water level in the Bagmati, Lakhandehi, Jhim and Kalinjor rivers. Water has entered many houses. Hundreds of acres of land and an irrigation canal have been inundated in the district. Five families in Rautahat and fifty in Udaypur have been rendered homeless due to the flood. In Sunsari, almost 30 villages are flooded displacing 60 families. Houses built in the lowlands in the entire eastern and central terai have been submerged in two to five feet of water. The rainfall has completely halted educational activities in the region.

Social/institutional reasons

People usually eat dead fishes, contaminated food and water. As the environment being contaminated due to dead animals, the quality of water is worse. There are no habits of the people to preserve water for emergency period. During this period, increase in snake insects biting is normal phenomenon because of poor settlement pattern. People have no proper emergency preparedness and absence of secure places during emergency (disaster) period.

Technical reasons

The risks invite many problems. Construction of infrastructure in the risk affected area without taking any protective any qualitative measures,

construction of houses using weak and poor construction materials and no practice of timely maintenance of physical infrastructures are the major reasons. The haphazard use of land for agriculture and other activities also invites the risks. The main reason is depletion of natural resources (i.e. forest) in the Churia that causes heavy soil erosion and landslides and floods have chance to swept all these materials with it and deposited in the downstream.

3.2 Disaster Situation and Relief Response

The disaster situation and relief response can be summarised based on the discussions with following line agency people and community groups. During the visits to different districts, discussions were made with many people formally and informally. The synopsis of some of the discussion is presented below.

Siraha district

Based on the discussion with Krishna Ojha, the LDO of Siraha

- The heavy flood of Ashadh 22-29, 2061 caused the disaster.
- The major problem is to collect information about the disaster victims. It is very difficult to identify who are victims and who are not. Teams were formed and trained on the types of formats and nature of information to be collected before send to the field for situational analysis of the disaster affected area.
- One of the major problems in this process is that the person involved in situation analysis process is not accountable to manage and distribute the relief, so he is willing to list down more people's name in the list even those who are not victims. So if possible, the person for situation analysis and relief distributor should be same to minimise the disputes.
- **The relief materials were distributed through one door system i.e. through NRCS. The relief materials could not be delivered to the real victims, as the socio-cultural scenario of Siraha is highly complicated, extreme poverty and lack of political ethics among the political parties. The politicians try to manipulate the entire relief distributing process. During the time of relief distribution, the interest of politicians is how to happy their voters. Due to the political pressure, the relief materials are distributed to the non-victim families too. It is very difficult to control but we did whatever we can do.**
- Ethnic minority caste groups and dalit are more vulnerable from disaster. It is because they are mostly poor as they have poor socio-economic condition and deprived from access to and control over the resources.

Binod Upadhaya, Administrative Officer, Chief District Office, Siraha

- In most of the cases, the political parties are interested in the disaster, rescue and relief process as is one of the opportunities for them to influence their voters. DNDRC always take the support of all political parties (i.e. they are involved in every decisions) to sort out the victims to minimise the political pressure.
- One of the major problems faced during the time of relief distribution is that the available resources are not enough compared to total number of victims. Due to this reason it is unable to follow the policies, strategy and acts. As in death cases, the family is provided even Rs. 1000 due to lack of resources.

Min Prasad Pandey, Superintendent of Police, Siraha

- There is a provision of quick response team (QRT) to protect and implement rescue operation during the peak emergency. This provision has been made, as it is not possible to mobilise civilians in the emergency period. As civilians are in scattered form, so it is unable to organize them quickly.
- The CDO is appropriate to act as a chairperson of DNDRC otherwise it is difficult to maintain the power balance among the agencies. If CDO request, others are compelled to provide the resources. So, it is easy to manage the resources. One of the problems with the private sectors is that they are not fully involved in the relief and rescue'.
- There is an intense political pressure within the districts. Similarly 'haves' always try to rule over the 'haves not'.
- One of the problems for the quick response to victims is current security situation. In Majhuliya village of Siraha, people denied to receive the relief materials as Maoist threatened them not to accept the relief material of state. As this village is considered Maoist affected area, NRCS is also not willing to go there to distribute the relief. Similarly the administration is hesitant to allow the agencies to go and work there.

Ashok Kumar Yadav, Project Coordinator, NRCS Siraha

- The Kamala River is one of the reasons for the heavy disaster in the southwest part of the district. The illegal extraction of boulders and sand from the riverbed is also the causes of disaster. The most affected VDCs of the district are Manpur, Makhana, Busbikhata and Majhualiya. The constituency no 4 of Siraha is the most disaster prone area.
- This year alone the flood of the Kamala damaged wealth of about ten corers and losses of eleven lives.
- As soon as the disaster strikes, then the DNDRC uses secondary information from elites, and on the basis of it, the committee send teams to prepare inventory (the situational analysis process). During the situational analysis process, they categorised the disaster victim people in four categories on the basis of available information like: vulnerable, highly affected, affected and least affected. The relief material is distributed to the vulnerable people as per the priority order.
- The relief materials were collected from different sources such as CDO office, NCRC, and Care Nepal, Save the Children (US) also provided the support such as clothes, utensils, foodstuffs and plastic tents etc along with Rs. 500 in cash per HHs.

- NRCS able to collect relief materials from various NGOs and INGOs. But there are no provisions of rent for proper storage of these materials. As a result, the NRCS sometimes decide to distribute the relief in haste. Despite of number of efforts, there may be possibility that the victims may not receive these materials. Due to vehicle facilities, it was difficult the transport the relief materials in the proper sites. The destruction in road network also obstacle to distribute the relief on time.
- It was decided to use NRCS to distribute the relief from one-door-system. Rs 10000/HH for death case and Rs 500/HH is distributed by CDO office.
- NRCS is unable to go Majhauriya, as district administration did not allow them to go and work. This area is considered Maoist affected area. But NRCS have no problem to go and work with victims. NRCS is also mobilising its volunteer in that village to assess the preliminary situation of disaster.

Rajdeo Thakur, Secretary (Mantri) NRCS, Siraha

- NRCS has been one of the pioneer organisations working in the field of the disaster and relief management. In Siraha District alone, it has 18 branches, Junior Circles in 21 schools, Youth Circles in 2 campuses. It has maintained the Kit boxes in all locations. So, it has strong institutional capacity.
- NRCS formed 5 teams including the representatives from DDC, DSLO, DADO and NRCS and send to disaster-prone areas for situational analysis. Based on the information collected from field, it formulates the plan of action and management of relief materials. Then distributes the relief materials according to this plan of action.

Indra Khatri, representatives of Care Nepal

- By nature relief should not be late, i.e. it should be distributed as soon as the disaster struck. If it is late then it is regarded as support NOT relief.
- One of the ill fates of the country is the politicisation of each and every activity. In case of disaster also it gets the most political attention as the politicians see disaster as the opportunity to secure their vote banks rather than considering it as a humanitarian effort.
- Compared to other countries, the practice of looting of relief materials is not much prevalent in Nepal, which is predominant especially in India. It is simple phenomenon.
- The rescue and relief process should be based on need based advance preparedness and planning i.e. discussion and interaction among the relevant institutions in advance, participatory plan of action formulation, relief distribution, decentralised committee (the real enforcement of DNDRC at VDC level), and timely service.
- One of the major drawbacks in disaster management program is lack of resettlement and rehabilitation programs, which is the important aspect of disaster management. The DNDRC does not have advance planning and not much have seriousness. It is confined its activities in rescue and relief activities not rehabilitation.

Babu Krishna Karki, Colonel, Royal Nepal Army, Mirchaiya, Siraha

- It is difficult to manage relief material, as the disaster of this year was very crucial. Army is always ready to provide its services to the most affected area and people. Since Nepal Army has been implementing their own programme (campaign) where they provide the support such as health campaigns, distributing of relief materials to the disaster victims.
- But in the recent years, the issue of the disaster has been in shadow. It is because of the present security situation raised due to the Maoist violence.

- Army are always ready to provide the sufficient security to those who wish to go in the critical places within the districts. But they never seek Army's supports to distribute the relief materials in the Maoist affected area. Home Minister planned to visit Majhuliya to observe the heavy disaster caused by Kamala River. But administration do not allow for visit showing security situation. The Army also assured to provide the security to any place. Even though such assurance, visits was cancelled. If so, it was possible to provide some relief supports to the victims of Mujhuliya. But it could not happen. There is some tendency that the person and institutions try to escape from their roles and responsibilities showing the weak security situation. It is not completely true.
- There has been no frequent meeting of DNDRC so it is difficult to set the priority issues and concerns for proper disaster management.

Saptari district

Bhupnath Poudel, LDO of DDC Saptari

- Due to the extreme disaster, local government do not have enough resources to manage it. Even though it is very difficult to distribute the available resources due to poor political ethics, as the politicians try to influence to pressurise the line agencies people.

Sanjaya Kumar Basnet, District Superintendent of Police Saptari

- The role of police has been limited only in the rescue operation during the peak emergency period. The other roles are based on the instruction of DNDRC. They don't have any roles to play during distribution of relief materials unless the relief materials are distributed near the border areas. They have to manage the security to protect relief materials from being looted in the border area.

Madhav Prasad Pokherel, Administrative Officer, Saptari

- People perceived that *Rahat* (relief) is distributed in expense of the government money so everyone should get the share of it. So there has always been conflict in the distribution of relief materials. They have to rely on the party representatives any way.
- DNDRC collected Rs. 11 Lakhs this year, which is distributed among 639 HHs at the rate of Rs. 1100 (status as of Shrawan 27, 061)
- These relief materials were distributed on the basis of inventory, which was prepared through VDC secretary, representatives of all party leaders and NRCS's information. Similarly this information was verified after a team comprising of DAO, DADO, NRCS, DIO, and DHO through an observation visit to the disaster affected area.
- There was even the case of looting of the relief materials. As Care Nepal's relief material was very impressive, people looted from the relief distribution centre in Rampur Malauliya. This place is lies in the border area. There was a gang fight between two groups of people but later it was found that it was just a drama to loot these materials.
- This year, it is reported that, there has been death of 2 people from flood, 6 people from dysentery, and 88 animals were killed by flood. The most disaster-affected area is Babangamakatti VDC.

Jogendra Bhagat, Chairperson, Ram Narayan Chaudhary, Secretary (Mantri) and Surendra Kumar Yadav, Programme Officer, NRCS, Saptari

- Disaster management committees are formed by NRCS, which are not the duplication of DRDRC, but they are formed for the internal purpose of NRCS.

- During situational analysis process, the data were collected from three different sources. First, data were managed by forming a study team, second, the information of VDC secretary and the information of NRCS youth circles. On the basis of this information, the VDCs were divided into three categories: A, B, C. This categorisation is on the basis of magnitude of destruction by disaster.
- In Saptari District, Daulatpur, Haripur, Mahadeva, Baban Gamapatti, Gobergadha are the most affected VDCs.
- The politicians try to get political benefits from the vulnerability situation as they consider it as the best time to alluring their voters. So they try to manipulate the situation on their favour.
- Readymade foods are essential during the peak emergency period rather than other supports as they are deprived from the facilities of cooking materials and cooking place due to flood.
- It is utmost need to aware all the people about the possibility of disaster and its impact before disaster. If so, people themselves can avert heavy loss due to occurrence of such disasters. There is need of river training in the most affected and vulnerable areas so that the lives and property could be saved.
- Due to topographic condition of Churiya, there is the possibility of multiple disasters. So afforestation and soil conservation activities should be implemented in the Churiya area so as to minimize the vulnerability situation in the plain.
- In parallel to the east-west highway, there should be a huge canal so that the siltation can be managed properly. The riverbed is drastically raised due to heavy siltation, so upper catchments area of the Churia should be conserved. Government should have the policy and plans to conserve it.

Ram Narayan Chudhary, Secretary (Mantri), NRCS, Saptari

- Action Aid Nepal worked through Saraswoti Samudayik Sewa Kendra for six years focusing mainly on the improvements physical infrastructures. The program improved the culverts, river training and school buildings in various places of the district.
- But now it changes its working modality via right-based approach. In the name of it, a lot of money has been invested which cannot demonstrate any impressive impact till now. It is better to invest the allocated amount in the river training so that the agriculture land could be reclaimed.
- Out of 6 lakhs, Action Aid Nepal invested thirty thousand for furniture support for school. But the rest of the money is invested in the name of training and advocacy programs, which are meaningless.

Ram Lochan Pandit and Binod Jha, Engineers, Divisional Irrigation Office, Saptari

- There are no services of gabion in the district due to Divisional Concept of DoI as River Training Division is located in Janakpur. The Division has to work in 9 districts so it is difficult to investigate and monitor micro-level situation since there is lack of staff in the River Training Divisional.
- Within the district, some Overseers have been allocated on the request of CDO and DDC to appraise the disaster situation. They are requested to make an estimate without the provision of resources. There is heavy destruction in both sides ofRiver. Based on the field situation, there is a need of at least 3000-4000 set gabions for river training. But DIO's priority is to safeguard the irrigation infrastructure (Chandra Nahar) rather than protecting the agriculture land from flood.
- The problem of flood is due to the problem in the Churia in one hand and construction of 20 feet high band in the border. As a result, the problem of outflow effect is common and flooded the villages for several days to month. Similarly the provision of granting 5 lakh amount to VDCs also created a lot of problems in some places. This amount has been invested in the community level infrastructures such as roads and culvert etc. These infrastructures are built without proper technical supervision (i.e. there is poor drainage system). As a result, it promotes for further disaster.
- Due to the lack of support services, the staffs of the Divisional Irrigation Office have not been able to provide its service to the people. Disaster prevention falls under the least category for them. Their prime concern is how to safeguard the irrigation infrastructures and maintain the canal in the functional way.
- Compared to the destruction made by flood in Bangladesh and India (Bihar), the rate of destruction is negligible. In order to deal with these small-scale disasters, preventive measures have to be enforced rather than rescue and relief operations.
- There is a need of a comprehensive master plan for disaster management seeing the poor coordination and networking among the agencies involved.

Mahadeva-1 and 2, Kajauli, Saptari

As per the discussion with people of Kajauli, it was known that

- Right after the disaster, SP, Army Chief and CDO came to inspect the situation. They observed the situation from road head, but not entered in to the village to see the extent of disaster and vulnerability of the victims.
- They requested to see the headwork of the canal, which is main source of disaster.
- NRCS is came to collect the data, but listed down the information by sitting in the riverbank not in the village. Every people have fear with Maoist problem.
- Out of 189 families, only 38 families were provided the relief. As part of the relief, they got 10 kg rice, one tent, 2 kg bitten rice, utensils and clothes.
- They made delegation four time to aware the situation and need.
- They worked for one month to manage the headwork.
- They also able to mobilise the VDC funds from four VDC as Mahadeva, Babangamakatti, Komadhayapura and Koiladi. In doing so, DDC and LDO helped a lot. They collected around 245000 and invested in dossier mobilisation, procurement of bamboo, gabion wire, and jute sacks. The CDO office also provided 1000 jute sacks and 177 sets gabion. DADO helped in providing the seeds in subsidy.
- Due to the internal conflicts between Topa and Kajauli, Ministry of Finance could not able to come. The people of Topa sleep in the road to blockage the vehicles of officials. The argument of the people of Tapa is if Minister goes in Kajauli, they get more supports.
- They divided the all house in to four categories according to magnitude of disaster.

Sarlahi district

Nanda Lal Yadav, Ex-DDC Chairperson.

- DNDRC received Rs. 17 lacks from various sources but distribution process was not fair and transparent. As there have been the cases of corruption made by CDO on relief material as reported by local Newspaper. It is very sad.
- Since NRCS is pro-Nepali Congress (NC) as its chairperson as he is general assembly representative of NC. So, the NRCS got political pressure from Nepali Congress during distribution of relief materials. So there have been the cases that the relief materials were distributed those who have cemented and tile house. In some cases the relief material were distributed to two member of the same house. It shows that the distribution is not as per detail assessment and analysis.
- DDC should be the common forum for all political parties but it is always been the shadow of the political parties. The DDC programs are is always guided by the will of the politicians (vested interest of political leaders).
- Till now around Rs. 45-50 lakhs is collected by DNDRC from various local level institutions, NRCS and donors. Even VDC's internal resources were mobilized for the relief purposes. But the DNDRC is unable to show the clear statement, i. e. they are not transparent.
- For situational assessment, ten teams were formulated comprising of VDC Secretary and party cadres. Due to present security situation, most of the VDC secretary lives in the district headquarters so he is not knowledgeable about the present situation of his VDC and the political cadres give preference to their supporter or voters. As a result, it is always disputable to prepare the list of victims. So the task force should be formed comprising of the all parties and institutions representatives including ex- parliament members. This task force should formulate the detail plan of action, approved from DNDRC and distribute the relief materials. If so, it maintains both the transparency and governance.
- The CDO, the chairperson of DNDRC has no proper plan of action. He has no much information and least bothered what is actually going. In fact he is not serious. Similarly the civil societies are not much strong. So, these CBOs should be strengthened for participatory monitoring to assess the situation of relief distribution. There must be the provision of awards and punishments to the people involved in this distribution task.
- The political parties are now inactive due to Sisau cutting in Mansumara irrigation system. It is because of the fear of SP and CDO. There is no coordination among the Police and Army. So it creates a lot of problem during relief distribution process.
- The status report submitted to DNDRC is replaced by virtual paper in the favour of political parties. It is indeed a blunder.
- There is no proper responsibility of donor, NRCS and VDC in disaster management. All these agencies work on the basis of the need of affected people so a single agency has to play multiple roles according to the situation. So there should be fixed and defined role which helps to minimise the duplication in the work.

Beni Bahadur Karki, Lawyer and Vice Chairperson of Nepal Press Council

- The flood of Baghan and Lakahndehi Rivers and heavy rainfall has created a lot of destruction and problems. Rains and floods are at a time, which is very difficult to manage. This is the first case.
- Though there was an all-party meeting but they never reach to the consensus for formulating plan of action. Each party has their own agendas. It hinders in providing the relief materials to the victims. For example, in Laxmipur-3, Phajul Ansaris's five-bigha land was eroded by flood and now he is landless but he is unable to receive any relief till now.

Similarly, there is lack of both human and physical resources at the time of distribution of relief material.

- The situational assessment and data inventory process was not satisfactory as victims got relief material from 250 gm bitten rice to Rs. 10,000 cash. The distribution is not equitable. So there was partiality in distribution of relief materials.
- There is need of river training of these two rivers (Bagmati and Jhim) but due to the lack of political favour this work has not been possible. Rautahat district is among one lucky district which got the river training program as Madhav Kumar Nepal win in the election from there.
- The administration is not in the favour of poor and disadvantaged. In one of reason is about 100 people's mass pressurising the CDO office demanding for relief materials. The CDO office then distributed 500 kg bitten rice to each to neutralise the pressure. It shows that the CDO is not accountable towards the poor and victims.

Sarada Bhakta Poudyal, CDO, Sarlahi

- DNDRC Sarlahi has received Rs. 26 Lakhs in its fund. Out of which relief material was distributed to 1582 families at the rate of Rs. 1300-1400 per family.
- The relief materials were distributed through one door policy via NRCS after all-party consensus. The NRCS distribution process is very effective as they set date, time and venue in advance with proper notification.
- Yes, there are the rooms for improvement for effective coordination among the agencies for effective distribution of relief materials.

Govinda Raymajhi, Vice Chairperson, NRCS, Sarlahi

- The flood has affected in a great extent. The houses damaged by the flood were categorized into two types: fully damaged and partially damaged.
- NRCS did not rely on the information of situational analysis conducted by the District Administration, as this information were false, unrealistic as they are collected by arm chair field workers. They only rely on the secondary sources without proper verification of the field situation. For example, within the municipality area, CDO office reported the number of fully damaged houseless as 350 but NRCS survey found that only 39 houses were fall under the category of fully damaged houses. In second round survey, only 16 houses were identified as the fully damaged and eligible for assistance. This shows the superficiality of the survey and irregularities in resources in the distribution process. It causes the disputes as 350 claimed that they already declared by the administration.
- NRCS has policy to distribute materials only. It does not distribute cash. This has been constituted in its policy.
- One of the drawbacks of DNDRC is that it is active during the time of disaster; and its focuses are only in rescue and relief activities. It has no concrete plan for the preparedness and rehabilitation process.

Discussion with the victims of Salimpur, Sarlahi

Hamra sabke bad ke bela koyi ne dekhe/sodpuch kare alai. Neta sabke kahi ta uoo sab kahi hamra sabke haat me hai !!!!katsese deu, tu sab apne jau jilla halla kare. Katta se ki bhetai, katta jayake padtai, kena ke karke padtai, kauno no batadai na hamara sabke thaha hai. Surume bhad ke bela ek bora chaura batlee ta bachha sabke na pugla. Ham sab bhad pidit 35 jana rahi, 28 janake delai, 7 janake kuch na delai, jabke ukara sabke cheeti hamra sabsee adhik hai, ohh sab badh dukhit hai, uoo sabke kathuse sahayog miladeo

- During the disaster, no one has come to see the destruction. Later their leaders come and advised to organise the delegation to pressurise the district authorities. They neither have the knowledge to get the relief nor they were supported for the information.
- Out of 35 victim's families, 28 families able to get the relief and 7 were still left out. The people are thinking that if these families not provided the relief then all 28 families will seek some supports from others and help to remaining 7 families.
- When the flood struck, it destroyed houses, stored grains and paddy land. The victims were able to receive the relief materials only after 10 days.
- At first, 100 kg bitten rice was distributed which is just enough for the children only. They are not been able to get the relief material as listed by the VDC Secretary. Next day of disaster, Jhangi Lal Yadav, the ward chairperson distributed 2.5 kg rice to the affected families. NRCS provided 2 *depche*, 2 pans, 2 glasses, 1 set clothes, 10 kg rice, 1 packet candles, 5 packets jivan jal, 1 kg pulses, 3 kg bitten rice and 1 tent.
- The victims demanded to receive support for reconstruction of their damaged houses in terms of materials, cash and woods support from Forest Range Post Office.
- Most of these disaster affected people are either landless or not possess more than 10 *dhur* land.

Rautahat district

Based on the discussion with the victims of Momohadpur -8 Shivanager, Rautahat

- During the discussions with them, they repeatedly expressed that *Malik hamra sabke ghar chutgayel* (Sir, all of our houses was not listed as the victims). They did not get any support so they have some hope that they will get the relief materials.
- They said that they got some rice and dal from VDC, and then never get anything from other agencies. They got the support after 20-25 days after the disaster.
- Many people were come and ask about their situation one came later with relief. They seem very frustrated, as there is the provision of relief so there are hopes. In the discussion, their information is also different. They seem as if they got training what to express and what not.
- They showed that collapsed houses caused by the flood. Unfortunately, they could not secure even grains.

Gorakh Prasad Yadav, VDC Secretary, Krishna Dev Giri, Local Priest of Shiva Mandir, Rautahat

- For the first time in the history after 70 years, the Bagmati canal was burst and mixed with the Jhas River. Due to this, there was the heavy disaster. Many houses were damaged completely, paddy crops were damaged and land eroded due to flood. Most of the people from ward 1-9 were disaster victims and majority of them are now become landless.
- As soon as the flood occurred, 4 kg rice and 1 packet noodle per family were given for immediate relief. Only 2400 cash was distributed to the people from 1-9 wards. The local Sugar Mills also distributed relief material of 5 kg bitten rice and 2.5 gram sugar to each family as immediate relief.
- NRCS did not enter the village showing the poor security reason. Similarly DDC sent the relief form to fill it as part of assessment but they are never provided the support.
- There is the utmost need to distribute relief materials to 95% families of ward no 2. Till now 1500 families were able to get relief out of 3000 affected. Only 43 VDCs were able to receive support out of 75 VDCs in the districts.

Mahottari district

Kaluwa- 2, Bahera, Mahottari

'Sab sarkarke upper se awaewala paisa khajhahai, jhotoke hamara sabke camara leke photo khichihai. Dekhuni yaha ghar sab duban bhailai 100 admikee, aai rahat delee jamma ath admike. Harma sabke ghar chood dele. Hamra sabke photo khichdeo, hamra sabke bad chheti bhailai. Hamra ghar, annapani sab bagake lagelee'.

- During the discussion, some people expressed the amount allocated as relief is invested for the staff for field visits and photos. They also showed the damaged houses caused by floods. Other requested to take the photos in hope of relief.
- About 100 houses were damaged but only eight people got the relief. They don't have any answer about it. They also requested to include their names in the list. They also reported that they were also unable to secure their grains.
- These people after flood stayed for 15 days in the local school. The *Pradhan Pancha* supported meal for 15 days. Then after they got relief materials. As part of the relief, they got 15 kg of rice, 1 kg of pulses and 3 kg of bitten rice.

Sundar Man Mahato, Community Facilitator (CBDP Program)/NRCS; Deepak Misra, Secretary (NRCS), Mahottari

- During the time of peak emergency period, CDO managed the relief materials and the distribution process was facilitated by NRCS. There were no major conflicts during the distribution of these relief materials.
- The relief materials were collected from different institutions. ASMAN Nepal provided foodstuffs and NRCS central office provided other relief materials for 400 families. Similarly Care Nepal provided foodstuffs, clothes for 1200 families and 14 kg rice per HHs. Similarly, Lutheran World Service provided 250 gm rice per meal for 15 days for 7000 people of 1000 families. DFO provided wood to the victims in cheaper rate, DADO provided seed support worth of 5-6 lakhs. These relief materials were distributed at the spot.
- The code of conducts were made and disseminated from local FM radio during relief material distribution process.
- There were lot of political pressure from the political parties regarding the distribution of relief materials but due to continuous counselling and discussion political pressure was neutralized.
- Security reason has been one of the impeding factors for the rescue and relief operation. As during social assessment process, 2 policemen were killed in Samsi village by the Maoist. It also hampered to accelerate the work in the full swing.
- The disaster victims were even rescued by boating as the flood damaged the roads and these victims were provided support and relief materials from boat. The security forces helped a lot in rescue and relief distribution.
- Marwadi Sewa Samiti wishes to provide one time meal to those who are settled temporarily in the school. People other than victims were gathered in such a way that the Samiti could not manage it properly and conceal this event.
- It is easy to distribute relief in the northern part of the village, because of awareness level of the people compared to other parts.
- Lot of problems were faced during the rescue and relief operation. The political parties tried to impose the pressure. They never convinced that relief is just for the victims only. Similarly, during distribution process it was unable to distribute coupon by door-to door visit. There were many misguided, manipulation instances during the distribution of the relief. For example: one woman took the relief in the name of other's wife.

Dhanusha district**Dinesh Chandra Neupane, Community Trainer CBDP/NRCS, Dhanusha**

- Awareness trainings on disaster preparedness were given to the people residing on disaster prone areas. Five VDCs such as Sabila, Dhanusadham, Dhanusa Govindapur, Tulsai and Jabdhi are declared the most affected VDCs.
- Five committees were formed one for each VDC to mitigate the disaster. Care Nepal ASMAN Nepal and Hotel Association of Nepal (HAN) Nepalgunj supported this initiative. Care Nepal provided tent, utensils, foodstuffs and clothes to Tulsihai VDC whereas CBDP provided stretchers, grain storage tank and first aid box.

Chhatra KC, Coordinator, MEDP/UNDP, Sunsari

- The Narsing, Jalpur, Harinagara, Ramnagarabhutaha, Kaptangunj and Devanjung are the most affected VDCs. So, LNDRC are activated in each of these VDC to manage the disaster related activities.
- Plan, DACOW/UNDP, DDC provided foodstuffs and NRCS provided other relief materials. Committees are formed by the representatives of DHO, DADO, and DLSO for in hand technical support.
- The major cause of the flood on Bhutaha River is due to the permission granted by the DDC for the extraction of boulders and sand in Bhutaha River.

Padma Raj Regmi, the CDO, Sunsari

- He has no ideas what is going on about the disaster and relief.
- LDO is the prime officer to look after these issues.

Hem Sagar Gautam, DADO, Sunsari

- The victims were provided support for seed and fertilizer, seedlings were procured for re-transplantations. Similarly, support were provided for seasonal and off seasonal vegetable farming as part of the income generation activities.
- There is a complex bureaucratic process in managing the resources. First program has to be designed and send to DDC. Then DDC sent to the departments. Then department sent it to the ministry and the ministry has to send it to the ministry of finance for the allocation of the budget. So it is complicated process and takes a lot of time.

Kanaklal Sahu, Assistant Livestock Officer, Sunsari

- After every disaster, livestock are ill due to contaminated water and grass.
- Necessary vaccines and medicines were provided to the livestock through livestock service centre in Devangunj and Harinagara.

Dharma Raj Niraula, District Secretary, UML

- The destruction of flood in Sunsari is not much serious as compared to other districts.
- The flood has caused a lot of destruction of physical infrastructures. In order to provide relief materials, a team was formed and visited to the disaster affected VDCs for observations. After the visits, two rounds discussions were conducted with CDO and prepared detailed plan of action to supports the families.
- There is no political debate and disputes in the name of relief distribution.
- As per the detail plan of action, DNDRC requested the CNDRC for 25 lakhs.
- The DNDRC is agreed to supports for the construction of two bridges in Bhutaha Harinagara and permanent headwork in Sunsari River to mitigation the disaster.

- Helped to maintain appropriate environment to negotiate with India at central level for flood management.

Kiran Karki, NRCS, Sunsari

- The most destruction was caused by the flood in Ramnagar Bhutaha VDC. So seeing the level of disaster, relief material was provided to 55 families out of 288. The distributed relief materials were: tent-55, utensils-49, sari-51, jeans clothes-102 meters, poplin cotton-153 meters, printed fariya-173 meters and ready made clothes- 33 sets.
- In order to manage the relief work, separate committees were formed under the chairmanship of VDC Secretary in which headmasters, social worker, representatives of political parties and ward chairperson are members.
- NRCS has a good relation with the River Training Division. As a result, NRCS able to get 223 set of gabion for the river training work.

Efforts made by the local people to provide the services to people

- In Ramnager Bhutaha, the flood of Ashadh 2e collapses two culverts in Sunsari Mariha. Due to this, the people suffered a lot. As it the shortest route, people wish to go from this route. Seeing that terrible situation, Samib Ansari invested Rs 16000 and constructed temporary bamboo bridge called *Chechari*. As part of the service fee, each person has to pay Rs 1, Rs 2 for bicycle and Rs 5 for motorcycle. Till now, they raised Rs 9000. He able to earn Rs 600 and Rs 300 as income from *hathiya* and normal day respectively. But the DDC is silent as it is their duty to provide the services to the people said Ansari.

Morang district

Mina Joshi, Kamal Koirala, NRCS, Morang

- Through ICRC, the victims of Maoist were rescued and supported.
- Strong institutional capacity of NRCS as it has 53 branches and 102 junior circles.
- 10 families were provided the relief support (utensils, clothes and Rs 500 per families) in Biratnager Municipality-7.
- Maintained good working relationship with other agencies like irrigation, agriculture and livestock, Lions club, Leo club and CDO office.
- Relief materials like 60 kg rice, 12 kg dal, and 3-litre oil per families supported 400 families from 15 VDCs.
- Teachers associations were also mobilised during the peak emergency periods.

Jhapa district

Samir Pokhrel and Sabitri Adhikari, NRCS, Itahari, Jhapa

- The disaster is made by Ratuwa River and the most affected VDCs are Lakhenpur, Kauware and Jadaha.
- In all VDCs, NRCS distributed the relief materials with the close coordination with DNDRC. There are no disputes in managing and distributing the materials.
- NRCS also provided the services to ambulance support, blood bank and treatment of snake biting to the victims. The services of snake biting are very popular in the region.

3.3 Relief and Rescue

The relief and rescue activities have to be carried out in the following three stages, which are given below.

Needed activities before disaster

- Study and analysis of the trend of the disaster.
- Keep record and document and find out its cause and effect.
- Implement river training, watershed and afforestation activities.
- Formulate national disaster plan and program.
- Formulate related to the natural disaster laws.
- Formulate rescue and relief activities suited during disaster.
- Allocate the roles and responsibilities of GOs, NGOs and civil societies during rescue and relief activities.
- Produce efficient human resources for disaster rescue and relief activities through training and exposure.
- Manage the rescue and relief materials.
- Manage re-settlement programs for the people settled in the hazard prone areas.
- Raise awareness for disaster management.

Needed activities during disaster

- Manage implementation plan of disaster.
- Lives saving i.e. rescue the people during disaster.
- Disaster prevention and reduction.
 - First aid and treatment services.
 - Coordination of rescue efforts by enforcing volunteers and staffs.
 - Need identification and survey
 - Collection of relief goods and material.
 - Arrange foodstuffs, clothes, and temporary settlement and manage sanitation.

Support to the Affected

Hetauda, the DNDRC of Hetauda, Makwanpur in coordination with the NRCS Makwanpur distributed the relief material for the 140 disaster affected families such as tents, foodstuffs, shoes, educational materials etc.

- Search for the missing ones and inform the nearest relatives. Search operation of the dead bodies. Identification of the dead bodies and handover to the relatives.
- Keeping records of finance and inform to all concerned.

Needed activities after disaster

- Implementation of the disaster plans.
- Detailed survey to identify the needs.
- Management of treatment facilities, foodstuffs, settlement and clothes.
- Search for the missing ones and inform the nearest relatives.
- Manage needy services such as drinking water, health, communication facilities to the displaced families. Resettlement programs for the displaced families.
- Education support to displaced children.
- Reconstruction of the devastated infrastructures
- Provide discounted loan for victims. No cost for land and other tax.
- Monitoring and evaluation the ongoing activities.

3.4 Mitigation Measures of Risks: A Community Efforts

Through proper training and information, the communities are able to safeguard and minimize that hazard and risks. When disaster strikes in the community, the priority becomes the management of risks, because if they are managed ineffectively it can lead to another disaster.

In order to avert danger and vulnerability from risks, formulate both short and long-term mitigation strategies and measures are needed. The community-based organizations can not capable to fight against the risks unless their capacity is enhanced. So institutional development measures such as training, exposures have to be managed. Frequent meetings and interactions among the stakeholders are needed to share the skills, knowledge and experiences in the line of mitigating risks. The risk mitigation measures and strategies have to tangible with the availability of resources, capacity, nature of risks, the risks affected area etc. Because the nature, capacity, resources and need of the people are different from one place to another. Physical ways to minimise the risks are expensive. So psychological strengths are equally importance. The construction activities have to be managed considering the environmental aspects in mind.

It is necessary to make inventories of potentially dangerous landslides based on the risk of harm. For this, the knowledge of local people is vital so inter-stakeholders interaction meetings have to organise time-to-time to share the ideas and expertise/technical backstopping. Relevant studies and the demonstration plots have to be commenced partnering with the communities to motivate/encourage the people through practical exercises.

The following measures are instrumental to reduce the risks

- Less construction of infrastructures, conservation and management of water sources and increase public awareness and education to reduce the risks of damage of physical structures.
- Protect the water sources; preserve water for emergency period is important. For it, the awareness of cleanliness of water at household level is needed.
- Health education and health relate awareness are beneficial to decrease in communicable diseases such as flu, diarrhoea etc.
- Plantation of flood averting crops and varieties such as sugarcane and other flood tolerable variety in the flood prone areas to resume the land and food grains
- Encourage the people to organise and involve in the saving and credit groups as the means of alternative livelihood strategy for daily wage labour.

3.5 Disaster Management: The Roles of Various stakeholders

Good coordination among the various stakeholders is fruitful to implement the disaster mitigation measures at local level. And effective

coordination is possible if their roles and responsibilities are defined and analysed properly. No one can deny the fact that leadership skills of all stakeholders are needed to manage the disaster efficiently. So, to enhance the leadership skills of community, the role of following stakeholders can be as follows.

- **Role of Community:** Provide reliable information about the risk and vulnerability of disaster, involve actively in enforcing mitigation measures in the community.
- **Role of NGOs/CBOs:** Strictly follow policy and regulation while constructing physical infrastructures, advocate for the basic human rights and help in implementing disaster mitigation measures in the society.
- **Role of Market:** Support in the collection of resources, provide qualitative goods and materials in cheaper prices to people.
- **Role of Government:** Formulate Necessary policies and regulations for the construction of physical infrastructure, help in the implementation of disaster mitigation activities partnering with to CBOs and NGOs at local level.

3.6 Consequences of Disaster

With the discussion of communities in the districts visited, the following phenomenons are reported as the consequences of disaster.

- Damage of electricity lines, telephone lines, water supply system, road, public office, hospital, school and market are at risk during the vulnerability. Loss of income as people unable to go on work daily wage labour, the roads are blocked and people are unable to access health facility in time, students unable to attend schools, markets unable to operate properly.

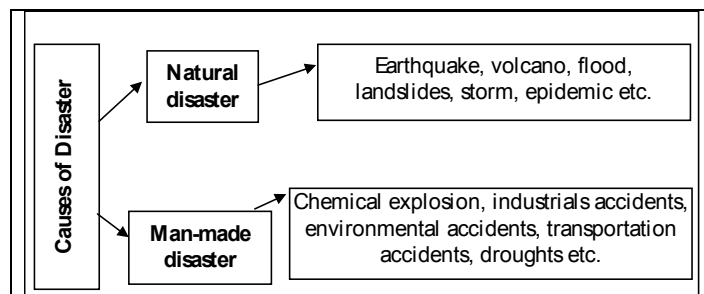
Landslide blocked the water source
Dharchula, due to the landslide, the people of Dadhakot VDC are not been able to get the drinking water due to blockade of the water sources by landslide. Heavy landslide occurred in this VDC when heavy rainfall continued for two consecutive day.
- Contaminated drinking water source as the tube-wells are immersed in the floodwater. People unable to go to work due to various communicable diseases spread during the time of flood. Increase in communicable disease and spread of communicable disease like flu, direahea, Infelicities etc.

Scarcity of Drinking water in Flood affected area
Hetauda, after the heavy rainfall for 5 days, there is a scarcity of drinking water in he Ambhanjyan VDC as the flood swept all the water sources. The scarcity of water arises when the flood swept all the pipes from the water source. The people of this VDC are forced to drink dirty water, is causing many water-borne diseases among the people such as common cold, stomachache, fever etc.
- Due to flood in the paddy field, transplantation has to be done at least 3-4 times, which causes the reduction in yields. Due to sand

deposition on the *khet* land, the fertility of the soil has been decreased. As the flood remains for several days, it is unable to plant paddy in the field and delay transplantation gives very low production.

- Damage of stored food grains and damage of important family documents and records like citizenship certificates, land registration certificates etc.
- Disaster also creates the problem especially for daily livelihood of the daily wage labor. During this period, it is very difficult to supply of raw materials and small industries are closed for many days. Due to less mobility of people in the market, which affects the daily income of Rickshaw Puller. Mobile shop and teashop are not run in the full swing.

Hence it can be said that disaster are occurred from two types i.e. physical and human reasons. Both types of disaster are destructive in nature if not managed in time.



3.7 Disaster Preparedness

The preparedness is the crucial stage of disaster for preventive measures. The NCRC implement the following activities as part of the preparedness.

- Extension of the services of NRCS in the wider areas.
- Construction of depot and godown buildings to store relief materials.
- Arrange relief materials.
- Manage special fund for relief and rescue.
- Conduct awareness raising activities.
- Conduct community based preparedness programme.

But before the preparation of activities for preparedness, emphases have to be given in the following elements.

- Analysis of vulnerability situation.
- Formulation of plans.
- Determine institutional network.
- Establish communication channel.
- Resource management.
- Provision of advance notice.
- Clear plan of action.
- Educate the mass through training and exposure.
- Demonstration for clarity.

3.8 Myths of People about Disaster

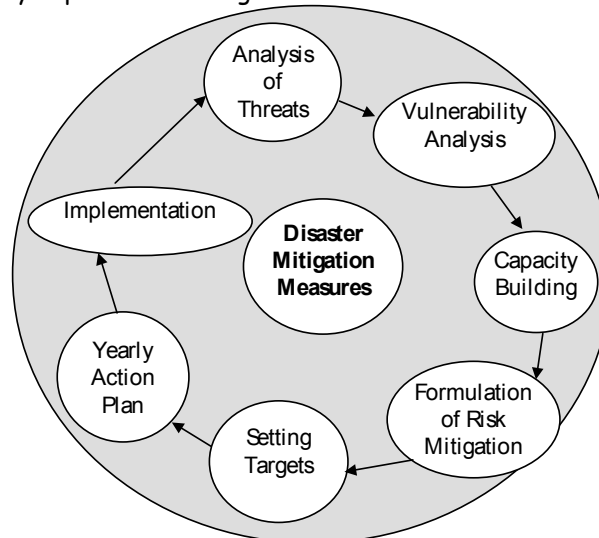
Until now, disaster is understood as a purely the science of geo-physical and engineering knowledge. As a result, the important of social and institutional knowledge in the shadow. But gradually, these knowledge is given to emphasis. The indigenous knowledge, skills and experience of the local people are very much instrumental for disaster management.

As the geo-physical situation of the country is very hard, so when disaster strikes, immediate rescue operation cannot be made due to the inaccessibility and poor communication facility in disaster area. Some of the flood affected area are considered as the Maoist affected area too so it was difficult to distribute the relief materials (in Siraha) Even in such situations, the knowledge of local people and local resource mobilization is only the way to cope with the problems of disaster.

There is general tendency that, people depend on government and NGOs/private sectors even when for small-scale disaster. So, while carrying out mitigation activities with the efforts of local people, it is found that the following activities have to be considered.

- Build the capacity of people through training and exposure.
- Raise awareness of the community via simple measures to be undertaken before, during and after disaster.
- Prepare the groups and allocate the roles and responsibilities to all to fight against the floods.
- Carry out afforestation programs through community plantation and provision of community forest to minimize the soil erosion.

Apart from these simple measures, analysis of threats vulnerability, analysis of capacity building, formulation of risk mitigation strategy, setting targets, yearly action plan preparation, implementation are equally important to mitigate the disaster.



3.9 Role of Right Holders is Crucial

Disaster preparedness and its mitigation are not only the responsibility of duty bearers², stakeholders³ but of right holders⁴ also important. Many communities in disaster prone areas have successfully demonstrated that it is possible to marry disaster mitigation initiatives, social security programs and help improve the resilience of communities vulnerable to natural disaster.

It is only possible if the policy makers/staff involved start to listen and honour the ideas, skills, and experiences of community people. The mobilization of knowledge and efforts at the neighbourhood and village level is critical.

3.10 Who Affects First from Disaster

Every year, thousands of families especially from the eastern terai are being homeless. These homeless people are settled under the tent and plastic roof for the temporary relief programs.

Mostly disadvantaged, minorities caste group, poor families are affected from disaster. Since they usually live in the disaster prone area so it is obvious that they are victimized. It is because, most of the people due to poverty are faced to settle in the banks of the river, as the land price is comparatively less. Especially women and children are more affected. Women are more affected by because they have to go for collecting firewood, fodder and grass from forest. Children also suffer from inadequate housing; nutrition and education rights if the family is suffer from disaster. These activities create them to homelessness and forced to adopt street life.

Due to the poverty, unemployment, dry season and storm, the people living near by the disaster-affected area are being under the situation of vulnerability. Among them, pregnant women, disable people, old aged people are found more vulnerable. The poor, family residing near by the rivers, people residing in the laps of Churia, people displaced by the landslides and floods are affected from disaster.

Budi Gandaki River Displaced Thirty Families.

Gorkha, after heavy rainfall, the flood in the Budhi Gandaki swept a child and an old man. Similarly it swept away thirty houses which displaced thirty families. These families have not been able to receive support from the government till now and they are sheltered in neighborhood houses.

3.11 The Perceptions of Community for Disaster Management

The following alternative measures to manage the disaster by the people of disaster prone area of people perceived the following alternatives for disaster management

- Disaster can be managed by construction of physical infrastructures such as river training, protection work etc.

² MoHA, DWIDP, DIO, DFO, DSCO, DHO and other relevant line agencies are the duty bearers as it is their duty to provide the services before, during and after the disaster

³ Women, children and *dalit*; landless; victims of natural disaster and conflicts; differently-abled people (disables); land tenants; ethnic minority people

⁴ NGOs/CBOs; district line agencies; Nepal Red Cross Society; FNCCI; political parties; and media.

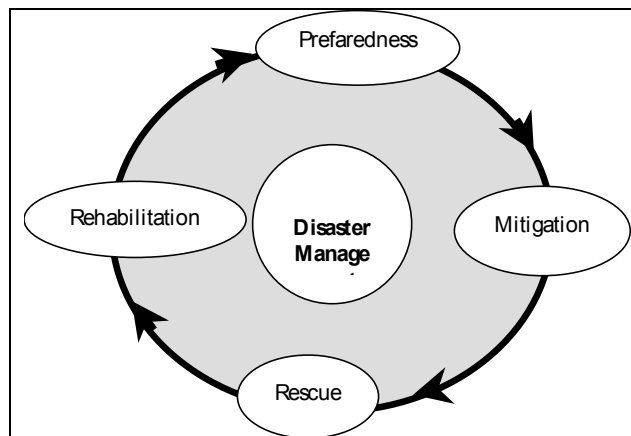
- Only afforestation can control the disaster, so give some emphasis on community plantations.
- Disaster is caused due to environmental and human factors
- Disaster is the consequences of fate.
- Government has the vital role. So it should focus not only on preparedness plan but also for rescue and support initiatives.

3.12 Level of Awareness in the different phases of Disaster Management

The major activities of disaster can be categorised in to four stages, which are as follow.

Stage 1: Preparedness

Poor people have not much concern about this stage. They forget about the previous years disaster and its consequences. It is mostly due to poorness and poverty. As most of them are daily wage labour, they have no time to think about it. Very few elites (teachers, VDC representatives and social workers) have some concern about it but it is not taken as seriously.



Stage 2: Mitigation

Compared to preparedness stage, people have some concern about this stage. The disaster affected people and elites are actively involved in the mitigation process.

Stage 3: Rescue and Support

During this stage, both right holders and elites are actively involved both for rescue and relief work. Both duty bearers and stakeholders are actively participating to manage the disaster.

Stage 4: Rehabilitation

In this stage only few local representatives, duty bearers and stakeholders actively involved. But the role of right holders is minimal.

3.13 Disaster Management

The effectiveness of disaster management is based on the strong co-ordination among the government and private agencies. More specifically, disaster management needs partnership between almost all actors in the society: marginalized groups, neighbourhood and the community as a whole. So far, there is no coordination among these stakeholders. It is important to recognize the local skills, knowledge, experience and practices of people in managing disaster and emergency. Community initiatives and local techniques on disaster are not still fully recognized by both state and private sectors.

The DNDRC mobilizes the police, army, civil servant soon after the disaster. If there is lack of local fund and capacity then CDO demands more support from CNDRC as helicopters, security personals and other support. As the process is quite lengthy, many cases are reported that victims have not been able to access these rescue efforts immediately.

Tanahun, nine people of a single family were perished a landslide at Hilekharka village of Deurali VDC, Wednesday night. Others three people were killed Chitwan and two each in Makwapur and Bajura district according to reports. SP Ram Chandra Dhakal Tanahun said that all the nine were killed when a landslide buried Rana Bahadur Gurung's house Hilekharka village. A team of policemen sent to out rescue operation there recovered all the bodies from the rubble of the landslide today.

3.14 Benefits of Disaster Preparedness

Disaster preparedness is an important to minimise the effect on the disaster. It helps to prepare secure place, conserve people's life and wealth, decrease in the injured cases during disaster, save the infrastructures from destruction and develop capacity of the community to tackle with disaster. The preparedness activities also help to provide immediate rescue during disaster, formation of local organization to resolve the disaster problem and disseminate adequate information and supports during disaster. Sometimes disaster helps to increases solidarity among the people and groups thus increase their collective bargaining power and supports for influencing their own agenda. It also creates a potential of change in the communities' leadership, empowering poor, marginalized, and civil society as a whole.

3.15 Role of Main Agencies in Managing the Disaster

3.15.1 Department of Water Induced Disaster Prevention (DWIDP)

DWIDP is establish in order to carryout activities related to water induced disaster prevention and management such as river training, landslides and slope protection, mitigate and manage the damages caused by water induced disasters (such as flood, landslides, soil and bank erosion, debris flow) and to protect infrastructures, land, properties and lives for poverty reduction.

More specifically, the major activities of DWIDP are summarised as:

- Formulate water related disaster management policy and plan, laws, regulation and guidelines.
- Strengthen disaster network and information system.
- Prepare inventory of potential risk area and establish early warning system.
- Develop cost effective technology and provide training for water induced disaster management.
- Provide emergency protection works and rehabilitate damaged infrastructures.
- Develop and implement flood plain management plan.
- Implement water induced disaster prevention works.
- Activate inundation committee to deal with problems in boarder areas.

In order to carry out the above-mentioned activities, following strategies are set:

- Prepare hazard and risk zoning mappings.
- Strengthen the network for disaster mitigation and establish disaster information system.
- Conduct community awareness programs and training on water-induced disaster management.
- Activate Indo-Nepal Inundation committees.
- Prepare and implement flood plain action plan.

- Strengthen the institutional and human resource development and capacity building.
- Identify environment-friendly water-induced disaster mitigation measures and construction methodology.
- Institutionalise and strengthen water-induced disaster rehabilitation system.

In the changing context, DWIDP focuses equal attention on the non-structural measures such as disaster awareness and information dissemination with greater local stakeholders' and community involvement in the field of disaster preparedness, response, evacuation and rehabilitation. It also establish the Civil Charter for the public notice which is given below.

Civil Charter Established by DWIDP

Services Provided	Required documents and proof	Est. Time	Est. cost	Responsible staff/dept	Person dealing with complains
Provision of rescue and relief materials and its distribution	HMG, CNDRC	Immediate	Free of cost	Responsible Disaster Rescue Committee	CNDRC
Identify temporary settlement for disaster affected families	HMG's decisions		Free of cost	Responsible Disaster Rescue Committee	CNDRC
Provision of immediate rescue, treatment and distribution of relief materials for the affected people	GO's, Local Police and people's information	Immediate	Free of cost	District, Regional & Central Natural Disaster Rescue Committee	CNDRC

3.15.2 Ministry of Home Affairs (MoHA)

In each district, a Chief District Officer (CDO) under the instruction of MoHA acts as the disaster manager at the time of natural disasters. Thus, it is the key agency for immediate response during disasters and has to play a leading role in managing the natural disasters.

The MoHA is responsible to carry out following activities:

- Acts as an apex organisation in relation to disaster management in Nepal.
- Formulate national policies and plans for implementations.
- Prepare preparedness plans and mitigation measures.
- Involve in immediate rescue and relief works.
- Plan to conduct data collection work and dissemination to relevant agencies
- Manage and distribute the funds to the DNDRC during peak emergency period.

3.15.3 Ministry of Local Development (MoLD)

The Ministry of Local Development (MoLD) is responsible for formulating plan, policies, strategies and legislation related to local governance. Then role of local bodies are very much vital during the peak emergency and disaster period as well as rehabilitation period.

More specifically, the MoLD is responsible to carry out following activities:

- Build the capacity and institutional development of local bodies like DDCs, VDCs and Municipalities through various trainings and measures.
- Help in producing plan and policies for better management of the local areas without seeking the outsider's help.
- Promote the roles of local governments in the provision of small infrastructure like agricultural roads and small-scale river training work.
- Mobilise the local bodies during the distribution the relief materials.

3.15.4 Divisional Irrigation Office (DIO)

The divisional irrigation offices implement its local level flood mitigation activities through the Irrigation and River Training Committees (IRTC). These committees are headed by the Chief District Officers (CDOs). The composition of the IRTCs is given as: Chief District Officer as chairperson and Local Development Officer, DDC Representatives, District Agriculture Development Officer, District Forests Officer, District Soil Conservation Officer, District Irrigation Engineer as members.

Under decentralised arrangement, the DDCs and the VDCs encourage users groups to submit their requests to the IRTC. On the basis of the request of users group, it assess the needs and acts accordingly.

3.15.5 Department of Soil Conservation and Watershed Management (DSCWM)

The DSCWM contributes of flood mitigation through soil conservation and watershed management, which are critical in promoting flood mitigation. It also is the main implementing agency for the execution of 'watershed management policy'.

The role of DSCWM is specified as follows:

- Involve in the formulation of plan, policies and legislations.
- Prepare the simple guideline for the execution of the activities like gully control, trail improvement, small-scale irrigation and drinking water system to conserve watershed of upper catchments.
- Implement the activities such as social and gender development; agro-farming, enterprises development and community forestry program in an integrated approach.

3.15.6 Department of Hydrology and Meteorology (DHM)

The role of DHM is as follows:

- Establish river-gauging stations to monitor the situation of river.
- Study by sampling of suspended sediment
- Introduce hydro-meteorological stations (aeronautical and synoptic, agro-meteorological, climatological, and precipitation).
- Develop the measures for flood forecasting system through systematic data collection using GIS and hydrological modelling tools.
- Provide relevant flood related data to India and Bangladesh to detail analysis.

3.15.7 Bilateral Organisations, Research Institutions, Relief Organisations and (I)/NGOs

The role of the bilateral organisations such as Japan International Cooperation agency (JICA), United Nation Development Programme (UNDP), United State Agency for International Development (USAID) and Technical Cooperation of the Federal Republic of Germany (GTZ) is to manage the resources and provide technical backstopping the agencies involved in the disaster management.

The research institutions like Asian Disaster Reduction Centre (ADRC), Asian Disaster Preparedness Centre (ADPC) and International Centre for Integrated Mountain Development (ICIMOD) are involved in the research and studies in the contemporary issues of disaster management. The Tribhuvan University has established a mountain risk engineering unit for training purpose.

The role of NRCS and International Red Cross Society (IRCS) is to manage the relief materials (cash and goods) for the distribution to victims and work to establish the basic human rights in the favour of the disaster victims.

Similarly, the INGOs like United Mission to Nepal (UMN), Care Nepal, Action Aid Nepal, World Food Program (WFP), Save the Children Fund and Lutheran World Service (LWS) etc have been involved in rescue and relief work and the execution of rehabilitation activities.

3.15.8 The Role of Local Government

Local governments (the VDCs and DDCs) have very important role to manage disaster. The representatives of local governments are the people chosen by the local people. So, they are responsible towards people's issues and concerns. They work at their best to solve these problems since they are more knowledgeable about local context and problem. So, they have important role in rescue and relief programs. At present there is no elected local governments in VDC, DDC and Municipalities, so difficult to manage the disaster related activities at local level.

Donation to Cross the Bridge

Sarlahi, it is reported that some people are collecting money for crossing the bridge over Lakhandehi River. The bridge was damaged when a flood struck in the river last month. The local people with a sum of Rs 2000 constructed the temporary bridge. The people are collecting Rs. 5 per person, Rs. 10 per cycle and Rs. 25 per Motorcycle say the local resident Devendra Kumar Yadav. It is reported that they beat the people who are not willing to pay that allocated amount. Around Rs. 5000 is collected on daily basis. This situation occurred when the DDC didn't initiate any effort to reconstruct the bridge since only small sum of money could rehabilitate the bridge.

Hence, for disaster management in the sustainable ways, following measures are taken into consideration by the agencies involved in this sector. These measures are nomenclatures in to two types: social/institutional and technical

Social/institutional measures

- Formulation of clear policy, rules and regulation in the participatory ways.
- Dissemination of relevant information to the right holders and stakeholder on time.
- Organize interaction meetings and discussion in the regular manner.
- Develop a mechanism to honor the indigenous knowledge and skills of the local people.

- Conduct awareness raising and sharing workshops among the stakeholders.
- Organize various capacity building and institutional development activities.
- Educate the people about the disaster mitigation preparedness plan.
- Maintain transparency among users groups and agencies.

Technical measures

- Formulate and implement land use policy properly.
- Conserve and proper manage the natural resources.
- Establish monitoring and warning system.
- Establish the required technical arrangements, expertise.
- Conduct the study and research on the current disaster issue.

3.16 Hazards

There are many hazards like floods, droughts, landslides, earthquakes, fire, and diseases etc that are facing the rural people every year. Among them, the terai people are more vulnerable in terms of are suffering from multi hazards activities. The implications of these hazards are loss of property and lives.

3.17 Type of Hazards and their Implications

Different types of hazard (drought, earthquake, fire, flood and epidemics) cause varying levels and scale of damage, which are illustrate below.

- Droughts result livestock and productive capacity of land.
- Earthquakes have little impact on standing crops, excluding localized losses occurring as consequences of landslides but cause widespread destruction of infrastructures and human lives.
- Floods cause extensive physical damage to human lives, infrastructure and agriculture depending on their timing relative to the agricultural cycle. The people are being more affected by flood, cutting then fire and disease.
- The problem of various epidemic (diseases) right after the heavy flood is normal. The situation could be even dangerous due to lack of proper and timely treatment.

To cope with these hazards, there are no proper commitments both from NGOs and government level. Yes, policies and programs are adequate but the level of enforcement is very weak. Its reasons are multifarious. The prime reason is no proper government structure to deal the planned activities of entire cycle of disaster management. Poor coordination, mismatch of programs with available resources, and ad-hoc management to response the disaster and hazards are other reasons. Hazards affect the poor and disadvantaged more than others. They seems unable to cope the hazards as they neither have resources nor have capacities. After hazards, they are more vulnerable.

The vulnerability situation depends on family, community and hazards. Due to the socio-economic condition and lack of awareness among the people of the community, they are not been able to face these hazards, so there condition is being vulnerable day by day. As the hazard is increasing, vulnerability is also increasing due to the multiple effects of the previous hazards. This year, thousands of families are being landless and displaced from flood, hence forced to settle in the public lands. As a result, these displaced families suffer from several social ills and disorder.

In Hetuada, due to the flood and inundation occurred in the last week of Ashad turned 700 hectares of arable land in to sand. About 19 VDCs of Makanpur have been affected by the flood and about 2200 farmers were affected by the flood.

Other hazards related to vulnerability also depend on the availability of foods. The vulnerability is found more prevailing in the period of food scarcity then during the availability of food. It is also seen that there is a strong relation between hazards, vulnerability and poverty. The poverty is found to be the major cause of vulnerability. And the poverty is the consequences of hazards.

3.18 Vulnerability and its Causes

Those people are vulnerable that are not able to manage the destruction right after the disaster by their own resources, i.e. they cannot face the disaster. Those who's livelihood is disturbed by the disaster or who can not manage the disaster by their own efforts. Similarly, those people do not fall under vulnerable category who can easily face the disaster or who able to rehabilitate by their own resources after disaster. Their livelihood is not disturbed by the disaster or they can rehabilitate easily after the disaster.

The major causes of physical vulnerability are as follows.

- Presence of the settlement area, buildings, arable lands physical infrastructures and necessary services in disaster prone areas.
- Lack of alternative livelihood resources. Livelihood resources are under the risk.
- Lack of access and control over the production of resources.
- Dependence on elites and well-off people. Lack of enough foodstuffs.
- Lack of necessary education, skills and capacity.
- Lack of basic services such as education, health-related services, drinking water, sanitation, roads, electricity, communication facilities etc.
- High mortality rate and disease epidemic.

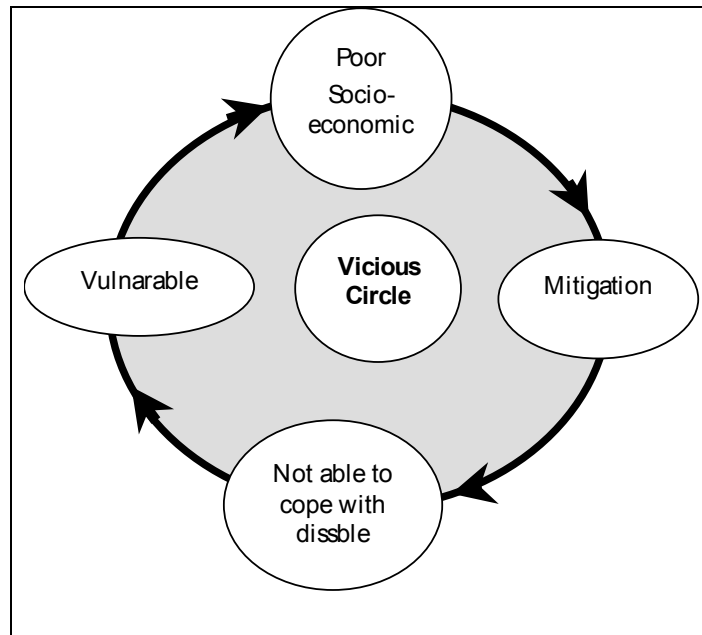
Similarly, the major causes of socio-economic vulnerability are as follows.

- Weak family lineage structure.
- Lack of leadership qualities, commitments to solve the conflicts.
- Unpractical decision-making process.
- Unequal access to legal and treatments services.
- Lack of access to political services.
- Weak community based institutions.
- No excess with outer world.
- Orthodox thinking towards change and modernizations.

- Dependent with others, believe on fate and lack of unity and coordination.
 - Lack of enough knowledge about threats and risk.
 - Lack of enough resources for rehabilitation.
 - Big family size.
 - Weak social harmony and cooperation.
 - Gender and caste discrimination.
 - No access to information.
 - No preparedness plans and strategies.
 - Erosion of agriculture land by flood
 - Submerged the standing crop for several days
- Flood destroys 65 million worth of Crops**
Sunsari, due to the flood occurred in the month of Ashad and Shrawan has destroyed about 65 million worth of food grains of Sunsari Districts. This has affected the entire gross production of the district and it will definitely impose impact on the national productivity. There has been continuous flood in the district from last three months.
- Collapse of thatched house and loss of lives of livestock and family members
- Ramechhap, a landslide in Hatosima village killed a 12-year-old child. One hundred fifty houses and dozens of cattle were swept away in flood in Mahottari's Jhingati village.
- Situation of disability and old age (disable who cannot walk, speak, see, and listen are under vulnerability situation then other people, and the old aged people are under vulnerable condition due to their weak physical strengths and poor psychology).
- Villagers Awake in Monsoon**
Parbat, the resident of Thanamaula VDC-7 is awake all night from past fifty years with the fear of landslides. This area is landslides prone and till now there has been no initiative to mitigate this problem from any sector. 'My whole life has been spent sleepless during monsoon season' commented an old man.
- The present conflict is also one major reason for the vulnerable situation of the poor people.

The vulnerability is found more prevailing in the period of food scarcity then during the availability of food.

The vulnerability situation depends on family, community and types of disaster. The families/communities who are affected for the first time are less vulnerable as compared to the families and community affected more than once. Similarly there is a strong relation between food availability and vulnerability. In general the most starvation months are from July to early September. Unfortunately these are the months of heavy rains that cause landslides, flood and outburst of communicable diseases. As a result, the social, economic, educational and the entire situation have led to the increase frustrations and conflicts.



The absence of local government, it is very difficult to get realistic information about the disaster victims. Hence, it is difficult to identify who are actually victims and who are not. Sometimes there is a manipulation in the victims lists. As a result, they are deprived from the services i.e. relief. In the name of victims, many other are benefited from relief materials. Due to this reason too the vulnerability situation also increase.

Unable to get Relief Assistance

Birgunj, the flood affected people from the Mudhuban Mathwal VDC protested for not getting the relief assistance from the government. About a dozen of houses were swept, even more houses were damaged, 10 bigha of land has been inundated and 10 bigha of land has been covered by sand when a flood struck last week. The affected people are now settled in the local Sidhapur school.

Many people became landless and they are forced to settle in the public lands, roadside and at the bank of forests. Majority of them are work as wage labour for their livelihood. Those who have less skill and have no influence over the available resources are more vulnerable.

In the disaster victim area, very less groups and organization are functional. As they are not properly organised, they are deprived from many external resources. As floods damage majority of the road networks in the terai, the relief materials are not transported during the peak emergency and disaster period, and people are more vulnerable.

3.19 Prioritisation of Vulnerability in the Experiences of People

In general, the causes and prioritisation of vulnerability are as follows (in the descending order)

- Poverty and poorness
- No sustainable means of resources to cope with livelihoods
- No unity and network of the disaster victims
- Not effective mitigation measures during disaster
- Poor capacity of community to fight against the disaster
- Lack of proper preparedness and mitigation plans on time

3.20 Ways of Minimising Vulnerability

- Need advance planning and preparation
- Increase the capacity of the people, mobilise internal resources
- Manage the external resources to cope with the problems.
- Stop extraction of stone, sand from the river. They are also cause for the disaster invite the vulnerability situation.

DFID grants 13.5m for flood victims

Kathmandu, Department for International Development UK (DfID) has announced a grant of Rs 13.5 million to relief efforts for flood victims in Nepal. According to a press release issued by DFID, the grant assistance was provided in response to an appeal by the International Federation of Red Cross and Red Crescent Societies for additional financial support to floods relief efforts in the country.

Canadian Support to Flood Affected People

Kathmandu, Canadian Cooperation Office (CCO) has pledged to provide emergency support of Ns. 26 lakhs for the flood-affected people of six districts under Canada Fund. The support and relief material would be distributed to 500 families through women self-reliance center in Makwanpur, Rautahat, Siraha, Sarlahi, Dhanusha and Mohattori districts.

3.21 The expectation of community to mitigate vulnerability condition

- Availability of the information about warning system and advance forecasting.
- Have efficient services on treatment during disaster by establishing the health camps.
- Management of secure place to rehabilitate people and cattle.
- Increase leadership quality; provide vocational skills and techniques to seek the alternative income source.
- Management of temporary shelter in advance.

Flood victims spend sleepless nights

Khotang, local streams have swollen due to the heavy rainfall. 'We don't sleep on rainy nights with the fear that the floods might engulf us' said Lalit Chandra Rai, a villager of Sungdel. Khaju, Nagayo, Rayang and Gultem of Sungdel VDC and Khutru area of Dipsung VDC are vulnerable to floods and landslides. The tent that the NRCS provided the victims last year has many patches. Water oozes from several parts whenever it rains. We have no amount to build a good shelter, said Parshuram Rai of Sungdel-2.

- Develop organization and networking of disaster victims in local level to cope with disasters.

In Jugadi, Chitwan, the 59 families are affected by landslides now settled in the temporary shelter camps but they are refused to settle there. It is because there still persists the threats of landslide in that area.

3.22 Livelihood and Vulnerability Situation

In the rural area, people run their livelihood through agriculture, livestock, daily wage labor, forest products, small business, service and foreign employment. The livelihood is disaster victims who reside in the lap of Churia largely depends upon the collection of firewood from forest. Some people run small vendor shops, tea shops nearby highway. Majority of them have low income group, who are dependent and work as daily wage labours. Those people who have some vocational skills such as carpentry brick maker and able to cope with disaster than people who have no skills. Majority of the people are not fulfill their food demands from their own production. Hence even those who have land have to depend on other two-three different sources of livelihood.

Different types of relationship between vulnerability and family size is also found. Even in the big families where more family members are engaged in the labor work or services can able to run their livelihood, other wise it is more vulnerable. Similarly many social ills and disorder such as domestic violence, crime, divorce, trafficking are the consequences of disaster that increase the further vulnerability. In the true sense, the skills, capabilities, accesses to and control over the resources are needed for livelihood security of the victims.

3.23 Sustainable Livelihood Framework to reduce the Vulnerability

The sustainable livelihood framework help to motivate people why collective action is necessary and hence helps in increasing their participation and solidarity. For example, from the group discussion why community leadership is necessary can be identified the following points in light of five major capitals of sustainable livelihood framework.

Social/ Political Capital

- Increase in solidarity
- Develop the sense of identity, honour and belongings
- Interaction through shared interest, increase people's ability to work together
- Membership of more formalised group
- Build relationship of trust and cooperation
- Social network help promote innovation and development of sharing of knowledge
- Ways of survivals in the time of extreme vulnerability i.e Parma, neighbourhood supports etc
- Enforcing group decision to solve problems
- Formulate the norms and values
- Share the power relations among the people

Human Capital

- Increase in local capacity in terms of knowledge, skills and exposure.
- Change in the orthodox thinking among the people.
- Initiation of preparedness plans and programs.
- Labour force.

Financial Capital

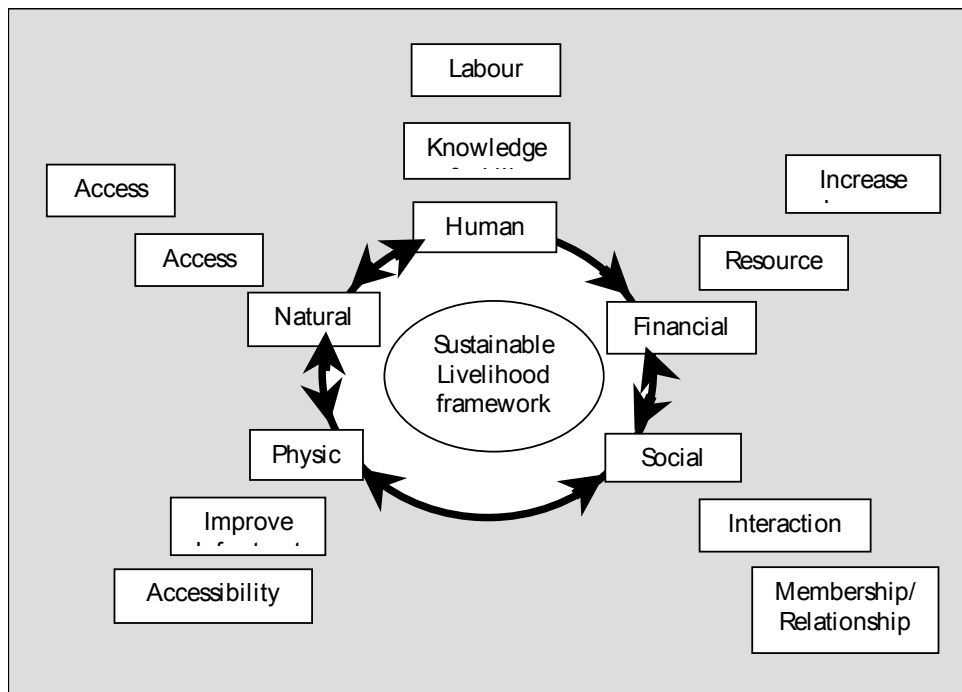
- Decrease in cost of construction of houses and infrastructures.
- Increase in the mobilisation of internal resources and management.
- Increase on-farm and off-farm income.

Physical Capital

- Continuation of public services
- Construction of simple infrastructures.
- Maintenance of shared infrastructures.
- Access to road.

Natural Capital

- Preserve the water resources
- Secure the land resources for better pr
- Access to better-serviced land.
- Management of common resources.



CHAPTER IV

MAJOR PROBLEMS AND CHALLENGES

The following are the sets of problems and challenges that are considered as obstacles in managing the emergency and disaster in time. Some of these problems and challenges are categorised in to four folds i.e. institutional, social, administrative and technical. Some of the problems under each category are summarised below.

4.1 Problem and Challenges

4.1.1 Institutional Problems and Challenges

- The institutions involved in the rescue and relief work are inactive because of poor institutional capability.
- There is no single authority to deal disaster. If so, it will be possible to deal disaster without waiting the instruction of other organisations. Till now the work is like a proverb 'too many cooks, spoils the food'.
- Despite of several efforts, coordination is still poor both at centre and districts. Three government ministries and four departments in the centre are directly involved to deal the disaster and emergency programs. Though their roles and responsibilities are defined but coordination among the agencies are still a problem. It is basically due to the complex bureaucratic jargons. The same situation is at the local level. The coordination is poor among the VDCs, DDC, Municipality, NRCS, NGOs/CBOs. They are performing their duties without coordinating each other, so programs are not much effective as one blame other if failure the activities.
- The inter-minister coordination is also weak. Though ministry of home is responsible for the instant rescue and support initiatives but the resettlement program is responsible of ministry of physical planning and works. In rescue efforts, there is a need of army and police force as well, which can be provided via ministry of home only. The provision of time-to-time training for these securities personal is also lacking.

Chitwan, authorities said that a dozen elephants at the Elephant Breeding Centre in Sauraha, Chitwan were missing in the flooded Budi Rapti River. Security personnel rescued two rhinos at Tribeni from being drowned in the swollen Narayani River. Police also confirmed the deaths of 19 people and 16 others missing in the district over the last three days (Kantipur Daily, 17 Shrawan 2061).

- COMMITMENTS ARE OFTEN IMPRESSIVE BUT THE LEVEL OF ENFORCEMENT IS VERY WEAK. DURING THE INTERNATIONAL DECADE FOR DISASTER MITIGATION (1991-2000), GOVERNMENT HAS FORMULATED ACTION PLAN THAT MAINLY FOCUSES ON THE ISSUE OF MITIGATING DISASTER IMPOSED BY FLOOD AND LANDSLIDES, BUT IT HAS NEVER BEEN IMPLEMENTED.
- Disaster victims are always suffers from basic needs such as water, electricity, and treatment facility. First the selection is not fair and the distribution is not transparent. There is immense political and caste partiality in the distribution of relief.
- Some organization are try to be boss by managing the few relief materials and try to get the sentiments of poor and disadvantaged in their favour. Sometimes the distribution is in ad-hoc basis so that people other than victims are benefited from these supports.
- Sometimes complex and bureaucratic process hinder to provide the relief to victims. According to government rules, one has to submit request letter to the Chief District Officer. As most of the people are uneducated, they discouraged to do so. Sometimes, they request to submit the copies of citizenship certificate. In the rural area, majority of the people have no citizenship certificates, as they do not need in fact.
- The rehabilitation process is often complex and expensive. The government has not proper policy and plans for the rehabilitation. Victims are generally settled under the tent and plastic sheet for few days. They have to research their future plan by themselves.

What has bewildered the victims most is that they have not yet received the amount that was raised by various NGOs in their names after last year's tragedy, according to victims, who added that they are equally shocked over the government's apathy towards them.
- NGOs are involved in relief and rescue not in rehabilitation program. It is because these programs are cheaper and they wanted to be popular through these programs. It was also found that some NGOs handover the relief materials with their own banners to others for distribution. As a result, the distribution is not fair.
- Though policies clearly spelled the provision of adequate support and rescue effort, but the committees are not providing relief to the affected people. It is because the numbers of affected families are reported very high than actual. The people who are involved in the situation assessment have to manage and distribution the resources. They also like to be boss by listing the names in the victims.

4.1.2 Social Problems and Challenges

- Due to poor awareness level of people, the distribution is not transparent. As a result, those who are active and efficient able to get the relief materials in the names of victims.
- Very few NGOs willing to work in disaster mitigation because they are not allow working in the disaster prone areas directly during the disaster and emergency. The existing laws are also obstacle to work NGO with disaster victims.

- Due to lack of education, ignorance, training and exposure, the perception of some rural people is that natural disasters are the act of god and consequence of fate. They seldom convinced that preventive measures could reduce the impact of natural disasters, but better to worship the god and make them happy.
- The problem of unemployment also discourages the people to think about disaster in advance. They are suffering from vicious circle of poverty.
- Due to the existing conflict, NGO's are not willing to work in conflict affected area, but till now there is no notice that Maoist are barriers in the disaster management. So, NGOs often charge the Maoist that they are committed but not have good working environment to work with disaster victims.
- Only well-off and elites have access to support from DNDRC as majority of the members are from the representatives of district line agencies (DLAs) and some social worker but not from disaster victims. Obviously they have little access with the committee members.
- Till now, natural disaster never a political commitment and election agenda for the politicians.
- In collecting support for the disaster victims, NGOs and general people are far ahead than government institutions. Huge amount of relief materials such as tents, clothes, money, foodstuffs, utensils are collected from all sectors. But the monitoring system is still weak whether these collected materials really reached to affected people or not.

4.1.3 Administrative Problems and Challenges

- Lacks of sufficient resources are the major problems. As a result, it is difficult to repair and maintenance of damaged infrastructures. Delay in the maintenance invite the more investment of resources.
- The process to *Nikasa* (release the fund) of government is very complex. At first, the request has to be made from district, and then regional and then central level (departments/ministers) decisions are needed. In doing so, it takes a lot of time. Sometime, the relief support is not appropriate if the relief management is in delay.
- Though there is a provision of central, regional district and local level support fund in the policy but in some district there is always more than enough fund whereas in some needy district there is scarcity of funds. It creates the conflicts and disputes among the victims.
- The agencies involved during rescue and relief have no clear-cut job description. So, it is a matter of disputes and conflicts.

4.1.4 Technical Problems and Challenges

- Lack of technical manpower available on time is also the problem. Absence of modern technology including early warning systems and forecasting to cope with the emergency and disaster immediately are other problems.
- Due to difficult geo-physical condition, inadequacy of infrastructure facilities, the transportation materials are difficult to deliver.
- The first reason of flooding in the terai for several days to months is due to haphazard construction from VDC funds without technical supervision. Second, the constructions/rehabilitation of river barrages by India just downstream of Nepal-India border. The problem has aggravated due to the increased settlements in the flood plain due to population pressure. There is even a standing committee to look after these problems but in practice nothing is happened.

4.2 Major Learning

The major learning are categorised in to three group, i.e. policies and regulations, knowledge and practices and institutional set-up.

4.2.1 Policies and Legislations

- For the effective management of relief and emergency, not only the role of political determination and commitment is necessary but also the role of effective and efficient policies and legislations are crucial.
- One of the major drawback is Natural Disaster Relief Act (1982) is without legislations (the regulations). The provision in the existing laws and the programs formulated in the plans are not properly enforced. The land use policy is not implemented properly.
- The enforcement of available rules and regulation is still weak.
- If the local bodies implement the activities as the provision of the central government as envisioned in Natural Disaster Relief Act. It is far better if there should have the provision of identification of the hazard prone areas through risk mapping in Local Self-governance Act.
- Every year, people are suffered from disaster. The Act is not fully implemented unless the provisions of Regulations. Seeing such scenario, the parliament and parliamentarians can formulate the laws to deal with such problems. But it is seen that they are also not much serious in this regards.
- The majority of the disaster problems are associated with the haphazard use of land in terai, in general and deforestation of upper catchments areas, in particular. Hence the application and enforcement of land use policy is equally important. For it, the concerned line agencies have proper plans to link the Land Use Policy with Natural Disaster Relief Act.
- It is obvious that disaster victims have right to get relief or protection. But the existing disaster policies and strategies are silent about these rights. Disaster relief are taken as government kind. They cannot argue and demand to secure their rights because the disaster victims have no single group and organisation. So now it is time to amend the Natural Disaster Relief Act on the basis of right-based approach to establish their rights. It is indeed the government obligation to provide the safety and service to the victims immediately. It is also necessary to define the roles and responsibilities of right holders, stakeholders and duty bearers in the Act in the changing context.

Request to Declare Sindhuli Flood Prone District
Kathmandu, a all party delegation met with Prime Minister and demanded to declare Sindhuli as a flood prone district. They have also demanded for a field-visit of technician team to carry out technical survey. Similarly they demanded Rs. 30 lakhs and 21 thousand meters of gabion wire to construct the infrastructure to mitigate the flood.
- Among the disasters, water-induced are more crucial and repeated every year. In order to deal with these disasters, water-induced disaster management policy and plan is needed. In this plan and policy, protection and mitigation options (structural and non-structural protection works, land use restrictions and warning systems) have clearly specified. It is useful if different policies formed for different types of disaster preparedness and response.
- People have lack of knowledge about the provisions of Building Code. So, appropriate communication mechanisms have to be in place to disseminate the major provision of building code to the wider community.

- The available information and knowledge are sufficient to formulate simple policy and plan of action. The need of disaster management guidelines is equally important.
- Now it is time to think towards the provision of crops and livestock insurance to encourage the people in the disaster and emergency activities.
- The disaster laws of Nepal are basically focused on post-disaster relief and response, but it is equally important in preparedness too, which includes the right to notice of the future disaster of the vulnerable people.
- The disaster legislations have to cover the major aspects such as environmental protection, hazard wastes, urban and regional development (i.e. land use planning), provision of quarantine, health, industrial development, natural resource management, national water resources, primary industries, energy, social security and transport in an integrated approach.
- Natural Disaster Relief Regulation (NDRR) yet to be formulated through it is essential. In the absence of NDRR, the NDRA could not be fully enforced. At present, the Natural Disaster Relief Act and Local Self-Governance Act are primarily providing the legislative framework for disaster management. But it is not enough.

4.2.2 Knowledge and Practices

- Knowledge and practices are important to deal with the disaster and emergency at local level. Knowledge can be derived from both experience (i.e. indigenous knowledge) and trainings and exposures. But the practices can be done through demonstration. In this context, both knowledge and practices can be instrumental to deal with the disaster and emergency.
- The agencies working in disaster sector have some sort of technical knowledge on mitigation, early warning system, emergency rescue and relief operation, rehabilitation and recovery plans. These knowledge and skills can be transferred through training and exposure.
- Emergency management trainings are necessary to the people who have to involve directly in the emergency not for the people who work in the centre and just guide others. These trainings have to organise at the VDC level using the local resource person. Yes, before it, the capacities of these resource persons can enhance through advance trainings. The training consists of simple tools and techniques with the practical demonstration. The content of the training would be: simple activities to reduce the risks, role of indigenous knowledge and practices, ways of assessing the vulnerability, effective communication, management of people and resources, role of coordination among the local stakeholders, activities for post disaster.
- It is equally important to disseminate the information on how emergency and risks could be mitigated at local level through series of public education materials in form of pamphlets, posters, emergency manual, documentary show and miking. These means of communication productions are helpful to changes in attitudes and behaviours of the people.
- The individuals who are involved in this area have to encourage conducting disaster related research and study. The finding from these research and study are helpful to formulate policies, plans and preparedness activities at the local level. So far, there is no systematic study undertaken to records the skills, knowledge, experiences as well as perception and belief of local stakeholders that impacts both emergency and disaster at local level.
- The local level stakeholders need the knowledge and practices on magnitude of the risk, their consequences, level of mitigation, alternative option to mitigates the disaster, and cost for each category of disaster.
- During disaster, the priority issues have to be determined and prioritised sitting together with local level representatives and disaster victims. The priority issue may be different from one community to another based on the socio-cultural conditions of people. But local level stakeholders should have the knowledge of priority issues as: potential for injury or loss of life,

economic value of lost property or infrastructure, loss of cultural resources, potential environmental impacts, extent of disruption of transportation, communications or food supply, and potential for water-borne epidemics (priority as in descending order).

- The information on risk mapping and zoning should be disseminated to relevant agencies, local authorities and communities to impart knowledge and practice on risks and immediate plan of action to mitigate (i.e. relocate villages, distribute the relief, manage temporary settlement).
- It is equally necessary to organize the formal and informal meetings at local level to review the findings of the past studies and research. It helps to change the perspectives of people and motivate them in action. For example, past studies indicated that some selected civil engineering or bioengineering actions are needed to mitigate the disaster. The bio-engineering measures are possible for the first round as it is compatible with the people's knowledge and practices.
- Disaster management issues have to be addressed both at community level through the literacy text and to university level through text book.

4.2.3 Institutional Set-up

- The disaster and emergency plans/policies can only enforce if there is strong institutional set-up.

- Disasters can be mitigated with the use of technical expertise of relevant agencies (both government, non-government and private sectors). Unfortunately, there is some egoism among these agencies about the disciplines and technical expertise. There is no functional coordination among the agencies to establish effective disaster warning and prevention system. Hence the first step in this direction might be educate the roles and responsibilities. It helps to reduce the duplications in the programs and activities. For it, there should be effective monitoring system and provisions of award and punishment.
- The meetings of CNDRC is only limited during the emergency period. The discussion and debates are needed in other times too to think and establish alternatives measures for disaster management. The actions have to be diverted on disaster preparedness, mitigation and rehabilitation works along with relief. If so, it helps to reduce the loss of lives and properties and improve the livelihood of rural poor.

In Saptari, ninety VDCs have come under the risk of inundation while over ten thousand people have already been displaced. On Saturday, flood swept away the telephone tower located at Hanuman Nagar. Likewise, eighty VDCs in Rautahat district have also been badly affected by floods. Five persons have been missing from this morning in Bhare Damar area of Makwanpurgadi VDC in Makwanpur district while fourteen others were rescued by security forces this afternoon. Similarly, over two dozens landless families in ward no. 1 of Hetauda municipality were forced to leave their shelters after the entire settlement got swamped this morning. Similarly, in Sarlahi, fifteen houses were swept away overnight in different parts. In Kamalamai of Sindhuli, twenty houses were swept away this morning, destroying a massive amount of property. The spokesman of Ministry of Home Affairs Gopendra Bahadur Pandey said rescue efforts are underway with the help of the Royal Nepalese Army and the Police. He also informed that the ministry has proposed a budget of Rs. 40 million in budget of upcoming fiscal year for the flood victims.

4.3 The Way Forward

The following recommendations are offered to central and local government agencies; NGOs, INGO, bi-lateral agencies; CBOs and community people for the effective management of relief, emergency and disaster.

4.3.1 Recommendations for Central and Local Government Agencies

- Adequate funds and resources are needed for repair and maintenance of infrastructure but before it, concrete plans should be formulated specifying the role of agencies involved. Funds should not be allocated for relief and rescue but also for rehabilitation programs. Funds should be managed on the basis of plan related to threats, disaster and vulnerability situation.
- Effective coordination among the central and local government is necessary to translate the plan in to action. For it, MoHA should take the lead role.
- The low-cost technologies are needed to establish the early warning systems, risk mapping of hazard prone areas. These information should be provisioned to all. For it, department of climate and meteorology should be equipped with modern technology.
- Disaster management component should be incorporated in five-years plans more minutely as priority sector. Though it is already addressed in tenth-five year plan.
- The MoHA should take active role in the amendment of Act. In light of its amendment, the basic preparation for the formulation of regulation should be carried out.
- It is better to allocate a separate agency (autonomous) to deal all sorts of disaster preparedness, mitigation and rehabilitation works. If so, it will possible to implement the programs in the immediate needs.
- The government should formulate the plan of action to enforce the Building code and disseminate its major provisions to all.
- The government should establish the human rights of disaster victims (sustainable environment rights, housing and habitation rights, social security rights and institutionalise rights) with an integrated approach.
- The role and responsibilities should defined more clearly. For example, the emerging role of DWIDP is to lead coordinating agency to facilitate its planning and coordination, DHM is to be lead agency for implementing and managing a flood warning system, and MoH is to be lead agency for planning and implementing disaster relief/rehabilitation measures. In the changing context, the role of DoI is not much need as it already transferred its roles to DWIDP.
- The majority of the people reported that the flooding problem especially nears the Nepal-India broader is just because of the construction of dam near the broader. In order to mitigate these problems bilateral dialogue and actions are needed time and again. If possible, organise the visits to these flood prone area by joint team is instrumental.
- Efforts should be made on identifying and prioritizing high-risk areas and developing disaster management plans, then efforts will be turned to better ways of managing

Rain Destroys 360 houses

Manthali, 360 families were displaced when heavy rainfall occurred in Ramechhap last night. The DNDRC has sent a team to collect the basic information. As soon as the information is collected the relief materials would be distributed said sources from the committee.

In the meanwhile, Home Minister Purna Bahadur Khadka said that floods and landslides caused by incessant rain have damaged property worth millions of rupees. Home Minister has already released 5.35 million rupees to provide immediate

- the floodplains according to situation.
- MoHA should release the fund for relief and rehabilitation in time so that the efforts could be made in to action immediately. A quick response team is essential to reduce losses and prevent from further disaster.

relief to the flood affected families in various districts of the country.

The landslide has affected about 100 houses and large arable land. According to the local correspondent, they have not received any rescue and support from any institutions though they have continuously requesting for it. The vulnerability has been increasing due to lack of rescue and support initiatives.

4.3.2 Recommendation for NGOs, INGO, Bi-lateral agencies

- During the disaster, the infrastructure such as road, water supply, electricity, bridge, schools, houses are damaged. But government alone has no sufficient resources to repair and maintain these damaged infrastructures. Similarly, rehabilitation program is a costlier effort. There should be joint initiatives of government, I/NGOs and private sectors for rehabilitation. The resettlement and rehabilitation program should be brought as a package program.
- NGOs need to be motivated to work in the disaster prone areas even during peak emergency periods but the activities and plans should be transparent. For it, there need to be amending in the Act as the present Act is an obstacle for it. There should be the provision of proper monitoring and evaluation of ongoing activities.
- The NGOs can be mobilised to manage the relief material (collection and store in the disaster prone area for quick delivery). The rescue groups should be formed and trained properly.

4.3.3 Recommendation for CBOs and Community People

- Local people and communities are the key respondents that knowledge about the situation and the area. The local level stakeholders such as local administration and NGOs came later and rely on the information of these people to produce further plan of action. It is sometime impossible to present local administration on time due to social and technical problems. Therefore it is necessary to strengthen the capacity and capability of local people and CBOs. If so they can do preliminary rescue and relief works right after the disaster.
- To aware the people about the emergency and disaster, mass education are needed. For it, literary classes with the issue of disaster in the curriculum are beneficial. It helps to discuss on the disaster issue on the basis of their knowledge, skills and experiences. It also helps to motivate the people that government only cannot do everything.
- Intensive awareness campaigns should be organised for review the primary roles, and priority activities to be carried out right after the disaster. It will help to minimise the destruction.
- In order to win the trust of local people, all activities should be transparent and the activities should be planned and prepared in the participatory ways. If so it is possible to enhance the active participation of people and able to establish a good working relationship. It is because victims should not be regarded just the service recipient but have meaningful role in managing the disaster.
- The community awareness and education campaign should be planned and prepared incorporating all the social and technical issues on mind.
- Meetings and interactions should be conducted among the stakeholders for the formulation of simple strategies on low-cost-mitigation measures.

- In order to adopt mitigation measures, it is important to identify the level of threats and extent of vulnerability. For it vulnerability and hazards mapping need to be prepared in the participatory way. The assessment of vulnerability condition of poor and disadvantaged and appropriate coping strategy is equally important. Community based disaster preparedness initiatives are needed for the long run to improve livelihood.
- Emphasis should be given to conserve natural resources especially forest and land. For it, the people have to be involved in the community plantation work, formation of community forest, riverside protection work and conservation of upper catchments of watershed. The affected families' should include in the income generating activities to improve their livelihood.
- The livelihood of poor people threatening every time as they live in the decertified land, which is cheaper, fellow and depend on the fishing, agriculture labour work. To improve the livelihood of people, they have to rehabilitate and given special skills to cope with disaster. Crop diversification is also needed to open the opportunity of agriculture labour through out the year.
- Victims are sufferer from many social disorders so they are mentally poor. In order to empower them, economic empowerments along with right-based approach is needed. Apart from these, they have to fully involved in the resource management such as constriction of catchments ponds, involve in production and protection activities.
- In order to improve the governance, social vulnerability and natural hazards should be dealt together. For it, social capital, institutional capacity building and exposure with media have to develop together. Minimisation of gender, caste and work discrimination is equally important. Formation and give appropriate nursing services are needed to build the capacity of marginal people.
- The formation of policies and legislations is pro poor and marginalized. The mechanism should be developed to balance the power relationship among the various actors. Cultural mileages are also important in this respect.
- There is need to detail study on how the society is gradually developed by managing the various types of disaster and emergences, what were the coping strategies in the past and which can be still viable to replicate etc.
- Disaster and emergency can be managed if the actors opens to interact, discuss with the victims to identify the common problems and effective resource management. For it, awareness, institutional development and political commitment are needed.
- Disaster and emergency programs should be dealt with economic and right based prospective. Till now, disaster is not much considered as the reason for poverty. But it is totally wrong. It has multiplier effects that are responsible to poverty and vulnerability.
- The community based preparedness programs should be formulated addressing the issues and concerns of all local level stakeholders and victims. The total investment of rehabilitation could be reducing drastically if serious on the preparedness programs.
- The relief assistance programs should be made simple s that even illiterate people can access to get the relief. The role of NGOs should be widened in managing the relief as much as simple. Structured formats should be discouraged.

Annex - 1 List of REports consulted

1. Analysis of Disaster Management with Reference to 2002 Flood and Landslide in Nepal, (2002), Action Aid Nepal, Kathmandu, Nepal.
2. *Chetana*: Natural Disaster Preparedness in Community and First Aid Book (1999), HMG/JICA/JMA, Lalitpur, Nepal.
3. Citizen Charter, 2060
4. Disaster Management in Nepal: A Profile (1994), His Majesty's Government of Nepal, Ministry of Home Affairs, Kathmandu, Nepal.
5. Disaster Review (1997), Water Induced Disaster Prevention Technical Center (DPTC) and JICA (Series VI), Lalitpur, Nepal.
6. Disaster Review 2003 (2004), His Majesty's Government, Ministry of Water Resources, DWIDP, Kathmandu, Nepal.
7. DWIDP Bulletin (2004), His Majesty's Government, Ministry of Water Resources, DWIDP, Kathmandu, Nepal.
8. National Action Plan on Disaster Management in Nepal (1996), His Majesty's Government of Nepal, Ministry of Home Affairs, Kathmandu, Nepal.
9. National Action Plan on Disaster Management in Nepal (1996), His Majesty's Government of Nepal, Ministry of Home Affairs, Kathmandu, Nepal.
10. National Water Plan - Draft Report (2004), His Majesty's Government, Water and Energy Commission Secretariat, Kathmandu, Nepal
11. Natural Disaster Mitigation Preparedness Planning, A Source Book (2004), Care Nepal, Kathmandu, Nepal.
12. Natural Disaster Preparedness and Community Level Awareness Building on Natural Disaster, A Source Book (2004), Care Nepal, Kathmandu, Nepal.
13. Natural Disaster Relief Act, 1982, His Majesty's Government of Nepal.
14. Poudyal Chhetri, M.B. and Bhattarai Damodar (2001) " Mitigation and Management of Floods in Nepal", HMG/Ministry of Home Affairs, Kathmandu, Nepal.
15. Problems of Disaster Management in Nepal and Measures to solve them (1998), A Report prepared by a Task Force, His Majesty's Government of Nepal, Ministry of Home Affairs, Kathmandu, Nepal.
16. Simple Practical Guidelines on Natural Disaster Management (2000), Nepal Red Cross Society, Kathmandu, Nepal.
17. Sustainable Livelihood Framework (1999), DFID, UK.
18. The Tenth Plan (2002-2007), HMG/NPC, Kathmandu, Nepal
19. Water Resources Strategy Nepal, Executive Summary (January 2002), His Majesty's Government of Nepal, Water and Energy Commission Secretariat, Kathmandu, Nepal
20. Water Resources Strategy Nepal (January 2002), His Majesty's Government of Nepal, Water and Energy Commission Secretariat, Kathmandu, Nepal

Annex 2 : List of people consulted during field work

<i>SN</i>	<i>Name</i>	<i>Position</i>	<i>Organisation</i>
<i>Siraha</i>			
1	Krishna Ojha	Local Development Officer	DDC
	Arun Sah	Programme Officer	DDC
3	Mohammad Sultan Rahi	Programme Officer	DDC
4	Binod Upadhaya	Administrative Officer	District Admin Office
5	Min Prasad Pandey	Superintendent of Police	District Police Office
6	Ashok Kumar Yadav	Programme Coordinator	NRCS
7	Rajdeo Thakur	Secretary (<i>Mantri</i>)	NRCS
8	Indra Khatri	In-charge, Rahat Management	CARE Nepal
9	Babu Krishna Karki	Colonel	Nepal Army
<i>Saptari</i>			
1	Bhupnath Poudel	Local Development Officer	DDC
2	Devendra Yadav	District Development Advisor	DDC
3	Sanjaya Kumar Basnet	District Superintendent Police	District Police Office
4	Madhav Kumar Pokhrel	Administrative Officer	District Admin Office
5	Jogendra Bhagat	Chairperson	NRCS
6	Ram Narayan Chaudhary	Secretary (<i>Mantri</i>)	NRCS
7	Surendra Kumar Yadav	Programme Coordinator	NRCS
8	Ram Lochan Pandit	Engineer	Div. Irrigation Office
9	Binod Jha	Engineer	Div. Irrigation Office
<i>Sarlahi</i>			
1	Nanda Lal Yadav	Ex-DDC Chairperson	UML
2	Beni Bahadur Karki	Lawyer, Vice-chairperson	Nepal Press Union
3	Sharada Bhakta Poudel	Chief District Officer	District Admin Office
4	Prabhat Thapa	Captain	Nepal Army
5	Sher Bahadur KC	Programme Officer	NRCS head Office
6	Govinda Rayamajhi	Vice-chairperson	NRCS
<i>Rautahat</i>			
1	Laxmi Sah	Ex-chairperson in Ward	Shivanager
2	Ram Prasad Yadav	Ex-VDC chairperson	??
3	Gokul Prasad Yadav	VDC Secretary	Shivanager VDC
4.	Krishna Dev Giri	Local Priest	Shiva Mandir
<i>Mahattori</i>			
1	Suderman Mahato	Community Trainer	CBDP/NRCS
2	Deepak Mishra	Secretary (<i>Mantri</i>)	NRCS
3	??	Treasurer	NRCS
4	Pawan Prasad Mainali	Administrative Officer	District Administrative Office
<i>Dhanusha</i>			
1	Dinesh Chandra Neupane	Community Trainer	CBDP/NRCS
2	Ram Bhajan Yadav	Programme Officer	DDC
<i>Morang</i>			

1	Yog Raj Poudel	CDO	CDO
2	Mira Joshi	Chairperson	NRCS
3	Kamal Koirala	Section Officer	NRCS
4	Subodh Sinha	Member	NRCS
5	Kedar Thapa	Member	NRCS
<i>Sunsari</i>			
1	Chhatra KC	Coordinator	MEDP/UNDP
2	Padam Raj Regmi	CDO	CDO
3	Hem Sagar Gautam	DDO	DADO
4.	Kanak Lal Sahu	Asst. Livestock Officer	DoLO
5	Dharma Raj Niraula	Secretary	UML
6	Kiran Karki	Coordinator	NRCS

Annex 3 : Tools and techniques used during the fieldwork

The following tools and techniques are used during the field visits

- Key Informant Interview
- Focus Group Discussions
- Time Line
- Time trend Analysis
- Seasonal Analysis

Annex 4 : Composition of Various Committee

Central Natural Disaster Relief Committee (CNDRC)

Chairperson: Home Minister

Members: Ministers of Housing and Physical Planning and Health; Secretary of Ministry of Finance, Defence, Home affairs, External Affairs, Public works and Transport, Water Resources, Information and Communication, Forests and soil conservation, Labour and Social Welfare, supplies; National Planning Commission Secretariat, Brigadier, Royal Nepal Army, Inspector General of Police, Representatives of Nepal Red Cross Society, Nepal Red Cross society, Nepal Scout; Director General of Department of Mines and Geology and Department of Meteorology; two reputed person nominated by His Majesty's Government, and Additional Secretary, Ministry of Home Affairs.

The Relief and Treatment Sub-Committee

Chairperson: Health Minister

Members: Secretary of Ministry of Communication and Ministry of public works and Transport Brigadier, Royal Nepal Army; Inspector General of Police; Representatives, Nepal Red Cross Society; and representatives, Nepal Scout

The Supply, Shelter and Rehabilitation Sub-Committee

Chairperson: Minister of Housing and Physical Planning

Member: Secretary of Ministry of Finance, Ministry of Home Affairs, Ministry of Supplies, Ministry of Labour and Social Welfare, Ministry of Water Resources, Ministry of Public Works and Transport; Representatives of Social Welfare Council

The District Natural Disaster Relief Committee

Chairperson: Chief District Officer; Members: representatives of national level political parties, Nepal Red Cross Society; In-charge of Royal Nepalese Army Unit, District Police Office, Public Health Office, District Housing and Town Development Office, Divisional Irrigation Office, District Forest Office, District Agriculture Development Bank, reputed Social Workers; Secretary: Local Development Officer