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Disaster Risk Management Plan Udaypur District



April 2011

Priority Framework for Action

Climate Change Adaptation and Disaster Risk Management in Agriculture

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Abbreviations and Acronyms

ABPSD	Agri-Business Promotion and Statistics Division
ASC	ASC
BCPR	Bureau for Crisis Prevention and Recovery
CBO	Community-based Organization
CBS	Central Bureau of Statistics
CDO	Chief District Officer
CDRC	Central Disaster Relief Committee
CFUG	Community Forestry Users' Group
CHD	(MoHP) Child Health Division
DADO	District Agriculture Development Office
DAO	District Administration Office
DCP	District Contingency Plan
DDRC	District Disaster Relief Committee
DDRMP	District Disaster Risk Management Plan
DFID	Department for International Development, also known as UKaid
DFO	District Forest Office/Officer
DHM or DoHM	Department of Hydrology and Meteorology
DHO	District Health Office
DIMS	Disaster Information Management System
DIO	District Irrigation Office
DLSO	District Livestock Services Office
DNDRC or DDRC	District Natural Disaster Relief Committee
DoA	Department of Agriculture
DoE	Department of Education
DoF	Department of Forest
DOI	Department of Irrigation
DPHO	District Public Health office
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DSCO	District Soil Conservation Office
DSCWM	Department of Soil Conservation Office
DTO	District Technical Office
DWIDP	Department of Water-Induced Disaster Prevention
DWSD	Drinking Water and Sanitation Division Office
DWSS	Department of Water Supply and Sewerage
DWSSO	District Water Supply and Sanitation Office
EDC	(MoHP) Equality Development Centre
EOC	Emergency Operation Centre
FAO	Food and Agriculture Organization
FGD	Focus group discussion
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
GLOF	Glacial Lake Outbursts Flood
GO	Government Organization
GoN	Government of Nepal
HFA	Hyogo Framework for Action
IASC	Inter-Agency Standing Committee

IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International Non-Governmental Organization
INSEC	Informal Sector Services Center
IOM	International Organization for Migration
KII	Key informant interview
LAPA	Local Adaptation Plans of Action
LDO	Local Development Officer
MLD	Ministry of Local Development
MoAC	Ministry of Agriculture and Cooperatives
MoHA	Ministry of Home Affairs
MoHP	Ministry of Health and Population
MPPW or MoPPW	Ministry of Physical Planning and Works
NA	Nepal Army
NADRM	National Authority for Disaster Risk Management
APF	Armed Police Force
NAPA	National Adaptation Programme of Action
NARC	National Agriculture Research Council
NCDM	Nepal Center for Disaster Management
NDRI	National Development Research Institute
NGO	Non-Governmental Organization
NP	Nepal Police
NPC	National Planning Commission
NRCS	Nepal Red Cross Society
NSDRMN or NS	National Strategy for Disaster Risk Management in Nepal
NSET	National Society for Earthquake Technology
NTC	Nepal Telecom
OCHA	(UN) Office for the Coordination of Humanitarian Affairs
OHCHR	(UN) Office of the High Commissioner for Human Rights
PVA	Participatory Vulnerability Assessment
SAARC	South Asian Association for Regional Cooperation
SOP	Standard Operating Procedure
SWOT	Strengths, Weaknesses, Opportunities, Threats
TWG	(NAPA) Thematic Working Groups
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VDC	Village Development Committee
WFP	(UN) World Food Programme
WHO	World Health Organization
WUA	Water Users' Association

Preface

The Udaypur district has been responding to a variety of recurring natural disasters through the District Disaster Relief Committee (DDRC) empowered by the Natural Calamity (Relief) Act 2039 promulgated in 1982, that establishes the policy and the legal framework for disaster management in the country. The Act has made provision for the district level management of rescue and relief activities to the Chief District Officer (CDO), who is the ex-officio Chairperson of the District level District Disaster Relief Committee (DDRC).

The DDRC springs into relief action only after a particular disaster hits an area. This approach to disaster management does not consider –**ex ante** disaster preparedness through development planning, administration and management. As an effort of proactive planning for the Disaster Risk Reduction (DRR), the District Disaster Risk Management Plan (DDRMP) has been formulated for the Udaypur district.

The preparation of the DDRMP has been commissioned by the Food and Agriculture Organization (FAO) of the United Nations to the Practical Action Consulting (PAC), Asia. PAC has facilitated the preparation of Udaypur district's DDRMP along with three other districts: Siraha, Kapilvastu and Arghakhanachi.

Due to the district wide implication of the DDRMP, District Development Committee (DDC) Udaypur has been made accountable of the coordination and monitoring of the activities listed in the DDRMP; and since the DDRMP laid heavy emphasis on disaster risk in the agriculture sector due to climate change, the District Agriculture Development Officer (DADO) who is also the chairperson of the District Technical Implementation Task Group (DTITG), has played a pivotal role in the formulation processes.

The DDRMP was developed through a multi-stakeholders participatory planning process to inform the local governance, community, DDRC and other stakeholders about disaster preparedness and risk reduction measures. During its preparatory planning process the government line agencies and other stakeholders were guided to move from a reactive disaster management approach to one that is more proactive by increasing commitment to prevention and mitigation actions.

The National Strategy for Disaster Risk Management (NSDRM) approved on 11th October 2009 provides a framework of key sectors and possible priority areas to consider in the Udaypur DDRMP. By employing the framework provided by the NSDRM, the Udaypur DDRMP has effectively implemented the Hyogo Framework of Action (HFA) 2005-2015, the consensus document adopted at the UN World Conference on Disaster Reduction, Kobe in 2005, towards achieving the stated goals of DRR within the stipulated time frame.

The planning document is divided into three parts.

Part I contains the methodology along with the layout of the plan and its applications. As of the methodology, a set of focus group discussions with the line agencies and other stakeholders were carried out supported with further data collection by the Working Committee and Field Officers elicited information about the hazard, vulnerability and risk context in the district. This formed the basis of the District Disaster Scenario and Impact and Vulnerability Analysis. Three local level triangulation exercises were carried out in selected Village Development Committees (VDCs) to confirm that district level information were support by community-based views.

The Working Committee also assessed the capacity of key institutions in the district, the readiness status of line agencies, and local livelihood capabilities. These are presented as the District Capacity Assessment.

Based on the critical district weaknesses and key priorities discussed by the Planning Committee and organized by the Working Committee with the assistance of Practical Action Consulting, a preliminary set of activities was compiled as the first draft of the Disaster Management Action Plan (DMAP) by the Working Committee. Allocation of responsibilities for activities was devised based on district institution capability strengths drawn from the District Capacity Assessment. A District

Contingency Plan (DCP) has not yet been developed for Udaypur, but a model of it from Siraha district was replicated where a DCP focusing flood has already been prepared.

Part II contains background information on institutional response to disasters and builds linkages between the national strategy and the district context.

Part III introduces the features of Udaypur district followed by analyses of hazards; and an impact and vulnerability assessment. The planning document covers five prioritized hazards faced by the district: flood, landslide; pest and crop disease, drought and snakebite. In this part, the capacity of the district has been assessed based on secondary data.

Mos of the section has been devoted to the action plan based on district weaknesses and key priorities with extension to the national priorities. The detailed DRM plan of activities for Udaypur district is structured in tabular format.

This planning document is intended to facilitate the government line agencies and other stakeholders, including those organizations which intend to work in a particular development sector in the district. It can be equally useful to the planners at local, regional and national level. If reviewed and updated periodically, this document can work as a cornerstone for reducing duplication, increasing efficiency and will ultimately play an important role in empowering the communities at large.

Acknowledgments

During its preparation processes, a large segment of district line agency heads, political party representatives, representatives from district-based Non Governmental Organizations (NGOs), the media, other district-based supporting organizations and the community were involved. They are much appreciated for their active involvement in the different processes of the DDRMP development. The CDO, LDO and Program Officer of the DDC and DADO deserve special appreciation for their cooperation, patience and keen interest in the planning contents.

The Practical Action Consulting (PAC) Asia implemented the activities and facilitated the preparation of the Kapilvastu district's DDRM Plan. The PAC team consisted of Mr Naragopal Rai, Mr Guna Raj Shrestha, Mr Krishna Gautam, Ms Madhavee Pradhan, Mr Jhalak Prasad Bhattarai, Mr Shree Prasad Dawadi, Mr Nabaraj Lama and Mr Alex Morcrette.

Ms Moushumi Shrestha, Country Manager and Ms Pooja Shretha of PAC provided coordination support to PAC's activities at national and district level. Mr Buddhi Pokhrel, Field Monitor of FAO in the Udaypur district is acknowledged for his diligence and constant effort during the preparation process.

Dr Hari Dahal, National Project Director (Joint Secretary, MoAC) and Dr D.M. Pokhrel, MoAC are acknowledged for their support and encouragement during the field activities and preparation of the DDRM plan. Mr RajRegmi Krishna, National Expert FAO provided coordination support during the preparation of the plan and also in facilitating meetings with the project Steering Committee to get final endorsement.

Dr Selvaraju Ramasamy, Climate, Energy and Tenure Division of FAO, Rome provided overall technical guidance and lead technical supervision. The Steering Committee chaired by the Ministry of Agriculture and Cooperatives (MoAC) provided the clearance for the development of the Plan and endorsed the final plan document.

The FAO office in Nepal administered the development of the DDRM plan under the project "Strengthening capacities for disaster preparedness and climate risk management in the agriculture sector" (TCP/NEP/3201 (D)). Financial support and technical contributions of UNDP to expand the programme to additional two districts under the UN Joint Programme is acknowledged greatly.

Executive Summary

The Context

Floods, landslides, droughts and other weather and climate-induced hazards are almost regular phenomena in Nepal. High socio-economic vulnerability of local communities and sectors – remote, rural, rugged and fragile geophysical environment mixed with unplanned settlement, population pressure, low social capacity to mitigate risk and prepare for difficulty – create scenarios of high risk, inviting disaster. Those likely to suffer the most are the poor, marginalised and disadvantaged social groups, whose limited access to resources make them least able to adapt to, prepare against and cope with their precarious environment.

In order to address the root causes of vulnerability to natural disaster, Nepal is in the process of shifting its government policies towards proactive preparedness, mitigation and prevention. This highlights the links between disaster management and development, calling for a cross-sectoral approach to identify the bottlenecks to risk reduction. Disaster Risk Management Plans must be developed with a dual top-down and bottom-up approach, tapping the existing institutional capacity required for coordinated action, in response to community-based voicing of the most pressing needs. Efforts must mobilise a variety of actors – government, private sector and civil society – to complement each other with their respective expertise, while allocating specific and binding responsibilities to overcome difficulties of collective action.

The National Strategy for Disaster Risk Management (2009) in Nepal links the International Hyogo Framework of Action (HFA) to Nepal's specific context, and sets an agenda for priority action to mainstream disaster risk management into Nepal's development. The aim of DRM Plan is to support and extend downward the needs assessment started at the national level with the National Strategy for Disaster Risk Management (NSDRM) by assessing the district level hazard risk context in Udaypur, analysing the impacts of the hazards and the fundamental vulnerabilities faced within the district, and by identifying key institutions at the district and local level and the critical capacity gaps, to plan a set of strategic priority activities across the district.

Outputs of the Plan

The results of the district level hazard analysis identifies the top five most problematic hazards in the district as **floods, landslides, pest and crop disease, drought and snake bites**. This is based on a participatory assessment taking into account **levels of loss, recurrence of events and prevalence of risk all VDCs in the district, the vulnerability to the hazards of the local population and the resources on which the latter depend upon**.

The impacts and the differential vulnerability of community groups of these prioritised hazards are examined according to the key sectors of **agriculture and food security; health education; shelter, infrastructure and physical planning; livelihood protection; water and sanitation; and information, communication, coordination and logistics**. This is supplemented with a district capacity assessment of **focal government line agencies and non-governmental organisations, private and community based endowments and capabilities of the local population**. Based on these analyses, twelve key priority areas are identified for action to address district weaknesses and institutional gaps. These are to:

1. Build decentralized capacity for disaster risk reduction;
2. Develop systematic disaster risk information sharing channels, including extensive post-disaster data collection;
3. Develop landscape-wide early warning information flows;
4. Ensure clean water, sanitation and control water-borne diseases during emergency and rehabilitation phases;
5. Prioritise essential activities and secure basic needs during floods, especially transport, health care and sanitation
6. Maintain exceptional support activities through the emergency phase into rehabilitation and recovery;

7. Strengthen emergency and rehabilitation coping capacity of vulnerable and affected groups through financial support and other resource subsidies;
8. Improve water circulation;
9. Facilitate more disaster-resilient income-generating practices, especially in agriculture;
10. Improve access to training, technical assistance and equipment in disaster-resilient agricultural practices;
11. Improve structural risk reduction including, but not exclusively, bioengineering solutions;
12. Improve structural protection of homes.

These priority areas extend the strategic activities advised by the National Strategy for Disaster Risk Management.

The detailed District Disaster Management Action Plan lays 124 specific activities aimed at addressing these points, identifying focal organisations to take charge of the activities. Focal organisations for emergency response and relief activities were selected using the Cluster Approach set up by the Government of Nepal Emergency Relief Cell and Inter Agency Standing Committee in coordination with the United Nations Office for the Coordination of Humanitarian Affairs. Focal organisations from risk mitigation and disaster preparedness activities were identified through district-level consultations with key stakeholders, including Government line agencies.

For the implementation of the activities outlined in this plan, DDC Udaypur has to take the lead role. There are several activities that fall into the working domain of more than one line agency; the DDC has to coordinate and disburse the activities among the district line agencies.

Establishing focal persons for disaster risk management for all district line agencies and key stakeholders participating in the activities provides a low-cost way of building institutional coordination across agencies and organisations. Formation of disaster management committees at the VDC level in vulnerable VDCs will provide the downward focus required to work at the local level with district coordination. Other critical areas of general management for effective uptake of the plan's recommendations are the development of a streamlined mechanism of implementation, mobilisation for human resources development, the availability of financial support for implementation, and regular updating of the plan.

The annexes of the plan provide considerable practical information for implementation of recommended activities, including contact lists of service institutions and disaster risk management organisations active in the district, results of pilot VDC-level hazard analyses, and a number of tables presenting the plan's information in other forms to offer flexibility for implementers.

1. Introduction

1.1. The Rationale for the District Disaster Risk Management Plan

Floods, landslides, hailstorms and drought have become almost regular phenomena in Nepal. In the past ten years¹ floods and landslides alone have been claiming on average more than 200 lives annually. These disasters affect approximately 10,000 families every year. The remote, rural, rugged and fragile geophysical structure of the country as well as unplanned settlement, population pressure, low literacy rate and lack of public awareness are the main contributing factors to the vulnerability of the rural population to natural disasters which hit the poor, marginalized and disadvantaged groups of people hardest.

The Government of Nepal's Ministry of Home Affairs (MoHA) calculated the economic losses due to disaster for the last 23 years (1983–2005) to be over 28 billion rupees. The accompanying indirect losses, in terms of lost time and opportunities, and the lack of services and the repercussions thereof, may lead to actual loss that would be much higher than the above figure.

In a much publicized incident of torrential rain on September 2008, thousands of families in the mid-west and far-west regions of Nepal were affected. In the mid-west alone, almost 180,000 people were displaced by heavy flooding. According to the government and aid agencies, the displaced number of people grew from 80,000 to nearly 180,000 within a span of single week.

Reasons for the losses are attributed to insufficient public awareness, lack or inadequacy in preparedness, lack of early warning system, lack of coordination among inter-government agencies, inadequate financial resources, low quality of human resource in terms of skill in mitigation of natural disasters, and ineffective dissemination of knowledge and skills to the vulnerable population groups.

To counter these inadequacies, Nepal is in the process of shifting its government policies towards a proactive way of preparedness, mitigation and prevention. This clearly calls for DRMP from the national level down to the local level, highlighting the links between disaster management and development. The cross-sectoral nature of a DRM plan should identify the priority needs and allocate responsibilities for action to a variety of government, civil and private actors.

The NSDRM Nepal 2009 links the International HFA to Nepal's specific context, and sets an agenda for priority action to mainstream DRM into Nepal's development. This District-level Disaster Risk Management Plan (DDRMP) aims to support and extend the national priorities through the identification of a district level plan of activities for Udaypur district.

1.2. Objectives of the Udaypur DDRMP

The aim of the DDRM plan is to support and extend downward the needs assessment started at the national level with the NSDRM by assessing the hazard risk context in Udaypur, analyse the impacts of the hazards and the fundamental vulnerabilities faced within the district, and then by identifying key institutions at the district and local levels, as well as the critical capacity gaps, and plan a set of strategic priority activities across the district.

The goals of the plan follow those of the HFA which are internalised in the NSDRM. These are to

- Make Disaster Risk Reduction a Priority [at local and district level]
- Know the Risks and Take Action
- Build Understanding and Awareness
- Reduce Risk
- Be Prepared and Ready to Act

The plan seeks these goals through a contextualised approach relevant to Udaypur and with special emphasis on the agriculture sector. These contextualised goals and specific objectives are summarized in the following table.

¹ Source: Ministry of Home Affairs, Government of Nepal, Kathmandu

Table 1: Aims, goals and objectives of DDRMP of Udaypur inline with the HFA and NSDRM in Nepal

HFA and NSDRM Priorities for Action	District Disaster Risk Management Plan aim, goals and objectives		
	Overall Aim	Goals	Specific Objectives
<p>Make Disaster Risk Reduction a Priority</p> <p>Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation</p>	<p>To support and extend the national disaster risk management priorities through the identification of a district level plan of activities</p>	<p>To facilitate a broad, cross-sectoral, inter-agency courses of action to develop a DRM plan and integration of DRM into development activities</p>	<ul style="list-style-type: none"> · To develop a plan of action for the district disaster management systems and other district stakeholders to set priorities and provide strategic directions and guidelines for Disaster Risk Management in all sectors with emphasis on agriculture; · To establish a channel of communication between MoHA, MoAC, MoLD and other line Ministries and the development partners in providing technical and financial support for DRM; · Integrating DRM with development, including agriculture development and food security.
<p>Know the Risks and Take Action</p> <p>Identify, assess, and monitor disaster risks – and enhance early warning</p>		<p>To assess the legal, institutional, financial, social and technical needs at a up to and down to district level to build capacity to analyse risk and take appropriate action</p>	<ul style="list-style-type: none"> · To assist DDCs in performing assessment, analyzing and interpreting the data from assessments, and formulating an appropriate intervention strategy · To indicate “gaps’ where government agencies, NGOs, CBOs , private sector and other actors can contribute to assisting the action plan; · To provide a conduit for information exchange between disaster management actors at national, district and VDC levels; · To assist DADO in performing assessment, analysing and interpreting the data from assessment and formulating an appropriate intervention strategy with a sectoral focus; · Strengthening the capacity of stakeholders at the district level to track, collate, monitor and disseminate information on phenomena, such as droughts, floods, landslides, pest and disease epidemics, temperature extremes and forest fire etc.
<p>Building Understanding and Awareness</p> <p>Use knowledge, innovation, and education to build a culture of safety and resilience at all levels</p>		<p>To raise awareness of stakeholders about DRM through participation and collaboration in the plan preparation process</p>	<ul style="list-style-type: none"> · To conduct a structured awareness raising, orientation and data collection consultation campaign across district and VDC level stakeholders and officials in the government agencies
<p>Reduce Risk</p> <p>Reduce the underlying risk factors</p>		<p>To transform perceptions about disaster as partially socially constructed</p>	<ul style="list-style-type: none"> · To move from a reactive disaster relief oriented approach to one that is more proactive; · An increased commitment to preparedness, mitigation and prevention actions by various sectors including agriculture sector as majority of the population in the district depend on agriculture based livelihoods;
<p>Be Prepared and Ready to Act</p> <p>Strengthen disaster preparedness for effective response at all levels</p>		<p>To beginning organising stakeholders for well-preparedness</p>	<ul style="list-style-type: none"> · To define the roles and responsibilities of various stakeholders in Disaster Risk Management at district level including for the DAO, DDC, Nepal Army, Nepal Police, DADO, District Livestock Service Office, District Forest Office(DFO) District Soil Conservation (DSCO) District Irrigation Office(DIO) District Education Office(DEO) District Health Office(DHO), Women Development Office(WDO) I/NGOs, Local representatives etc., (A complete list is annexed)

1.3. Methodology

1.3.1. Framework for DDRMP Preparation

The DDRMP of Udaypur frames itself within the national development plans. This national development plan recognizes disasters as one of the major impediments of the national development process, and tries to address the disaster risk management tasks by devoting one separate chapter on the topic.

The Udaypur DDRMP supports and extends the international DRM framework, embodied by the International Strategy for Disaster Reduction's Hyogo Framework national strategy in the form of the National Strategy for Disaster Risk Management in Nepal. The draft of the Disaster Management Act jointly submitted by the Nepal Centre for Disaster Management (NCDM) and OXFAM GB in 2007 has also been taken on board. The guidance notes for District Disaster Preparedness Planning Workshop May 2009, as endorsed by the Ministry of Home Affairs, has also been set as a binding document for the preparation of the DDRMP.

The contingency plans prepared by some District Disaster Relief Committees (DDRCs), the Cluster Approach of the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) and lessons learned by several International Non-Governmental Organizations (INGOs), UN Organizations and NRCS have also informed the strategy taken in organising this plan.

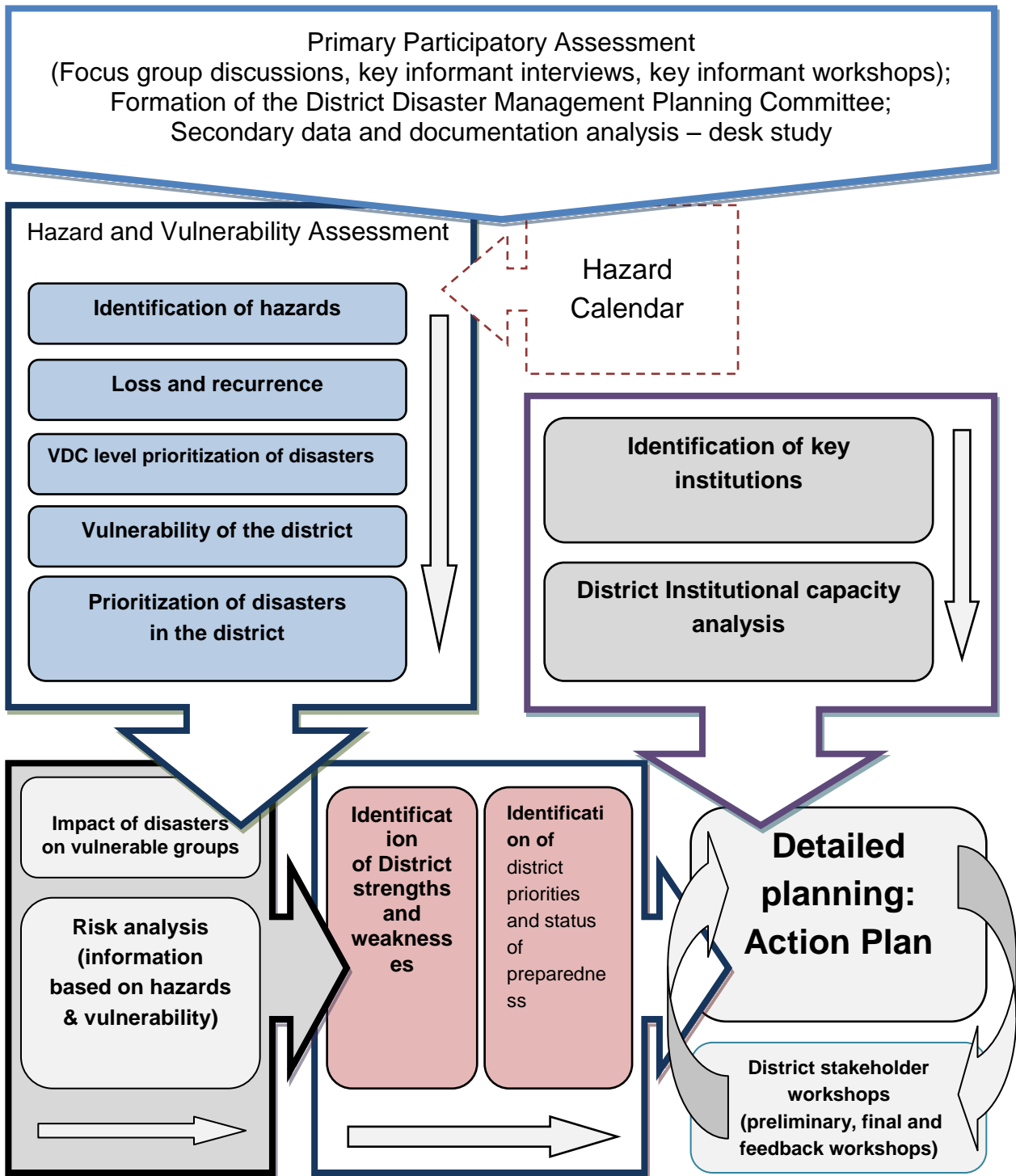
A number of existing documents by FAO also shaped this document. Existing DDRMPs for Chitwan, Nawalparasi, Banke and Bardia, and VDC level disaster management plans from Chitwan and Nawalparasi offered some lessons in effective planning. The baseline study report of the Udaypur (FAO 2009b) and the hazard mapping exercise (FAO 2009a) offered valuable contextual analysis of the district which has been integrated into this document.

1.3.2. Building the picture – Assessing the disaster context in Udaypur

The core output of the DDRMP is the District Disaster Management Action Plan (DMAP). This is list of strategic activities recommended for Udaypur to address priority areas of the NSDRM and the critical capacity gaps at the district level. The Action Plan is organised first according to prioritised hazards. It is then organised to follow the NSDRM according to whether activities are to be conducted in 'normal' times as prevention, mitigation and preparedness efforts, during emergency as response and relief efforts, or post-emergency to strengthen rehabilitation and recovery. Finally the activities are organised according to key sub-areas of action.

In order to inform the Action Plan, a wide assessment of Udaypur's disaster context was conducted. The important steps of this process are summarised through the subsequent graphical presentation.

Table 2: Steps to assessing the disaster context of Udaypur



1.3.3. Data collection methods

Both secondary and primary data sources have been used in preparation of the DDRMP. The primary methods are mainly appraisals and qualitative analysis. The main tools used are described, followed by a summary of the methodological sections.

Tools Used for Primary Information Collection

a. Key Informant Interview and Focus Group Discussion: The method of Key Informant Interview (KII) was used for the purposes of hazard, vulnerability and risk assessment and capacity assessment of the institutions and communities. For detail planning purpose, the individual line agency chiefs were approached for capacity assessment purpose. Key informants were also relied on for constructing hazard calendars and vulnerability profiles. Focus Group Discussion (FGD) were used for assessing the communities' capacity to access the services provided by the relief agencies and their inherent capacities to withstand any future disasters.

b. Checklist: Checklists were primarily used for assessing the capacities of the service providers and existing gaps in relation to disaster preparedness, mitigation and prevention. The assessment also focuses on the perceived gaps in relation to emergency response.

c. Hazard Calendar: The hazard calendar has been prepared based on the past experience of hazards in a year. The months of occurrences are determined based on the feedback from community level discussions and from the key informant interviews. The hazard calendar is meant to help the DRM actors during the implementation of activities.

d. Field observation: A group of experts comprising of the members of the plan facilitation team visited selected VDCs and the vulnerable communities and observed the ground realities of hazards and vulnerabilities. Informal interactions with local communities elicited information on historical timeline of hazards and its impacts, past interventions and indigenous DRM good practices undertaken by the communities.

Participatory Hazard Assessment

Adapting the Participatory Vulnerability Analysis (PVA) methodology, participatory hazard assessment was used for identification of hazards in the district. The disaster management plan was then developed with a focus on prioritized hazards. However, there are specific activities that apply to all hazards identified in the district.

i. Identification of Hazards: Brain storming sessions and open discussions were conducted to construct historical timeline of disasters experienced in the district. The historical time line of the disasters concerned on the damage and losses suffered in terms of human, land, livestock, crops and physical infrastructures. The listing of the hazards thus derived was used in the next step of loss and recurrence analysis.

ii. Loss and Recurrences: In this step, damage and losses due to the disasters were analyzed in terms of their severity and frequency of repetition the losses were viewed in terms of human lives, physical infrastructure, land, crops, livestock and natural resources. The scores of High (H), Medium (M) and Low (L) were assigned to both loss and respective recurrences.

The loss of human lives scored the (H) whereas (M) and (L) were assigned to other losses with descending order of their importance to the communities. A period of 1 to 2 years was considered for the frequency of (H), whereas around 5 years and 10 years of recurrences were considered for the score of (M) and (L), respectively. With the exception of earthquake, hazardous event not occurred in the past thirty years were assigned the value of zero.

iii. VDC level Prioritization of Disasters in the District: This step tried to ascertain the extent of loss in each VDCs of the district against the past disasters. This assessment was done on two grounds: the extent of loss itself and the capacity of the community to withstand the particular risk. This assessment was also assigned the scores of (H), (M) and (L). These scores were successively assigned with the growing capacity of the community against the particular risk and growing extent of loss; i.e.

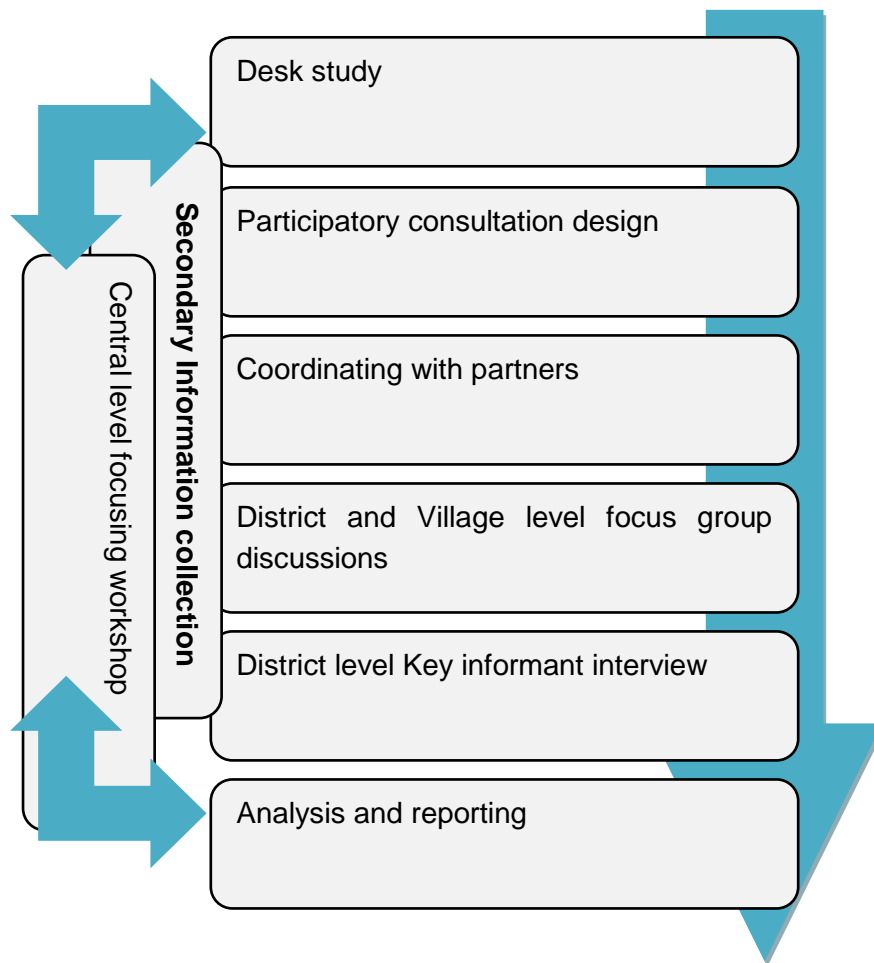
(L) signifies lower prioritization of the hazard in a particular VDC means greater capacity of the community against that hazard and lesser loss.

iv. Vulnerability of the District: In this PVA analysis, an exercise is done to assess the vulnerability of the district as a whole in terms of potential loss of human lives, physical infrastructure, land, crops, livestock and natural resources in case of the disasters listed in previous section. The estimations are given the scores of (H), (M) and (L). These estimations are done on the basis of potential impact of the disasters and the perceived likelihood of future occurrence. The profile of the local communities and their livelihood patterns were considered as part of the assessment, considering livelihood assets and their risk to identified hazards. In this exercise, the score of (H) signifies the High vulnerability against the particular disaster which has high potential of incurring losses and communities have low capacity in facing the disaster. Other scores are assigned with similar logical estimations.

v. Prioritization of the Disasters in the District: Previous exercises have tried to determine the disasters causing greater losses in the district, have a trend of higher recurrence; and those with high potential for incurring losses in future. This step uses the outcomes from the previous exercises (A), (B) and (C) to prioritize the disaster risks in the district. The list of district level participants involved in these exercises is attached as Annex 4.

In this exercise, the frequency of (H), (M) and (L) from exercise (A), (B) and (C) are added to determine the severity of the disasters; the highest score would correspond to the highest priority ranked disaster in the district, and so on. The exercise has prioritized five disasters that would have to be taken into consideration in the action planning for prevention and preparedness, response (rescue and relief) and recovery (rehabilitation, reconstruction) measures against those disasters. However, there are several roles and responsibilities of the key actors can contribute to management of other disaster risks.

Table 3: Information collection and management



Impact and Vulnerability Analysis

Discussion at the district and VDC level which formed part of the Hazard Assessment included consideration of the specific impacts of hazards and the kind of social groups particularly vulnerable to the hazards. The analysis of specific impacts and differentiated vulnerability within the district then fed into the detailed preparation of the Action Plan, providing critical inputs to inform the best approach to mitigate impact and protect vulnerable groups. Further organisation of this section was carried out during a central level workshop with key disaster specialists and district informants, and supported by secondary literature (FAO 2009a, 2009b).

Institutional Identification and Capacity Assessment

A critical feed into the detailed Action Plan process were the results of institution identification. This activity was an integrated part of the DDC level planning for the Action Plan, and was further refined in central level workshops with disaster specialists and district level focal agency representatives.

It was not part of the scope of the DDRMP preparation process to conduct in-depth institutional analysis of the organisations recommended as key players in this plan. However, through the DDC level workshops, as well as the central level focus activities, considerable synthesis of existing information about key institutions and their strengths and weaknesses in terms of disaster management was conducted and is presented as part of the plan for preliminary guidance on institutional capacity. The sources of the information range from VDC and DDC informants’ perspectives, UN OCHA’s Cluster Approach in Nepal, and FAO’s baseline study in the district (2009)

Identification of weaknesses and key priorities of the district

As part of the document preparation process, the central level focus workshop with disaster specialists and district level representatives allowed the highlighting of critical district level weakness in DRM

and key priority areas for action. This section provides a useful introduction to the key areas that the more detailed Action Plan focuses on.

Detailed Planning

The method of Key Informant Interview (KII) and district level workshops were used for the purposes of detailed planning. The interviews with government line agencies, service institutions, business, non-governmental organizations, other supporting agencies (such as relief providers) and armed, security forces formed the information source for planning.

The detail planning focused on different aspects of disaster risk management agenda that is fleshed out into DDRM Plan consisting of policy, institutional, organizational, human resource development, livelihood improvement and technical elements. The final form of the Plan intends to fully integrate DRM into the ongoing governance, business, and economic activities in the district. A sample form used in the detail planning is attached in Annex 5.

Secondary Data Collection and Analysis

The baseline study of the district conducted for the Food and Agriculture Organization by Practical Action in 2009 and the FAO reports by the National Development Research Institute (NDRI) were extensively used (FAO 2009a, 2009b). Other secondary data sources include reports from various line agencies in the district and in Kathmandu based organizations like National Society for Earthquake Technology (NSET), Nepal Red Cross Society (NRCS), National Agricultural Research Council (NARC), Ministry of Home Affairs (MoHA), Ministry of Agriculture and Cooperatives (MoAC), Department of Agriculture (DoA), Department of Hydrology and Meteorology (DoHM) and Central Bureau of Statistics (CBS). Available information was collected and collated by experts. Information from different sources were triangulated and verified for their precision. Information from primary and secondary sources was compared for its relevance and most reliable sources were fed into the further analysis purposes.

1.4. Layout of the Plan

The DDRMP document is arranged into four parts.

Part 1 is the introduction, detailing the rationale behind the DDRMP, the objectives and the methodology used to put together the plan.

Part 2 traces path down from the international and national strategies, plans and policies for disaster risk reduction and management to the district context, setting up the framework by which the DDRMP is organised.

Part 3 offers the substantive content of the DDRMP. First introducing the district of Udaypur in broad terms, this section then follows the step-by-step process used in the district consultations to develop the detailed Action Plan. Part 3 is divided into a *Hazard Analysis*, an *Impact and Vulnerability Assessment*, and a *Capacity Assessment* subsection before delivering the Action Plan, the detailed roles and responsibilities of key actors to address the gaps for better disaster risk management.

Part 3 offers streamlined activities leading to the Action Plan. The *Impact and Vulnerability Assessment* presents an easy-to-read assessment of the key impacts and critically vulnerable social groups for each of the prioritized hazards. Parts of the *Capacity Assessment* offer brief profiles and analyses of the key institutions recommended in the Action Plan as lead organisations. District level stakeholders from relevant service institutions were surveyed to establish the availability and status of various resources at the district and subdistrict level. Finally, as part of the Action plan, a summary of the critical *District Weaknesses and Key Priorities* provides an overview of key areas dealt with in the Action Plan, and the *Extending the National Priorities* matrix shows how the district level Action plan corresponds to the national priorities.

Part 4 provides annexes relevant to details of consultations, data collection formats and standard operating procedures in line with national disaster risk management strategy.

1.5. The DDRMP in Application

1.5.1. DDRMP as a Planning Document

The DDRMP in its present form can only be used after its validation and endorsement by the district development council. Even after that, it needs a transparent mechanism by which the implementing agencies including the VDCs have a guideline for coordinating with different stakeholder agencies. These two initial fundamental activities should be starting point from which other recommended activities are implemented.

1.5.2. Assumptions of the DDRMP

The DDRMP preparation process has encompassed a wide range of stakeholders from the communities, government, non-government and representatives from civil society in the district. The planning is an outcome of a participatory consultation exercise with these diverse actors, focusing on disasters with the greatest impacts on agriculture and natural resources. However, as the analyses in the plan make clear, impacts of disasters were considered along broad terms, following the priority sectors identified in the NSDRM.

The plan is light on quantification of risk, vulnerability, impact and capacity. This is for two reasons. First the choice of data collection methodology, encouraging broad stakeholder participation, is not suited to supporting numerical data collection. Secondly, statistical data capacity limitations across institutions in Nepal, from the national level downwards, makes quantitative analysis of broad social phenomena often unfeasible. Background data on district and national level is not always as up-to-date as desired. This is again due to data collection and management limitations and accessibility issues in Nepal. Emphasis was given to cross verify the qualitative data collection with a diverse group of stakeholders and supported with data. Recommended activities are a result of a time-specific set of consultations, and reflect available resources, technology and circumstances at the time. Unforeseen changes may lead to some activities not being advisable in the future and new activities coming into need.

Wide participation at the local level and the district level advised the hazard identification process. Implicit discussion of impacts, vulnerability and capacity further informed detailed action planning. However the organised presentations of impacts, vulnerability and capacity in the subsequent sections integrate input not only from the district consultations but also central level workshops and secondary sources. The plan targets vulnerable communities as a whole and does not recommend many activities designed to address intra-community asymmetries and differentiated vulnerability. The budgetary requirements for the activities have not been included in the planning exercises as they will differ at the time of implementation.

2. DDRMP in context

2.1. Background

2.1.1. Risk of Disasters in Nepal

Nepal faces a variety of natural hazards, which every year causes significant number of casualties and loss of properties. Disaster caused by flood, landslide, earthquake, epidemics, fire drought, famine, hailstorm, and few other hydro-meteorological events are most frequent. The fragile Himalayan geology, mountainous topography and variable monsoon rainfall are the primary factors responsible for various hazard events in Nepal.

High population growth with haphazard migration and encroachment into marginal land, ecologically sensitive areas, deforestation, agricultural activities on steep slopes, lack of disaster awareness and preparedness have resulted in vulnerability of natural resources and communities. These hazards mixed with vulnerabilities have contributed to turning the hazard events into disasters with large numbers of casualties and huge damage and loss of properties.

According to research carried out in past (Dis-inventar; FAO 2009) to investigate average annual losses from different types of environmental disasters from 1983 to 2000, about 6,000 deaths and 13,500 million rupees of property loss have been reported. Precipitation plays a critical role in creating damaging hazards in Nepal. Flood and landslides, triggered by precipitation patterns contribute the most of all hazard groups to loss of life and property in Nepal. Glacial lakes are growing, with the risk of glacial outbreak floods (GLOFs) increasing due to glacial melt.

The studies by UNDP and the World Bank has put Nepal in the ranked of 11th in terms of risk from earthquake and 30th in terms of flood risk (UNDP/BCPR 2004). Another study conducted by World Bank has classified Nepal as one of global “hot-spots” for natural disaster (World Bank 2005).

2.1.2. National Scenario of Disasters

Traditionally the data on loss by disasters were collected by Nepal Police and they were primarily focused on loss of lives and properties and only secondarily on loss of crops and livestock. A report produced by the Ministry of Home Affairs (2009) highlighting the historical data on loss of lives from the major disasters in Nepal from 1983 to 2004 shows that in the last 22 years more than 21 thousand people had lost their lives due to various disasters. The data base spanning from 1983 to 2004 showed the greatest loss of lives were from the epidemics (11912 individuals) followed by flood and landslide (6843 individuals).

The Disaster Information Management System (DIMS) using Dis-Inventar, compiled and operated by NSET with initial support from UNDP Nepal, states that there have been total 15,388 events of large, medium and small size disasters throughout the country. The summary of the Dis-Inventar database Table 4a is presented below, clearly reflecting that Nepal is suffering from frequent natural disasters.

Table 4: Summary of Disaster Events between 1971 and 2007 in Nepal²

Events	# of events	Deaths	Population Affected	No. of Buildings Damaged/ Destroyed
Flood	2720	2936	3,367,974	154,104
Landslide	2184	3987	479,972	25,451
Earthquakes	94	873	4539	89,020
Fire, Forest fire	3978	1125	228,456	66,395
Epidemics	3129	15,741	461,952	-
Drought	152	-	1,512	-
Cold wave	192	298	1453	-
Heat wave	31	25	261	-
Famine	20	2	83,902	-
Avalanche	90	217	1,012	28
Other Hydro-meteorological	2123	1166	281,661	9,144
Others	675	886	13,868	1,781
Total	15,388	27256	4,926,562	345,923

² Source: Dis-Inventar Database, NSET

2.1.3. Agricultural Loss due to Disasters

The effects of disasters have been most prominent in agricultural production in Nepal, according to studies carried out by the Department of Hydrology and Meteorology (DHM). The information collected by District Agricultural Development Offices (DADO) and District Livestock Services Office (DLSO) show losses by disasters mainly on crops and livestock. The following table (Table 5) highlights some major losses in agriculture sector by disasters caused by unexpected changes in climate in recent years, at the national level.

Table 5: Major Losses in Agricultural Sector by Natural Disasters³

SN	Particular	Year				
		2003	2004	2005	2006	2007
1	Paddy (ha.)	115000	6967	116505	3585	109922
2	Maize (ha.)	4435	954	1293	20	47
3	Millett (ha.)			500	419	
4	Fish (lb.)	985 lb	14 lb	411lb		
5	Livestock (no.)	4700		1295		

Although definitive trends in aggregate precipitation have not been determined, there is evidence of more intense precipitation events. GLOFs could also destroy hydro-projects while causing floods and landslides. On the other hand, glacier retreats also mean contracted flow of water during drier seasons. Therefore, because of climate change and the rising temperatures, Nepal could face drier phases during dry seasons with wetter monsoon with chances of flooding and landslides during rainy seasons with subsequent impacts on agriculture and livelihoods.

In 2004, MOAC estimated damage to major agricultural crops by flood to have been in a region of 111,654 ha. A total of 586 VDCs were affected by the flood which cost lives of 180,282 (

Table 6). There is a clear discrepancy between the number of lives lost reported by the MoAC (180,282 individual) and the Des-Inventar Database), NSET (154,104 individual) of Table 4.

**Table 6: Status of flood damage on major crops in Nepal during 2004
(Bimonthly Bulletin of Crop and Livestock Situation, ABPSD and MoAC 2004)**

Description	Area (ha.)	Rice (ha.)	Maize (ha.)	Sugarcane (ha.)	Veg.(ha.)	Fishes (lb.)	Others (ha.)	Families
Flood drowned	83884	73016	1468	5535	5129	1238	459	180282
Sand covered	19612	17815	375	632	740	42	7.8	
River cutting	8158	6991	477	345	301	39	5	
Affected VDCs	586							
Affected Area	111654							

The data in

Table 6 shows the implications that climate change can have on Nepalese agriculture and even on food security. Because the Nepalese economy depends heavily on agriculture, it is very sensitive to climate variability and change. The agriculture sector provides employment to over 65% of the population. Hydro-power is the primary source of electricity Nepal would be affected by climate change impacts at several fronts: hydropower, irrigation, domestic water uses and disasters.

2.1.4. Disasters and Climate Change

Climate change is increasingly being recognised throughout the world and in Nepal as a critical threat to future economy and society. In Nepal, which emits negligible quantities of climate change causing greenhouse gases (less than 0.05% of global totals per year), the emphasis is on adaptation. Nepal's geographical location and topography makes it particularly at risk to climate induced hazards, and its socio-economic and political circumstances create high vulnerability to these hazards.

³ *Source:* Bimonthly Bulletin of Crop and Livestock Situation, various years. ABPSD, MOAC

There is thus considerable momentum at present in Nepal to build its resilience to climate-induced hazards through facilitation of national, district and local level adaptation. The Government of Nepal's Ministry of Environment is in the final stages of completing an expanded National Adaptation Programme of Action (NAPA). As part of the NAPA preparation process, Thematic Working Groups (TWGs) comprising of diverse stakeholders and experts were put together for each priority sector to delivery in-depth technical reports on adaptation needs for different sectors. Furthermore a framework for developing Local Adaptation Plans of Action (LAPAs) was also put together, and these are now in the design and piloting phase.

Other climate change adaptation initiatives are active in Nepal, with Government departments setting up climate change units and the Government developing climate change protocols. Other major donors, the Asian Development Bank in particular, are committing funds to mainstreaming climate change resilience in Nepal. International and national non-governmental organisations are also implementing their own programmes, climate-proofing their existing initiatives, and investing in impact assessment research.

A fundamental limitation to climate change impact assessments is that at the level where the assessments are contextualised enough to be practical, it is not possible to identify conclusively climate change induced hazards and impacts from the ever-present hazard risks that exist independently of climate change. Furthermore, although it is possible to show that key meteorological and climatic indicators have trended consistently with global climate change at the local level, through analysis of meteorological data, it is not possible to reliable forecast future changes and resulting impacts.

In view of this, this document integrates climate change considerations into wider disaster risk management, and climate change adaptation into more general disaster risk reduction (DRR) and resilience building.

2.2. Institutional Responses to Disasters

2.2.1. International Framework and conventions

Hyogo Framework of Action 2005-2015

HFA 2005-2015 is the consensus strategy adopted by 168 member countries during the UN World Conference on Disaster Reduction in January 2005 in Kobe, Japan for spearheading the task of disaster risk reduction globally. The HFA 2005-2015 was developed based on the gap analysis in the national and global efforts in Disaster Risk Reduction (DRR) in the preceding decade from 1994-2004. Nepal has expressed its commitments to DRR by signing the HFA.

The expected outcome of the HFA is the substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries. The strategic goals set by the HFA 2005-2015 are: a) Integration of disaster risk reduction into sustainable development policies and planning, b) Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards, and c) Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery program. It recommends five priorities for Action, namely,

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;
2. Identify, assess and monitor disaster risks and enhance early warning;
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
4. Reduce the underlying risk factors;
5. Strengthen disaster preparedness for effective response at all levels

Other international conventions playing a key role in international and national disaster risk management strategy are the United Nations Framework Convention on Climate Change (UNFCCC), tasked with international cooperation on climate change and the United Nations Development Programme Millennium Development Goals (MDGs), guiding national development plans and specifically disaster vulnerability and risk reduction. The South Asian Association for Regional Cooperation (SAARC) also integrates natural disaster management into their environmental

coordination. Particular emphasis is placed on mainstreaming disaster risk reduction cooperation between SAARC member countries so that economic development is not undermined.

National Acts and Legal Provisions

The natural calamity Relief Act 2039 promulgated in 1982 A.D. (2039 B.S.) provided a legal basis for the first time in Nepal for disaster risk management. This Act allocated primary responsibilities to the government for preparing and responding to disasters in Nepal.

The Natural Calamity (Relief) Act 2039 (1982) was very progressive when promulgated, however, although amended twice, it has failed to internalize the concept of development and paradigm shift in disaster risk management from a reactive intervention in the form of relief to a proactive approach of mitigation. The Act does not have any instrument to correspond to the current concept of mainstreaming disaster risk management to the efforts of national development. This Act needs to be abrogated and replaced by a new Act that could internalize all the recent concepts of disaster risk management.

This gap was in part filled by the Local Self Governance Act (1999) which promotes the concept of decentralizing disaster risk management and encourages the district authorities to address the issues primarily at the district and VDC/municipality levels. While the Act assigns responsibilities to the district level authorities, it is not followed by supporting regulations and budgetary allocation resulting in poor implementation of the ideas contained in it.

While the tenth Five Year Plan has referred to disaster management, it has not been backed by suitable legal instruments, either in the form of acts or ordinances. In fact, even Nepal's land use policy has not been able to arrest flood plain encroachment in rural and unsystematic town planning in the urban areas. Thus, a predominantly reactive approach to disasters has continued across generations among most of the relevant stakeholders rather than the less expensive option of proactive preparedness and risk mitigation.

Apart from the above-mentioned, a series of national policies and international protocols can have implications on the issues of disaster risk management in Nepal, and vice versa.

Institutional Structure

The Natural Calamity (Relief) Act 2039 (1982) provided a disaster management administrative structure in the country. The Act is still guiding the disaster risk management initiatives in Nepal and the provision of following structure has been made at different levels for disaster related works.

Central Level: At the central level, it constituted the Central Disaster Relief Committee (CDRC) with the Minister of Home Affairs as the Chair. It constitutes a 27-member apex body for disaster management. Following a disaster, the CDRC would meet as and when necessary to address the needs of the affected population and on matters related to all sectors (e.g. food, health, shelter, water and sanitation etc.). Because of the devastating effects of the annually recurrent floods, CDRC has been meeting regularly at least twice a year - before the floods to take stock of the flood preparedness status and to augment it, and immediately after to evaluate the response.

Regional Level: The Natural Calamity (Relief) Act, 1982 provides for the establishment of regional committees as and when required. During the 1988 earthquake affecting eastern Nepal and the 1993 floods in south-central Nepal, Regional Service Centre established respectively at Biratnagar and Simara provided relief coordination demonstrating the usefulness of setting up regional committees to coordinate relief activities related to more than one district. However, these centres were closed after the emergency operations were over.

District Level: District Disaster Relief Committees (DDRC) is a permanent outfit at the district level to coordinate relief and preparedness. DDRC is chaired by the CDO who is the main administrative functionary to maintain law and order at the district level. Other members to DDRC are the representatives of the district level offices of the various public sector agencies such as district water supply office, district education office and district health office. LDO plays coordinating role with elected bodies at the district level, is the member-secretary of DDRC.

National Strategies for DRM in Nepal and Strategic Actions

Nepal has recently started two very important initiatives, namely (a) formulation of the National Strategy for Disaster Risk Management (approved by the cabinet in October 2009) and, (b)

preparation of a new legislation for Disaster Risk Management to replace the existing Natural Calamity (Relief) Act, 1982. Both these initiatives are focused on internalizing the shift from a response-based national system to emphasizing the disaster risk reduction and effective preparedness approach.

With its national vision as Disaster-resilient Nepal, the NSDRM (2009) endeavours to facilitate the required change in order to achieve the goal of disaster resilient Nepal by providing guidance for improving the policy and legal environment, and by prioritizing the strategic interventions.

The NSDRM, developed as a consensus by a participatory process involving all group of stakeholders, government, non-government, academic and communities, private sector and the international development partners, aims to serve as a guide to all, and at all levels, in planning and strategizing disaster reduction works or their integration in national development works processes in Nepal.

The floods/flash floods and landslides constitute the principal hazards in Nepal and earthquake is a primary potential hazard. Hence, the strategy specifically encompasses components to address these as well as other hazards.

2.2.2. Implementation Strategy and Follow Up

The NSDRM rests the primary responsibility on the Government of Nepal for the implementation and follow up of the strategic goals and priorities for action included in this National Strategy.

The proposed National Authority for Disaster Risk Management (NADRM) will be the agency primarily responsible for implementing the specific elements of this strategy and facilitating the implementation by other stakeholders, and monitoring the implementation of the overall national strategy. The NPC is to be responsible to monitor the integration of DRR into the development programs. The responsibility of civil society monitoring DRR should be a part of the monitoring process. Following implementation strategy has been proposed by the NSDRM.

Table 7: Implementation of the strategy: Responsibility and Use by Different Stakeholders

Implementation of the Strategy: Responsibility and Use by Different Stakeholders	
NCDRM	– Establish and direct NADRM
NADRM	– Overall responsible and accountable for the implementation of the Strategy including establishment of funding mechanisms for DRM implementation
GoN Institutions	– Regulate effective service delivery including disaster response & mitigation; risk free infrastructure construction & other disaster reduction – A guide on incorporation of disaster risk reduction in all their policies, legislations and priority programs
Local Government	– Guide in planning, programming and implementing towards implementing mainstreaming of disaster risk management at district, municipal/VDC, and community levels. – Encourage decentralization of DRM initiatives up to the community and household levels
Corporate Sector	– Strategy would help protect business losses due to disaster impact – Provide better avenues for corporate social responsibilities – Higher knowledge and disaster awareness would generate greater business opportunities
National and International Organizations, NGOs and CBOs	– Help to achieve higher security for development initiatives against natural hazards – Enhanced opportunity for resource mobilization for DRR works in respective areas of competence
External Development Partners (Donors)	– Guide for investment in DRM sector in Nepal – Enhanced protection of resources committed for long term development of Nepal

2.3. Linking the National Strategy to the District Context

2.3.1. Core elements of the National Strategy for DRM in Nepal

The NSDRM integrates the HFA's five Priorities for Action as guiding areas for identifying national level strategic priority activities.

The key priorities of the NSDRM reflect overall goals of the HFA to systematically incorporate risk reduction approaches into the implementation of emergency preparedness, response and recovery; to develop and strengthen institutions, mechanisms and capacities to build resilience to hazards; and to integrate disaster risk reduction into sustainable development policies and planning.

Within the 5 Key priority activities in different priority sectors (Table 8) NSDRM has identified twenty nine (29) strategic activities specific to Nepal. These strategic activities, together with their corresponding priorities are listed in Annex 1.

National Strategy as a framework for the DDRMP

Table 8: National Strategy Priority Sectors

National Strategy for Disaster Risk Management Priority Sectors
Agriculture and Food Security
Health
Education
Shelter, Infrastructure, and Physical Planning
Livelihood Protection
Water and Sanitation
Information, Communication, Coordination and Logistics
Search and Rescue, and Damage and Needs Assessment

It is essential that a practical district level plan must respond to the priorities at the national level. This DDRMP uses the NSDRM as its organising framework. It was decided however not to impress the NSDRM too strongly during the district level consultations to avoid 'problem closing' brainstorming and planning within a rigid framework. The activities in the action Plan are thus not strictly categorised according to the national level strategic activities. However, the matrix provided at the beginning of the Action Plan, under the heading of *Extending the National Priorities* provides an instructive picture linking the national priorities to the recommended district level priorities. Elsewhere the National Strategy priority sectors are used to organise the hazard impacts.

3. Udaypur DDRMP

3.1. Introduction to Udaypur

3.1.1. Geo-physical Settings

Location

Udaypur is one of the mid-hill districts of Sagarmatha Zone of Eastern Development Region. Situated on the side of Triyuga River, Gaighat is the headquarters of the district. The district consists of 3 constituencies, 11 Ilakas, 1 municipality and 44 VDCs.

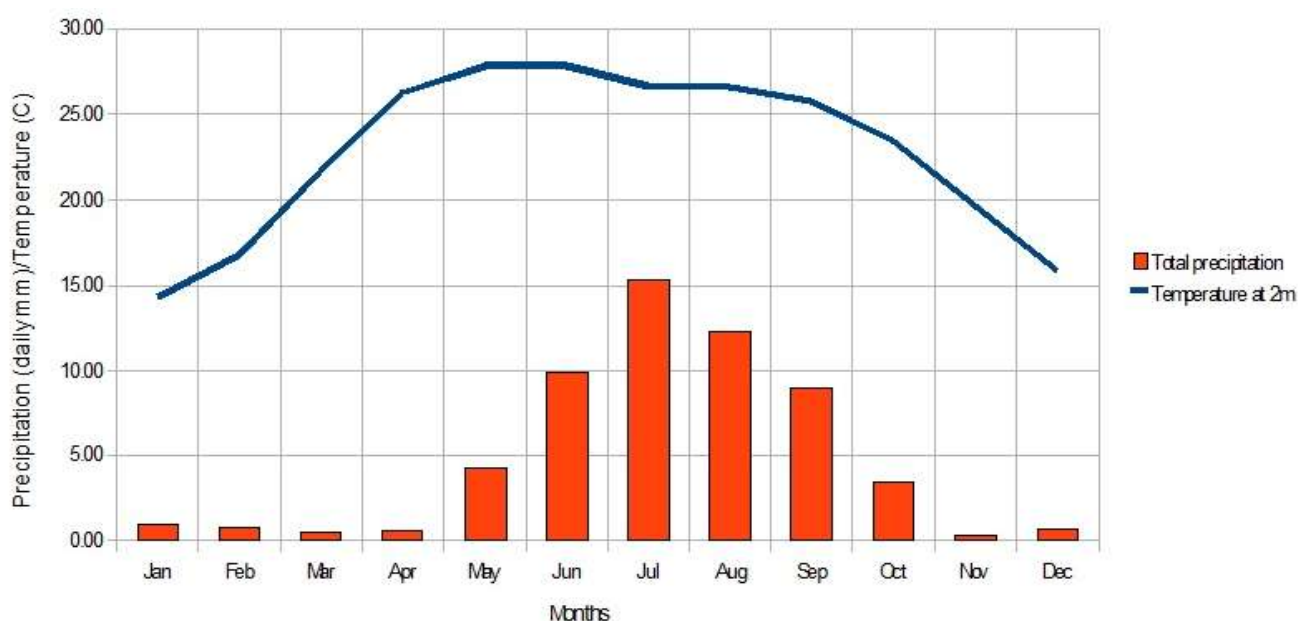
Climate

Tables 9 and 10 provide a 20 year aggregate summary of Udaypur's climate over its Gadhi station (26.560, 86.310). Both parameters are outputs of the European Centre for Medium-range Weather Forecast's ERA-Interim reanalysis model (Spatially and temporally consistent), drawing from Gadhi and nearby field stations and further international data (including satellite data).

Table 9: Udaypur climate

Months	Mean Temperature 2pm (C)	Precipitation (mm)
Jan	14.26	1.05
Feb	16.78	0.83
Mar	21.66	0.44
Apr	26.29	0.61
May	27.89	4.31
Jun	27.82	9.81
Jul	26.69	15.28
Aug	26.61	12.26
Sep	25.79	8.98
Oct	23.44	3.43
Nov	19.59	0.37
Dec	15.83	0.66

Table 10: Udaypur Climate (1969-2009 monthly aggregates)



Physiographic divisions of Udaypur

This inner Terai district (low mid-hills) covers elevations between 360 metres to 2310 metres above sea level. Different topography, geology and altitude have established three distinct physiographic zones in the district as mentioned below.

1. Mahabharat hills: Mahabharat hill range in this district stretches from Sunkoshi River on northern side and links to inner terai and in some stretches, to Churiya hills. About 60% of the district is covered by middle hills with steep slope and rugged mountain topography. From nearly 1100 m to 2310 m, this land consists of high hills like Lekhani, Majhkharka, Rautapokhari.

2. Churiya hills: The Churiya hills stretch across elevations between 550 m to 1100 m. reaching from the upper Mahabharata to Terai land in the south leaving some plain inner Terai land in between. It occupies about 9% of land of the district and consists of small valleys of inner Terai including Nepaltar, Murkuchi and Mainatar as well as plains like Bahuntar, Bhuttar, and Hardeni. These valleys are situated on Panchawati, Rauta, Bayaldanda and Tawashri VDC respectively.

3. Inner Terai region: This region occupies around 31% of the district at elevations between 360m to 550 m above sea level. This region is mainly situated on the border of Triyuga and Tawa River. Where inner Terai exists the Churiya range lies to the south of this region. This region is highly affected by the problem of river cutting or floods. Major places of district like Gaighat, Katari and Beltar lie in this region.

3.1.2. Social Fabric Configuration

Population composition

The total population of Udaypur district is 287,689. Out of the total population, 143,756 are male and rest are female (CBS, 2058). Major ethnicities in the district are Chhetri (21.01%), Rai (17.09%), Magar (14.4%), Tharu (8.3%), Brahmin (7.31%) and others (32%). The total HH number is 51, 603 and average population size per HHs is 5.58. The population density per sq. km is 167. The literacy rate is 53.31 percent (CBS, 2001).

3.1.3. Natural and Historical Landmarks

Some important sites and events with potential for tourism at risk from Udaypur's disaster context:

Historical Sites and Social Events

- Tapti Pokhari
- Udaypurgadhi
- Giddhagaya
- Rajdaha
- Chikretham
- Falls (Manedanda waterfall, Chatang waterfall, Batase fall, Runche waterfall)
- Remains of Belka palace
- Triveni Mela
- Baraha Area
- Chaudandigadhi
- Rautapokhari

Sites with Religious Importance

Besides these other religious tourism areas are Basaha Than, Mainarani Temple, Mahadkali Temple, Bow of Bhimsen, Khat Temple, Kakani Mai etc.

Tankela cave, Batpati cave, Jhak cave are popular tourist destinations. If these sites are conserved and advertised properly than this district could have possibilities for internal as well as international tourism.

The process of degradation and the context of hazards may put these important sites at risk. Separate study on the vulnerability of these sites and protective measures are suggested.

3.2. District Disaster Scenario

3.2.1. Hazard analysis: Prioritization of hazards in the District

(i) Identification of Hazards

The ranking done by Participatory Vulnerability Assessment (PVA) exercise with district level stakeholders resulted in the following listing of hazards. The exercise was based on the historical time line of disasters and present vulnerability of the VDCs towards respective hazards.

Table 11: Identified Hazards in the District

SN	Hazards	SN	Hazards
1	Flood	7	Attack by wild animal
2	Landslide	8	Earthquake
3	Fire	9	Lightening
4	Drought	10	Storm (with rain)
5	Pest and disease in crops	11	Hailstorm
6	Coldwave	12	Indusdtrial pollution
		13	Snake bite

(ii) Loss and Recurrences (A)

Analysis of losses due to disaster and its repetition are shown in the following table. The numbers correspond to the Hazards as mentioned in the previous

Table 12: Analysis of losses due to disasters and recurrence

Hazards	1	2	3	4	5	6	7	8	9	10	11	12	13
Loss	H	M	L	H	M	M	L	M	L	L	L	L	M
Repetition	H	H	H	M	H	H	H	L	H	H	M	L	L

The above analysis shows that the losses are high (H) due to Flood and Drought with high recurrence of flood over drought. The losses due to landslide, pest and disease, cold wave, earthquake and snakebites are medium (M) with high recurrence of incidences in the case of landslide, pest and disease and cold wave.

(iv) VDC level Prioritization of Hazards in the District (B)

Table 13: Udaypur VDC level disaster risk

SN	VDC	Hazards												
		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Mainamaini	L	H	M	L	L	L	L	L	L	L	L	0	L
2	Katunche babalal	L	M	M	L	L	L	L	L	L	L	L	0	L
3	Rampur	H	L	M	L	M	M	L	0	L	L	L	0	M
4	Tapeshwori	H	0	M	L	M	M	L	0	L	L	L	0	M
5	Basaha	M	L	M	L	M	M	L	0	L	L	L	0	M
6	Choudandi	L	H	M	L	L	L	L	L	L	L	L	0	L
7	Siddhipur	M	M	M	L	L	L	L	L	L	L	L	0	L
8	Beltar	H	0	M	L	M	M	L	-	L	L	L	0	M
9	Sundarpur	H	L	M	L	H	M	L	0	L	L	L	0	M
10	Hadiya	H	L	M	L	M	M	L	0	L	L	L	0	M
11	Jogidaha	H	L	M	L	M	M	L	0	L	L	L	0	M
12	Shaune	L	H	M	L	L	L	L	L	L	L	L	0	L
13	Triyuga Municipality	H	L	M	L	H	M	L	L	L	L	L	M	M
14	Jalpa Chilaune	L	H	M	L	L	L	L	L	L	L	L	M	L
15	Khanbu	L	H	M	L	L	L	L	L	L	L	L	0	L
16	Aaptar	M	H	M	L	L	L	L	M	L	L	L	0	L
17	Pokhari	L	H	M	L	L	L	L	M	L	L	L	L	L
18	Lafagaun	M	H	M	L	L	L	L	M	L	L	L	0	L
19	Balamta	L	L	M	L	L	L	L	M	L	L	L	0	L
20	Tamlichha	M	H	M	L	L	L	L	L	L	L	L	0	M
21	Bansbote	L	M	M	L	L	L	L	L	L	L	L	0	M
22	Baraha	L	L	M	L	L	L	L	M	L	L	L	0	L
23	Jante	L	M	M	L	L	L	L	M	L	L	L	0	L
24	Bhuttar	M	M	M	L	L	L	L	M	L	L	L	0	L
25	Rauta	H	H	M	L	L	L	L	M	L	L	L	0	M
26	Nametar	M	M	M	L	L	L	L	M	L	L	L	0	L
27	Ename	L	M	M	L	L	L	L	M	L	L	L	0	L
28	Thanagaun	L	H	M	L	L	L	L	L	L	L	L	0	L
29	Rupatar	H	M	M	L	L	L	L	L	L	L	L	0	M
30	Okhle	L	H	M	L	L	L	L	L	L	L	L	0	L
31	Lekhgauu	L	M	L	L	L	L	L	M	L	L	L	0	L
32	Barre	M	M	M	L	L	L	L	M	L	L	L	0	L
33	Dumre	L	M	M	L	L	L	L	M	L	L	L	0	L
34	Bhalaya Dada	H	M	M	L	L	L	L	M	L	L	L	0	M
35	Pachwati	H	M	M	L	L	L	L	M	L	L	L	0	M
36	Rishku	H	L	M	L	L	M	L	L	L	L	L	0	M
37	Katari	H	0	M	L	L	M	L	L	L	L	L	M	M
38	Triveni	H	L	M	L	L	M	L	L	L	L	L	M	M
39	Sirishe	L	M	M	L	L	L	L	M	L	L	L	0	L
40	Tawashree	M	M	M	L	L	L	L	M	L	L	L	0	L
41	Limpatar	L	M	M	L	L	L	L	M	L	L	L	0	L
42	Sorang chhabise	M	M	M	L	L	L	L	M	L	L	L	0	L
43	Hardeni	M	H	M	L	L	L	L	M	L	L	L	M	L
44	Mayankhu	L	H	M	L	L	L	L	M	L	L	L	0	L
45	Lekhani	L	H	M	L	L	L	L	M	L	L	L	0	L

As per this analysis, Rampur, Tapeshwori, Beltar, Mainamaini, Sundarpur, Hadiya, Jogidaha, , Rauta, Rupatar, Bhalaya Dada, Pachwati, Rishku, Katari Triveni VDCs and Triyuga Municipality are seen to be highly affected by flood. The southern part of the district is plain area so the VDCs located in the south fall in hazard zone of the flood. About 42 percent of the VDCs in the district are in hazard prone areas in terms of the flood hazard. Triyuga, Kamala, Tawa, Chuniya, Bhorle, Bengri, Barua, Siwai, Baksaha Kadmaha, Belsot and Jyamire Khola are the major rivers and streams that cause the flooding in the district. The damage of the flood occurs just raining and soon after the rainfall.

Where as Mainamaini, Choudandi, Shauane, Hardiya, Katari, Jalpa Chilaune, Khanbu, Aaptar, Pokhari, Lafagaun, Tamlichha, Rauta, Thanagaun, Okhle, Hardeni, Lekhani and Mamankhu VDCs are found to be highly affected by landslide. Apart from these, Risku, Rupatar and Sirise VDCs also fall in high hazard zone.

(iv) **Vulnerability of the District (C)**

Table 14: Vulnerability of Udaypur

Vulnerability	Hazards												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Population	H	M	L	L	0	L	L	M	L	L	L	0	M
Land	H	H	0	0	0	0	0	L	0	0	0	L	0
Crops	H	H	L	H	H	M	L	L	0	M	M	L	0
Domestic animals	H	L	L	0	0	0	L	L	L	L	L	L	L
Physical infrastructure	H	M	L	0	0	0	L	M	L	L	L	0	0
Natural Resources ⁴	M	H	0	0	0	0	0	0	0	L	L	0	0

The vulnerability of the district has been analyzed both in terms of the severity of effects by a particular hazard and the estimated quantity of loss by that particular hazard. As we see in the above scoring the flood has high effect on the population, land, crops, domestic animals and physical infrastructure with corresponding extent of quantity of loss. Similarly, landslide is also seen to have high effect on land, crops and natural resources with medium and low levels of effect on population and domestic animals respectively.

⁴ Forest, water (surface and subsurface sources), biodiversity etc

Prioritized Hazard in Udaypur District

Table 15: Final prioritization of hazards

	Hazard																										
	1		2		3		4		5		6		7		8		9		10		11		12		13		
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	
A	2	0	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	0	1	0	0	1	1	0	1	1	
B	14	10	13	17	0	0	0	45	2	6	0	0	0	0	0	22	0	0	0	0	0	0	0	0	5	0	18
C	5	1	3	2	0	0	1	0	1	0	0	1	0	0	0	2	0	0	0	1	0	1	0	0	0	0	1
D	21	11	17	20	1	0	2	46	4	7	1	2	1	0	0	25	1	0	1	1	0	2	1	5	1	20	

Legend:

A = Loss and Repetition

B = VDC level prioritization

C = Vulnerabilities

D = Total

H= High

M= Medium

The above scoring has concluded the hazards 1, 2, 5, 4 and 13 are descending prioritized for having potential of their disastrous effects. These numerical correspond to **flood, landslide, pest and crop disease; drought and snake bites** are the five top-most prioritized hazards in the district.

3.2.2. Hazard Calendar

The table presents the ‘hazard calendar’ based on participatory assessment with local communities.

Table 16: Hazard calendar for Udaypur

Hazards	Months (in AD)											
	J/F	F/M	M/A	A/M	M/J	J/J	J/A	A/S	S/O	O/N	N/D	D/J
<i>Flood</i>						▨	▨	▨				
<i>Landslide</i>							▨	▨	▨			
<i>Pest & crop disease</i>			▨	▨	▨							
<i>Drought</i>	▨	▨	▨	▨	▨						▨	▨
<i>Snake bite</i>	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨

Key	
▨	Primary data collected from community level discussion of past disasters
▨	Primary data collected from interviews with disaster risk management experts supported with secondary data triangulation

Focus group discussions at the local level informed the formation of the hazard calendar. Communities were asked to create the calendar based on past experiences of hazards over the previous 30 years. Data collected in the communities was supported by advice from local and central level experts and triangulated with secondary literature, in particular climate change impact assessments and predictions.

Floods are most prevalent during the summer monsoon months, as are landslides. Drought is reported to be prevalent at the end of the dry winter months, in the spring months from April to June. Communities did not report experiencing winter drought, reflecting that acute water shortage occurs in years when the first rains come late, rather than every year during the dry season. Nonetheless, expected climate change suggests that longer dry spells in winter in future may create increasing drought risk in the winter.

Pest and crop disease was experienced by communities mostly in early spring between March and June. Snakebites can be experienced at any time of year, but can be a particular problem during flood time when snake holes are inundated and people need to wade through water.

From the hazard calendar, it appears that a suitable time frame from towards the end of October to end of June would be more favourable for a physical implementation, whereas additional months from April to June would be crucial for farming communities.

3.3. Impacts and Vulnerability Assessment

As part of the detailed planning process consultations focused on the impacts of the prioritized hazards and the vulnerable groups in the district most affected by the hazards. These informed the choice of priority activities recommended in the action plan.

The issues discussed as part of the detailed planning is presented in Table 17 - 23. The content was organised during a wrap-up workshop at the central level with disaster experts and district informants. The categories reflect the priority sectors identified in the National Strategy.

Of particular use to practitioners is the summary of high risk VDCs for each hazard (Table 36 – in ‘hazard focus’ section), pulled from the data gathered in the hazard prioritization process. In planning specific activities recommended in the Action Plan, consideration of the high vulnerability social groups noted here can also provide practitioners with a conceptual cornerstone for their vulnerability targeting.

The Tables 17 – 23 organise all impacts according to sectoral groups.

Table 17: Impacts and Vulnerability on Agriculture and Food Security

Sector	AGRICULTURE AND FOOD SECURITY	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Damage and destruction of irrigation channels	Farmers with irrigated land
	Decrease in food security due to loss of standing crops and degradation of cultivatable land	Landless, small and medium farmers
	Washing away of standing crops and seedlings	Landless, small and medium farmers
	Integrated farming system disruption (partial loss of system)	Affected communities
	Disruption of agricultural activities	All farmers
	Silt and debris deposition destroying crops and causing land degradation.	All farmers
	Damage and destruction (washed away) of seed banks	Small and medium farmers, who have seed production program
Landslide	Damage and destruction of irrigation channels	Farmers
	Loss of cultivatable lands	communities living in vulnerable places/landslide hot spots
	Integrated farming system disruption (partial loss of system)	Affected farmers
	Agricultural calendar (farmers' activities) disrupted	Affected farmers
	Agriculture damage through debris – rocks, soil, deposition (silt)	All farmers
	Marketing access restricted by damaged roads	Commercial farmers, middle men and traders
Pest and Crop Disease	Pests affect beneficial insects populations (e.g. bees) with impact on ecosystem regeneration	Families depend on agro-forest based livelihood options specially, small farmers, indigeneous communitis
	Food supply reduction	Soaring of food prices affect on poor families.
	Low yield and production	Small and medium farmers
	Poor quality of seedling produced from nursery	All farmers
	Detrimental effect on soil health	All farmers
Drought	Reduced yields	Farmers with limited access to irrigation systems
	Reduced regeneration of soil (long term)	Farmers with limited access to irrigation systems
	Livestock stress	Livestock rearing households – especially those relying on this income source
	Reduced quality of soil (short term)	Farmers with limited access to irrigation systems
	Loss of genetic resources	All
	Increase in market prices of staple grains due to decrease in crop productivity	Landless, small and medium farmers
Drought	Increase in rodent and pest population thriving in dry weather	Small and medium farmers

Table 18: Impacts and Vulnerability on Health

Sector	HEALTH	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Injury, disability and possibility of loss of life	HHs in high risk locations, individuals with limited mobility, the young and old
	Increase in prevalence of water-borne disease	All, especially those relying on open water sources
	Psychological effect on the communities	All
Landslide	Injury, disability and possibility of loss of life	High risk location people, people of limited mobility, the young and old
	Increase in incidence of (water-borne especially) Disease	High risk location people, people of limited mobility, the young and old, sickly
Pest and Crop Disease Drought	Food supply reduction	All, especially poor
	Shift to low nutritional food	All, especially poor
	Introduction of excessive chemical content into food supply and water sources	All
	Effect on farmers applying pesticides on pests and crops without proper precautionary measures	Farm labourers
	Effects of pesticides on natural resources including fish, animals and birds which can be eaten by people	Socio-economically marginalized communities who eat meat
	Reduced supply of clean water	High water needs groups (women and children)
	Low food availability	All through supply market channels, the poor especially
	Shift to low nutritional food	Poor especially
	Increase in the prevalence of communicable sexually transmitted diseases	Illiterate and disadvantage segment of the affected communities
	Increase in dust and air pollution thus increasing the incidence of respiratory diseases	Socially disadvantaged groups especially
Snake bite	Psychological trauma	Communities geographically isolated or with limited access to health posts
		Women due to predominance of male health care workers and impact of social taboos
		Illiterate individuals with no access to information and knowledge about the threat
		HHs after clearing bush land for agriculture
		Flood affected communities

Table 19: Impacts and Vulnerability on Education

Sector	EDUCATION	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Schools used as shelters, disrupting education	School-going children
	School building and staff damage	School-going children
	Access to school cut off	School-going children
Landslide	Damage and destruction of school buildings and injury of school staff	School-going children
	Discontinued programmes	School-going children
	Problems of access to schools due to road damage	School-going children
Drought	Disruption in regular schooling of children due to additional time taken in fetching water	Landless, small and poor communities
	Disruption in regular schooling of children due to parents' decreased financial capacity	Landless, small and poor communities
	Affect on quality of education of drought affected children	Landless, small and poor communities

Table 20: Impacts and Vulnerability on Shelter, Infrastructure and Physical Planning

Sector	SHELTER, INFRASTRUCTURE AND PHYSICAL PLANNING	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Shelter damage and loss	All, especially socially disadvantaged people
	Earthen rural roads damaged and destroyed	All Road users, especially those earning from their use, drivers, traders, collectors etc.
	Public buildings damaged and destroyed	All, especially those relying on public resources and institutions
	Long emergency and recovery period disrupts physical planning	Physical planning – targeted groups
	Physical planning may need redesign	Planning – targeted groups
	Damage and destruction of seed storage bins	Socially disadvantaged people
	Temporary displacement and migration causing livelihood insecurity and population pressure conflict	Women, children & disabled
	Loss of bio-engineering structures by flood forcing the communities to rebuild next year which in turn will affect the forest resources	Forest depended communities
Landslide	Damage and destruction of shelter	High risk area HHs
	Damage and destruction of roads	Road users
	Damage and destruction of public buildings	All, especially those relying on public resources and institutions
	Need to redesign physical planning	All, especially planning-targeted groups

Table 21: Impacts and Vulnerability on Livelihood Protection

Sector	LIVELIHOOD PROTECTION	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Missing persons	All
	Loss of access to resource through infrastructure damage, and impassable areas	All, especially those relying on access to communal resources
	Integrated farming system disruption, increasing vulnerability	Integrated farms
	Health and education problems	Young, women, old, disabled
	Intra-community land conflicts	Small land holders, disempowered people, social disadvantaged (less bargaining power)
	Struggle to pay national taxes at times of hardship	All, especially those already socio-economically vulnerable
	Loss of assets – working equipment, transport vehicles	Resource-endowed HHs
	Loss of livestock	Livestock owners with no access to safe storage
	Loss of grain, seed, harvested crops, reducing income and food security	Agricultural households, integrated farmers,
	Allocation of less budget in other sectors due to emphasized financial allocation on flood-hit areas	All but specially socially disadvantage communities
Limited access to income generation activities	Landless groups	
Landslide	Missing persons	
	Integrated farming system disruption, increases vulnerability	Farmers involved in integrated farming
	Loss of crops lowers income and increases food insecurity	All, especially low-income households already in precarious livelihood situation
	Loss of cultivatable land, with long-term impacts on food security	Small, medium farmers especially, all through market channels
	Health and education problems	Young, women, old, sickly especially
	Struggle to pay national taxes at times of hardship	All, especially low-income households already in precarious livelihood situation
	Cultivated land loss	Land labourers losing jobs, small landholders losing land assets
	Land conflicts after loss of land boundaries in hill area	Small landholders in close proximity to other farms, hill area farmers, terrace farmers
	Conflict for resources	Small landholders in close proximity to other farms, hill area farmers, terrace farmers
Access restrictions due to road damage and destruction	All, especially those travelling large distances to access resources	
Pest and Crop Disease	Effect of pesticides on ecosystem	All specially socio-economically marginal communities
	Effect on food security	All specially socio-economically marginal communities
	Increase incidence of sickness among working communities	People depended on daily wages
Drought	Increasing rate of migration	Esp poor, those with limited social connections across geographical areas
	Conflict within the community over scarce resource	Socially disadvantaged (lower bargaining power)
	Livestock loss	Livestock rearing reliant households

	Fish farming stress	Fish farmers
	Allocation of less budget in other sectors due to emphasized financial allocation on drought	All communities of the district
	Decrease in crop productivity affecting livelihood	All communities of the district
	Increase in prices of staple grains	All communities of the district
Snakebite	Possible loss of workforce	Communities geographically isolated or with limited access to health posts
		Women due to predominance of male health care workers and impact of social taboos
		Illiterate individuals with no access to information and knowledge about the threat
		HHs after clearing bush land for agriculture
		Flood affected communities

Table 22: Impacts and Vulnerability on Water and Sanitation

Sector	WATER AND SANITATION	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Clean water supply contaminated	High water needs groups – children and women
	Irrigation channel, and other canals blocked by debris and silt	Irrigated land holders
	No access to clean water	High water needs groups – children and women
	Contamination of river through debris – trees, dead animals	All, natural irrigated farmers
Landslide	Irrigation channel damage and destruction	Irrigated landholders,
	Water supply infrastructure damage and destruction	All, especially women and children (larger water needs than adult men)
	Inadequate water supply	All, especially women and children (larger water needs than adult men)
	Watershed-system transformation, leading to change in water resource allocation	All through water supply, forest-dependent people, rain-fed and natural irrigation farmers
	High silt content of water	All
	Water resource infrastructure damage increases prevalence of water-borne disease	All, especially women and children with higher water needs
Pest and Crop Disease	Water pollution due to run-off from the pesticide used farms	All, especially those with high water demands (women and children)
Drought	Lowering of water table, reduced effectiveness of pumps and wells	Those with wells and pumps
	Polluted water uses	All, those with greater need for clean water (children and women)
	More difficulty in disposing of waste matter, leading to rise in hygiene and sanitation illnesses	Poor and socially disadvantaged
	Shrinking of water holes and streams	Those without wells and pumps relying on ponds and streams

Table 23: Impacts and Vulnerability on Information, Communication, Coordination and Logistics

Sector	INFORMATION, COMMUNICATION, COORDINATION AND LOGISTICS	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Electricity cables damaged or destroyed	All affected
	Phone line damaged or destroyed	All affected
	Possible damage of focal point buildings and government line agencies and affected focal point staff	All, especially those relying on public resources and institutions
	Coordination and logistics hindered by loss of infrastructure such as roads	Those benefiting from physical planning – targeted groups
	Agricultural calendar disrupted	All farmers – cropping farmers
Landslide	Electricity cables damaged or destroyed	All, overall coordination, higher income (lower income have no electricity anyway)
	Phone lines damaged or destroyed	All, overall coordination, those receiving remittances
	Possible damage of focal point buildings and affected focal point staff, including government line agencies	All, overall coordination, those relying on public resources
	Coordination and logistics hindered by loss of infrastructure such as roads	All, overall coordination, those relying on public resources

3.4. District Capacity Assessment

Effective disaster risk management requires the mobilization of resources across different levels. Where capacity for coordination and appropriate action is lacking, best intentions can prove ineffective. It is therefore essential to assess the capabilities of different actors within the district in order to identify what organisations should be partnered for good management and how relationships should be defined.

This section considers critical elements of district capacity for effective DRM. The information presented here played an essential role in the detailed planning, contributing to decisions on what partners to stipulate for recommended activities.

The section covers capacities from the household and community level up to the district level, reflecting the need for mobilization across all levels within the district.

3.4.1. Livelihood Assets

This plan organises the assessment of livelihood assets according to the now standard Sustainable Livelihood Framework (Chambers and Conway 1991) in terms of natural, physical, social, financial and human capitals. As important as what a particular household owns in terms of assets is a household's *access* to resources. This is particularly important for the resources that no-one 'owns' or that are owned communally. This is especially relevant in the case of natural resources, such as water and forest items. *Access* is also crucial to understanding the *differentiated* livelihood security of social groups within a community. The rules that govern who has access to what and when – formal and informal social norms, or institutions – are often not egalitarian. Some social groups find themselves disadvantaged in access some resource because of these institutions. Thus social capital, the resource that embodies an individual's relationships with others in the community and in the wider society plays an important role in shaping the access of individual's and households to other resources. presents the results of a household survey conducted in the mid-hill districts of Arghakhanchi and Udaypur. Respondents, once explained the categories of capitals, were asked whether they believed their household had sufficient access to different resources. The results show that in each case around 80% of respondents felt capable of answering these questions. The largest percentage of positive responses came in reply to the question of social capital, referring to access to participation in social groups that facilitated better relationships and increased access to communally controlled resources. 74% of respondents replied that they had good access to social capital, and only 8% felt that they did not. With respect to the other capital classes, positive replies were around the 55 – 60% marks, with between 20 – 30% of respondents feeling that they did not have adequate access to natural resources, adequate public and private physical facilities, acceptable financial support, or access to skills, knowledge and services required for good health.

The findings of this study suggest that local communities perceive their local social organisations and institutions as their greatest resource endowment, but that access to other capital is often limited. As has been found during other experiences in rural Nepal, it is likely that a strategy that leverages social capital in the local community to better provide access to other resources has a strong potential for success.

Table 24: Livelihood Assets in mid-hill districts of Arghakhanchi and Udaypur (FAO 2009b)

		Capital classes				
		Natural	Physical	Social	Financial	Human
Description		Resources provided natural by the ecosystem	Public physical facilities and infrastructure and private buildings and equipment	Access to participation to social groups that provide leverage for access to other resources	Cash transferable belongings and access to supporting financial services	Private knowledge, skills and access to information. Also includes access to health services
FAO 2009b	Respondents	360				
	Yes (%)	59	53	74	56	59
	No (%)	19	27	8	26	24
	No Answer %	22	20	18	18	17

3.4.2. Natural Resource Endowments

Critical natural resources in the district are forest-based, water-based, and the ground (i.e. soil).

Forest cover takes up 67 % of the total land area of the district. 28 % of the land is cultivated (FAO 2009a). Small and large river and ponds remain the main source of water in the district. Ponds like Rauta Pokhari, Suke Pokhari, Tapli Pokhari, Jogidaha Chure Forest Pond and Jhilke Pokhari are key water resources in the district. The district does not possess larger lakes. Triyuga is the largest river in this district. Other two major rivers are Tawa Khola from Western side and Vaidyanath River from mid-side unite with Tawa River. Other rivers in the district are Kakaru Khola, Yari Khola, Rakula, Baruwa Khola, Andheri, Bahadura Khola and Rasuwa Khola. Sunkosi, Saptakosie, Kamala rivers lie on the district border.

Table 25 presents the water supply statistics for the district.

Table 25: drinking water and Sanitation for Udaypur district (Source: Drinking Water and Sanitation Division Office)

S.N.	Particulars	Percentage
1	Population consuming clean drinking water	61.69
2	Population using managed toilet	11.39
3	Population using toilet	24.4
4	Availability of improved source drinking water	69.7
5	Using electricity for lighting	32.2
6	Population having television	12.3
7	Population having radio	38.5
8	Using hard substance for cooking food	92.7

Focus on good natural resource management by the government and civil society has led to promising institutional structures to successfully coordinate the use of endowments that achieve environmental sustainability, while allowing local communities to draw considerable livelihood benefits. Effective such coordination is limited in upland regions however, where deforestation is a serious problem (FAO 2009b). Increased vegetation on upper catchment would reduce the risk of landslide, erosion and flash flooding. Evidence suggests that careful afforestation plantation schemes can also homogenise temporal water availability downstream (ibid.).

Intensification of agriculture and its greater demands on natural resources continue to pose a challenge for effective management. However, existing poor agricultural practices reflect substantial opportunities to balance agricultural needs with good natural resource management, if existing practices were to improve. FAO (2009b) details such recommendations, which encompass encouragement of integrated farming, integrated pest management, better fertilizer use, and adoption of appropriate technologies, in irrigation especially. In particular, integrated farming provides considerable benefits for soil, water and forest management as waste outputs from livestock rearing provide efficient substitutes for forest-based resources as inputs into crop farming, and use of organic fertilizers has proved more sustainable for soil health conservation.

Recent initiatives of DADO, DLSO to support the increase in access in agricultural inputs have improved the management of natural resources used in agriculture in the Udaypur. Water and soil health management have particularly benefitted from coordinated efforts to improve irrigation systems, and introduce IPM. These initiatives are in their early changes, and have only benefited a limited number of farmers thus far (FAO 2009b).

In Udaypur, the rain-fed farming still remains the common practice. A small number of irrigation systems exists in the study sites, relying on rain-feeding, river channelling or artificial and natural ponds for their water source. However, poor maintenance of the irrigation systems, coupled with unreliable rainfall, especially in winter, and system-wide water shortage limit effective irrigation. Floods and landslides also often damage irrigation infrastructure.

Rainwater harvesting is a growing practice at times of water scarcity, communal rainwater collection ponds being constructed in Sundarpur and Triveni study sites. Nonetheless, continued winter water

scarcities, in spite of these efforts detract farmers from cultivating off-season vegetables (FAO 2009b).

3.4.3. Household-level capabilities

Technical Agricultural Skills

Aside from a very few leaders, most farmers lack information and knowledge about the proper use of inputs, from variety selection, soil fertility, pesticide and chemical fertilizer use, seed and nursery management and off-season vegetable production. Post harvest technologies are poor and soil health management absent.

A few lead farmers do have access to this knowledge, but they do not have the incentives to pass on their technical skills and information, and even with knowledge some new practices have too high start up costs to be adopted, even by those who detain the know-how. Weak social capital prevents other farmers seeking assistance from leaders.

Use of inputs

Typical inputs to agriculture are irrigation, seeds and seeding materials, chemical fertilizers, pesticides and agricultural loans. In addition, effective use of these inputs, and adoption of good practices depends on technical know-how and appropriate skills.

In Udaypur, evidence from FAO (2009b) suggests that it is less lack of skills and knowledge that constrains the efficient adoption of good practices and use of inputs, than input supply problems. Many farmers cannot afford the cost of inputs, and have limited access to agricultural loans for support. Furthermore, available inputs on local markets are often of poor quality, and anecdotal experience and perceptions on low returns from input investment detract farmers from using inputs such as high-yield seeds, chemical fertilizers and pesticides.

In FAO's study sites, a combination of local markets, the local *haat bazar* and cooperatives provides farmers with access to inputs. Inputs procured through cooperatives are perceived to be of consistently higher quality.

Technical training is provided by DADO and DSLO, which sometimes distribute a small quantity of seed and fertilizer inputs linked with their trainings. Local farmers are dissatisfied with these trainings however, citing content, methodology and timing as unsuitable to their specific needs.

Credit is provided mainly through local savings and credit groups, community-based cooperatives and the Agricultural Development Bank. Farmers tend to prefer local institutions over larger scale, more formal outfits.

In the study sites, the practice of maintaining seed banks, nurseries and seed storage is limited. Farmers buy their seeds each year from markets. Although farmers are aware of the potential of high-yield seed varieties, they are wary of the additional care and water demands of these varieties.

Notwithstanding reports that critical input limitations relate to input supply rather than farmer skills and knowledge, limited understanding about good practices relating to fertilizer, insecticide and pesticide use also hampers productivity. Poor irrigation infrastructure also limits chemical fertilizer use.

Table 26: Major Strengths and Weaknesses of agricultural activities in Udaypur⁵

Sectors	Strengths	Weaknesses
Agriculture	<ul style="list-style-type: none"> • Some lead farmers have sufficient knowledge and information about improved farming practices • Presence of technician in ASC • Adoption of improved inputs • Emergence of farmers organizations and cooperatives at local level • Farmers have development towards climate change and its adverse impacts 	<ul style="list-style-type: none"> • Inadequate, low quality and not on time inputs and services to farmers • Farmers largely dependent on rain water for irrigation • Limited skills and knowledge about the right application of inputs • Unable to invest in inputs management due to poverty • Poor post harvest practices • Unable to change cropping pattern in the changed climatic context
Livestock	<ul style="list-style-type: none"> • Existence of technician in LSCs • Practice of farming improved breeds of livestock • Interest in improved grass and forage plantation • Check up for livestock occasionally 	<ul style="list-style-type: none"> • Grazing control, not sufficient place for grazing and fodder for livestock • Labour shortage for livestock rearing • Unable to services for livestock disease and pests on time and appropriately
Homestead garden	<ul style="list-style-type: none"> • Ensured market for agriculture commodities • Use of improved variety of seeds • Seed bed preparation practices • Have sprinkle irrigation in some areas • Use of improved variety of seeds 	<ul style="list-style-type: none"> • Unable to treat the diseases and pests timely and adequately • Inadequate irrigation facilities • Poor access in marketing

3.4.4. Institutional Capacity

Annex 7 lists contact details of service institutions in the district.

Local level organisations

A wide range of organisations works in Udaypur. The different types are summarised in. Capacity of some key organizations has been assessed and presented separately in tables and sections below. Each organisation has its clear working sectors and areas, and there is limited capacity to address cross-cutting issues such as DRR. A small number of district level organisations, such as the District Soil Conservation Office (DSCO) and the District Forestry Office (DFO) support local organisations in their own priority sectors – Soil conservation and agriculture, and forestry management, respectively – and partially mainstream DRR into their activities on a *ad hoc* basis.

Although capacity building activities in the form of community-based skills trainings are conducted by NGOs, GOs and at times autonomously across local organisations, these are often in the form of one-off events with no provision of refreshers or follow-ups or subsequent training of new employees and members.

Awareness of DRM is low across local organisations, existing awareness building activities are only beginning to deal with DRM, mostly in relation to climate change. DSCO and DWIDP are the most active in awareness raising, though only in relation to floods and landslides.

Local organisations' activities, however, do have an impact on local DRM, through implicit risk reduction. By developing social capital to encourage coordination and cooperation in farming and other income-generating activities, and by specifically targeting income-generating extension activities, local organisations are the most active institutions at the local level in contributing to disaster vulnerability reduction. However, these efforts are not framed in response to disaster risk, and DRM is not internalised in these processes. Technical knowledge and skills to mainstream DRM into

⁵ FAO 2009b

existing activities are entirely absent. Furthermore, given the limited resources at the local level, reliance of local organisations on outside inputs and knowledge reduces their resilience to disasters, which damage and destroy infrastructure.

At the local level, key gaps in institutional capacity are summarised below:

- Inegalitarian access to institutional services and institutionally managed resources. New programmes fail to target highly vulnerable community groups
- Poor coordination between local institutions, especially between NGOs and between NGOs and GOs. This leads to both a failure to address cross-cutting issues, but also leads to ineffective delivery of key services such as grazing governance and pasture-forest management
- Interventions are supply-driven due to local of community-based mobilization
- Lack of access to higher-level knowledge on ecological management and disaster risk management
- Trainings delivered without follow-ups or refreshers
- Lack of financial resources leads to an imbalance towards soft interventions by government line agencies and away from urgently required hard-technology support

Table 27: Local level institutions in Udaypur

VDC Organisations	Strengths: Working areas	Institutional Weaknesses	Capacity-building needs (Prioritized)
Community Forestry User Groups	Sustainable forest management and extension activities, including community plantations. Oversees local governance, management and coordination of forestry resources, including agriculture and livestock inputs	<ul style="list-style-type: none"> • Poor awareness of disaster risk and CC linkages • Lack of forest revenue investment in DRR • Exclusion of HHs geographically distanced from forest • Lack of coordination from other VDC activities • Water resource management not integrated in activities • Limited women's representation 	Training in: <ul style="list-style-type: none"> • Landslide and soil erosion management training • Forest-based income-generating diversification • Nursery and NTFP management • DRM impact awareness • Water resource management
Water Users' Association	River and irrigation management coordination, some minor activities relating to flood risk reduction	<ul style="list-style-type: none"> • Poor awareness of disaster risk and CC linkages • Inadequate training in sustainable integrated water resource management-irrigation management • Lack of resources for physical construction/repair • Limited women's representation 	<ul style="list-style-type: none"> • External resource mobilization for weir construction/rehabilitation, canal lining • Regulatory development in equitable water resource management • Bioengineered structural protection of springs and upper catchments • Awareness raising on climate change
Farmers' Groups	Responsible for sharing knowledge and skills between farmers and channelling new technologies. Some groups act as wider cooperatives coordinating inputs to reduce costs. Active in reducing risks of disease and pests	<ul style="list-style-type: none"> • Poor awareness of disaster risk and CC linkages • Lack of climate change considerations in choice of practices • Excessive emphasis on input management over resilient good practices • Loss of application of local and traditional knowledge (often highly resilient) • Limited emphasis on diversification • Limited women's representation 	Training in: <ul style="list-style-type: none"> • Fertilizer application • Pesticide selection and handling • Soil fertility management • Integrated Pest Management • Drip and Sprinkle irrigation • Climate change impacts and resilient practices <ul style="list-style-type: none"> • Resource mobilization for insurance systems • Coordination for input access • Good practices demonstration plot
Savings and Credit Groups	Operate as micro-banks offering credit and saving facilities to members. Contributing to resilience building in agriculture through	<ul style="list-style-type: none"> • Poor awareness of disaster risk and CC linkages • Limited credit products not suited to ongoing agricultural working capital investment or community investment in resilience building 	Training in: <ul style="list-style-type: none"> • Innovative new practices (new group lending and credit mobilization) • Diversification of income generation (off-

VDC Organisations	Strengths: Working areas	Institutional Weaknesses	Capacity-building needs (Prioritized)
	credit for inputs and liquidity in times of hardship		season) <ul style="list-style-type: none"> • Revolving fund management • Climate change impacts and resilient practices
Cooperatives	Conducting varied activities, mostly to reduce output marketing costs of agriculture, sometimes in production activities also. Some credit activities. Vary to the extent of cooperation of farming activities	<ul style="list-style-type: none"> • Highly vulnerable to infrastructure damage • Direct benefits of cooperatives rarely reaches the poorest and social excluded sections of the community • Poor awareness of disaster risk and CC linkages (especially in relation to infrastructure vulnerability) 	<ul style="list-style-type: none"> • Strengthening of district and regional market linkages • Ensuring quality of inputs delivered through quality standardisation • Developing micro enterprise and other livelihood enhancing investment mechanisms
Youth Clubs	Focus of social mobilisation and community empowerment, advocacy and rights; often forming volunteer groups during emergency	<ul style="list-style-type: none"> • Poor awareness of disaster risk and CC linkages • Social mobilization framed within wider activities of youth (sports and entertainment) • Lack of resources to conduct autonomous communities activities • Lack of program and activity sustainability • Limited women's representation 	Awareness raising activities relating to: <ul style="list-style-type: none"> • DRM • Ecological health and biodiversity conservation • Watershed management • Basic infrastructure maintenance • Climate change impacts
Mothers' Groups	Knowledge and skill sharing in a wide range of areas, including agricultural practices, health. Sometimes providing savings and credit facilities		Awareness raising activities relating to: <ul style="list-style-type: none"> • Agricultural practices • Health and sanitation
Local NGOs	Facilitating and conducting community support activities in a wide range of areas, especially agricultural extension, and income-generation, health and sanitation, and education		
Governmental Organisations	Deliver technical training in agriculture		

District level disaster risk management

Table 28: Performance of District Capability Analysis

SERVICE PROVIDING INSTITUTIONS IN DISTRICT																			
VDCs	Types and numbers of service provider organization																Other service provider organizations		
	Police	Sub Health post/HP, hospital & clinics					Agriculture centre	Vet Service		School /College							Number of financial institute	mother groups based on non-government org. and community	INGOs
		Sub Health Post	Health Post	Primary Health Center	District Health Office	Sub Service Centre		Service Centre	Public			Private							
									Primary	Lower Secondary	Secondary	Higher Secondary	Primary	Lower Secondary	Secondary	Higher Secondary			
Apatar		1							9	1	1	0	0	0	0	0		3	
Balamta				1					2	1	0	1	0	0	0	0		1	
Bansbote	1	1							5	0	1	0	0	0	0	0			
Baraha		1				1		1	5	0	1	0	0	0	0	0			
Barre		1							5	3	2	0	0	0	0	0		2	
Basaha	1	1				1		1	6	3	1	1	3	1	0	0		7	
Beltar	3		1			1		1	3	4	0	1	3	1	3	0	1	9	
Bhalayadanda		1							11	1	1	1	0	0	0	0		4	
Bhuttar				1				1	5	1	0	1	0	0	0	0		2	
Chaudandi		1							3	1	1	0	0	0	0	0		1	
Dumre		1							5	1	1	0	0	0	0	0		2	
Hadiya	1	1					1		3	4	2	1	3	0	0	0		5	
Hardeni		1							3	2	1	0	0	0	0	0		2	
Iname		1							5	0	0	1	0	0	0	0		2	
Jalpa Chilaune	1	1							5	0	2	0	0	1	0	0		3	
Jante		1							5	0	1	0	0	0	0	0		1	
Jogidaha	1	1							2	2	0	1	1	0	0	0		3	
Katari	2					1		1	6	5	1	1	1	0	3	0	3	10	
Katunjebabala		1							10	2	0	0	0	0	0	0		1	
Khabu									5	2	2	0	0	0	0	0		1	
Laphagaun		1							5	1	1	0	0	0	0	0		2	
Lekhani						1			6	0	1	0	2	0	0	0		2	
Lekhgaun,				1		1			9	0	1	0	0	0	0	0		1	
Limpatar		1							3	0	1	0	0	0	0	0		1	
Mainamaini		1							4	1	3	0	0	0	0	0		4	
Mayamkhu				1					5	0	1	0	0	0	0	0		1	
Nametar		1							5	1	1	0	0	0	0	0		1	
Okhle	1	1							6	1	1	0	0	0	0	0		1	
Panchawati	1	2		1		1		1	8	4	2	1	2	0	0	0		3	
Khanbu		1				1		1	5	2	1	0	0	0	0	0		2	
Rampur	1			1		1	1		9	3	3	2	2	0	1	0		4	
Rauta		1		1	1			1	10	2	1	1	1	0	0	0		7	

Risku	1	1							8	2	0	1	0	0	0	0			2	
Rupatar	1			1					6	0	1	1	0	0	0	0			1	
Saune		1							4	1	1	0	0	0	0	0			1	
Siddipur		1							2	1	2	0	1	0	0	0			3	
Sirishe		1							7	0	1	0	0	0	0	0			1	
Sorungchabise									9	0	1	0	0	0	0	0			1	
Sundarpur	1	1							1	2	1	0	0	0	0	0			4	
Tamlichha		1							5	1	1	0	0	0	0	0			1	
Tapeshwari		1							3	0	2	1	1	0	0	0			2	
Tawashree		1							4	2	1	0	1	0	0	0			1	
Thanagaun		1							4	0	1	0	0	0	0	0			2	
Triveni	1	1							6	1	2	1	1	0	0	0			2	
Triyuga Mun.	7			1		2	2	1	20	9	5	5	6	3	9	1	1	11	59	
	25	35	1	9	1	13	3	11	257	67	54	22	28	6	16	1	1	15	172	9

*only include cooperatives and mother groups

Status of preparedness

The status of preparedness for the districts was determined by assessing whether facilities including Fire Brigade, Ambulance, Doctors/Nurses/Health Assistants, Engineers/overseers, Volunteers, Transportation means such as Truck, Bus Jeep, Rickshaw, Food, Trained rescue and relief operators and water tankers are adequate or otherwise. The source and suppliers are identified. Accordingly the table below summarizes the adequacy of the facilities available in Udaypur district. Through consultations with different stakeholders, it was noted that there exists adequacy in various facility types including health centres, telecommunication facility, clothes reserves/provisions, and vehicles with skilled drivers. However, a deficiency of a higher number of factors some of which include ambulances, fire brigades, doctors/nurses and water tankers; a lack of proper road networks and power supply were also found. There is also no provision of food reservations as preparedness towards disaster.

Table 29: Adequacy of the facilities available in Udaypur District

S.N.	Details	Condition		Source and supplier	Remarks
		sufficient	Not sufficient		
1.	Ambulance		*/	NRCS	
2.	Health centres (various types)	*/		DPHO	
3.	Doctors/Nurses/Health Assistants		*/	DPHO	
4.	Fire Brigade		*/	Udaypur Cement Industry	
5.	Excavator		*/	DDC	
6.	Trained rescue and relief operators		*/	Nepal Police/APF	
7.	Engineers/Overseers		*/		
8.	Volunteers		*/	NRS	
9.	Skilled Drivers	*/		DDC	
10.	Vehicles (truck, bus, jeep, rickshaws, dodgers and boats)		*/	DDC/Nepal Police/Private	
11.	Road network		*/		
12.	Telecommunications	*/		NTC	
13.	Power supply		*/		
14.	Food reserves/provisions		*/	Private	
15.	Clothing reserves/provisions	*/		Private	
16.	Water tankers		*/		
17.	Financial Resources		*/		

Table 30 supports Table 29 by rating the availability and reliability of the service institution resources available at different sub district levels.

Table 30: Nature of the Resources Available in Udaypur District

Service and sources	Capacity			Availability			Durability		
	VDC level	Area level	District level	Simply available	Available	Non available	Short term	Mid term	Long term
Ambulance		■			■				■
Health centres (various types)	■			■					■
Doctors/Nurses/Health Assistants			■		■				■
Fire Brigade			■		■				■
Excavator			■					■	
Trained rescue and relief operators			■		■				■
Engineers/Overseers			■		■				■
Volunteers			■		■		■		
Skilled Drivers			■	■					■
Vehicles (truck, bus, jeep, rickshaws, dodgers and boats)			■		■				■
Road network		■	■		■				■
Telecommunications	■		■		■				■
Power supply			■		■				■
Food reserves/provisions			■	■					■
Clothing reserves/provisions		■	■		■				■
Water tankers			■			■			■
Financial Resources			■		■				■

Table 31: Profile of the District Disaster Relief Committee (FAO 2009b)

The District Disaster Relief Committees (DDRC) is a permanent outfit at the district level to coordinate relief and preparedness. DDRC is chaired by the Chief District Officer (CDO) who is the main administrative functionary to maintain law and order at the district level. Other members to DDRC are the representatives of the district level offices of the various public sector agencies such as district water supply office, district education office, district health office, representatives of national level political parties, Nepal Red Cross Society; In-charge of Nepal Army Unit, District Police Office, District Housing and Town Development Office, Divisional Irrigation Office, District Forest Office, Agriculture Development Bank, reputed Social Workers, DADO, DSCO, etc. The Local Development Officer (LDO) – the district level officer of the Ministry of Local development, who coordinates development works with the elected bodies at the district level, is the member-secretary of DDRC.

Role perceptions of DDRC

- Facilitate, monitor, guide the relief and response activities
- Oversee development, implementation, monitoring and periodic updating of disaster risk reduction strategies, plans and programs through governmental and non-governmental entities at district level
- Formulate and implement response, recovery and rehabilitation plans
- Mobilize the resources for response, recovery and rehabilitation after the disaster at district level
- Establish networks and coordinate with I/NGOs, private sectors, government stakeholders
- Assess the disaster risks due to different natural hazards and vulnerabilities at different levels and different scales; and develop a system to periodically update
- coordinate with national CDRC at time of disaster in the district

Summarised below are the Strengths, Weaknesses, Opportunities and Threats of the DDRC in Udaypur.

Table 32: SWOT analysis of DDRC

	Positive	Negative
Internal	<p>Strengths</p> <ul style="list-style-type: none"> • Familiar at district level • Apex body at district level with power and authority for coordination and linkages during disaster • Mobilize NGOs and donors during time of need for rescue and relief • Relief and response at time of disaster in district 	<p>Weaknesses</p> <ul style="list-style-type: none"> • No regular meetings, planning and decisions • No annual plan • No basket fund • Sometimes politically biased • Mainly relief and response focused • Inadequate of technical skills and know-how with lead members of the committee • Inadequate knowledge and information on CCA and DRM
External	<p>Opportunities</p> <ul style="list-style-type: none"> • Resource mobilization to design and implement DP and DRR plans and programs • A sharing forum for mainstreaming disaster as a cross cutting theme in the district programs • Can play a good advisory role to district programs for mainstreaming disaster risk reduction and climate change adaptation 	<p>Threats</p> <ul style="list-style-type: none"> • Frequent transfer of ex-officio members create information gap • Political pressure deviate the activities from real need • Inadequate policy and regulations to address all disaster cycle

Key institutions recommended in the Action Plan for response and rehabilitation activities – The Cluster Approach

During emergency institutional capacity can be affected, and ‘normal time’ capacity is not a good measure of what an institution can coordinate effectively during emergency. This plan therefore follows the Cluster Approach developed through UN OCHA in Nepal to recommend district level leads and coordinators of the activities recommended in the Action Plan.

For focal persons and organisations involved in activities relating to risk reduction prior to emergency (mitigation and preparedness), see the detail Action Plan.

In September 2008, following floods and the displacement of 70,000 people when the Koshi River broke its embankment, the UN Humanitarian Coordinator in Nepal requested the ERC and the IASC to establish the Cluster Approach in Nepal with the following operational arrangements:

Table 33: The Cluster Approach to emergency response and rehabilitation

SN	Cluster	District Cluster Lead Agency	Central Disaster Relief Committee (CDRC)	UN Cluster Lead Agencies (to support CDRC lead)
1	Health	DPHO	MOHP (EDC)	WHO
2	Nutrition	DPHO	MOHP (CHD)	UNICEF
3	Water, Sanitation & Hygiene	DWSS	MPPW	UNICEF
4	Food	DADO	MOAC	WFP
5	Education in Emergencies	DEO	MOE	UNICEF/Save the Children
6	Protection	WDO	(not clarified)	OHCHR
7	Emergency Shelter	DNDRC (NRCS)	MPPW	IFRC
8	Camp Coordination and Camp Management (natural disasters)	DNDRC (NRCS)	MPPW	IOM
ADDITIONAL CLUSTERS TO BE ESTABLISHED IN THE CASE OF MAJOR NEW EMERGENCIES (NATURAL DISASTERS)				
9	Emergency Telecommunications	NTC (DNDRC)	(not clarified)	WFP
10	Logistics	CDO (DNDRC)	(not clarified)	WFP

These clusters are still operational in Nepal. At the central level Cluster leads responsibilities include:

- Coordination with national/local authorities, civil society and other relevant actors
- Participatory and community-based approaches
- Attention to priority cross-cutting issues (e.g. age, diversity, environment, gender, HIV/AIDS and human rights)
- Needs assessment and analysis
- Emergency preparedness
- Training and capacity building
- Provision of assistance or services as a last resort

The OCHA office in Nepal helps to facilitate inter-cluster coordination and ensures appropriate coordination with all humanitarian partners, including national and international NGOs, the Red Cross/Red Crescent Movement, IOM and other international organizations, as well as with national authorities and local structures.

3.5. Action Plan

3.5.1. District Weaknesses and Key Priorities

Experts at national and district level and district level stakeholders identified gaps and limitations in DRM in different consultation workshops and suggested key priority areas for action. These are summarised in table 34 and provide a useful introduction to the key areas on which the more detailed Action Plan focuses.

Table 34: Udaypur district weaknesses and key priorities

	District Weaknesses and Institutional Gaps	Key Priorities
1	Limited district capacity to coordinate local level disaster risk management	Building decentralized capacity for disaster risk reduction
2	Patchy and sporadic sharing of information, poor post-disaster collection	Developing systematic disaster risk information sharing channels (including extensive post-disaster data collection)
3	Lack of coordination across landscapes for early warning	Developing landscape wide early warning information flow
4	Poor water resource management and disease control during emergency and rehabilitation	Ensuring clean water, sanitation and controlling water-borne disease through emergency and rehabilitation phase
5	Lack of standard emergency procedures and coordination for ensure basic needs are met	Prioritizing essential activities and securing basic needs during flood (especially transport, health care and sanitation)
6	Gap in emergency relief support recedes, inadequate support through rehabilitation and recovery	Maintaining exceptional support activities through emergency phase into rehabilitation and recovery
7	Limited targeted assistance to highly vulnerable groups	Strengthening emergency and rehabilitation coping capacity of vulnerable and affected groups through financial support and other resource subsidies
8	Poor coordination in landscape wide and local water resource management	Improving water circulation
9	Limited emphasis risk reducing, resilience building diversification of income generation activities	Facilitating more disaster resilient income-generating practices (especially in agriculture)
10	Lack of training, technical support and input assistance for building resilience in agriculture	Improving access training, technical assistance and equipment in disaster resilient agricultural practices
11	High risk river banks close to important infrastructure	Improving structural risk reduction (including but not exclusively bioengineering solutions)
12	Many settlements in high risk areas	Improving structural protection of homes

3.5.2. Extending the National Priorities

It was decided that using the NSDRM Priorities for Action and Strategic Activities during the district level detailed planning of recommended activities was inadvisable, as it could have caused participants to ‘problem close’ around the suggested national activities and not develop a properly contextualised response that reflected Udaypur’s specific and individuals needs. However, this reflects clearly the consistency between the national and district level documents. See Annex 1 for elaboration of each NSDRM Strategic activity.

Table 35: Match-up between National Strategy and District Action Plan

District Action Plan Activities	National Strategy for Disaster Risk Management																												
	Priority 1 Make Disaster Risk Reduction a Priority							Priority 2 Know the Risks and Take Action				Priority 3 Building Understanding and Awareness						Priority 4 Reduce Risk					Priority 5 Be Prepared and Ready to Act						
	Strategic Activities																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Preparatory Planning																													
Response and Relief during emergency																													
Rehabilitation after emergency																													

3.5.3. Overall recommendations

Although this plan is developed to address vulnerability to the prioritised hazards in particular, as part of a strategic allocation of available resources, many activities in the detailed plan build overall disaster risk management and reduction capacity. These activities are tracked in the ‘hazard relevance columns of the detailed plan.

Furthermore effective district level disaster risk management will need to address the following overall recommendations for institutional capacity development, and relate to risk minimisation in general.

The responsibility of effectively developing District Disaster Management Plan rests on the local government bodies, mainly on District Development Committees (DDC) and subsequently on the Village Development Committees (VDC). However, the local institutions lack inadequate manpower and experience for developing such plans. These local institutions need support in building the institutional capacities and technical skills needed for moving towards development and implementation of the strategy, in an integrated, cross-sectoral manner.

Institutional Requirements

For functionalizing the activities outlined in this DDRMP, the Udaypur District Development Committee has to take the lead. There are several activities that fall into the working domain of more than one line agencies, DDC has to coordinate and disburse the activities among the district line agencies.

Establishing focal persons for disaster risk management for all district line agencies and key stakeholders participating in the activities provides a low cost way of building institutional coordination across agencies and organisations.

These activities will have to be included by all the VDCs of the district in their respective planning documents. There may arise a need for a working guideline for implementing agencies that have to notify an authorized body for their works in any area of the VDC.

Formation of disaster management committees at the VDC level in vulnerable VDCs will provide the downward focus required to work at the local level with district coordination.

Streamlining of mechanism for implementing the DDRMP

The activities outlined in the DDRMP have to be endorsed by the district development council prior to their integration into the development planning of the district. For this, representatives from major political parties from the VDC and other stakeholders have to play a crucially important advocating role. The service agencies who deliver their services in more than one VDC, they can assist the relevant VDC through Cluster Approach.

Human resource development

Awareness towards various facets of disaster management, training and capacity building have to be carried out along with other activities. With the DDRMP, the district line agencies will have a firm ground for lobbying for relevant support from donor agencies that can assist in strengthening their district level capacities.

Financial requirements

During the endorsement process, preliminary budgeting with a financial allocation plan must be devised and agreed upon by the DDC.

The priority is to establish the emergency fund and a transparent protocol for disbursement.

Updating of DDRMP

The DDRMP should be revised and updated every intermittent years or after any major disasters based upon lessons learnt from disaster response. The Information Cell of the DDC should take the lead in this respect.

3.5.4. Hazard Focus

Table 36 list the high risk VDCs for each of the high priority hazards.

Table 36: High Risk VDCs for prioritised hazards

Hazard Type	Flood
Hazard Priority	1
High Risk VDCs	
Rampur, Tapeshwori, Beltar, Sudarpur, Hadiya, Jogidaha, Triyuga Municipality, Rauta, Rupatar, Bhalayadada, Pachwati, Reshku, Katari, Triveni,	
Hazard Type	Landslide
Hazard Priority	2
High Risk VDCs	
Mainamaini, Choudandi, Shauane, Jalpa Chilaune, Khanbu, Aaptar, Pokhari, Lafagau, Tamlichha, Rauta, Thanagaun, Okenle, Hardeni, Mayankhu, Lekhaneni	
Hazard Type	Pest and Crop disease
Hazard Priority	3
High Risk VDCs	
Rampur, Tapeshwori, Basaha, Beltar, Sundarpur, Hadiya, Jogidaha, Triyuga Municipality	
Hazard Type	Drought
Hazard Priority	4
High Risk VDCs	
All VDCs	
Hazard Type	Snakebite
Hazard Priority	5
High Risk VDCs and Municipalities	
Rampur, Tapeshwori, Basaha, Beltar, Sudarpur, Hadiya, Jogidaha, Triyuga Municipality, Tamlichha, Bashbote, Rauta, Rupatar, Bhalayadada, Pachwati, Rishku, Katari, Triveni,	

Table 37 lists all hazards identified during district consultation as problematic.

Table 37: Identified Hazards in the District

SN	Hazards	SN	Hazards
1	Flood	7	Attack by wild animal
2	Landslide	8	Earthquake
3	Fire	9	Lightening
4	Drought	10	Storm (with rain)
5	Pest and disease in crops	11	Hailstorm
6	Coldwave	12	Industrial pollution
		13	Snake bite

3.5.5. Detailed Plan of Activities

The detailed plan of activities is organised as follows. Activities are split between preparatory planning, response and relief activities during emergency and rehabilitation and recovery activities after emergency. Under the preparatory planning section, risk reduction activities are categorised according to activity types, or sectors, as policy related, physical infrastructure development and construction related, organizational capacity development related, human resource development related, natural resource conservation related, livelihood development related, and early information system development related.

Under each heading, some activities are general, and reduce risk across all hazards identified by at the district level, while special focus is given to the most problematic hazards, and some activities relate directly to these prioritised hazards. The planned activities should be carried out in tandem with the overall recommendations outlined in the early section of the plan.

Preparatory Planning: Policy Related Activities

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
Flood, Landslide	Establishing relief fund in DDC and vulnerable VDCs	DDC	VDC, NRCS, DDRC	1 year
	Making guidelines for mobilizing community, private area, organizations in order to manage disaster	DDC	VDC, NRCS, DDRC	2 year
	Advocating to include Udaypur as a flood and landslide prone district	DDRC	VDC, NRCS, DDRC	1 year
Diseases and pest attacks on crops	Advocating for forming policies on compensation of crops damaged by insect pests/diseases	DADO	Farmer's group, NGOs, DDRC, MoAC,	2 years
	Promotion of diseases and pest resistant crop varieties and promotion of bio- pesticides	DADO	DDC, Agrovat, NGOs, MoAC	2 years
	Implementing Pesticide Act and its monitoring	DADO	Farmer's group, DDRC, MoAC, NGOs, Agrovat	Immediately
Drought	Declare the drought affected VDCs where drought has been a regular phenomenon	DDRC	DDC, DADO, MoAC	After drought
	Formulate and execute crop insurance policy	DADO	DDC, MoAC, DDRC	1 year
Snake bite	Awareness building in the peak season of snake bite incidence	DPHO,	VDC, DDC, local media	
	<ul style="list-style-type: none"> Trained health personnel on snake bite treatment in the HP and SHPs level Develop snake bite treatment facilities at SHP/HP. Encourage the health persons to extend their support in the field regularly and monitored 	DPHO	DDC, MoH, NRCS, NGOs working in the health sector	1 year
	Revisit the existing policy on dissemination of Anti-Snake Venom (ASV) at HP/SHPs level where snake bite is prevalent	MoH	DDC, MoH, NRCS, NGOs working in the health sector	1 year
	Advocacy on compensation of snake bite cases and treatment expenditure through DDRC	DPHO, NRCS	DDRC, MoH, HP/SHPs, DDC, VDC	1 year

Physical Infrastructure Development and Construction Related

Relevant Hazard	Activity	Main Responsibility	In coordination with	Time frame	
Flood, Landslide Flood, Landslide	Develop effective early warning system and aware community on flood and landslide	DDRC	DDC NRCS, VDC and NGOs	Before onset of monsoon	
	Management of shelters/building in case of flood and landslide occurrence	DDRC	DDC, VDCs, NGOs	Before onset of monsoon	
	Constructing of flood and landslide obstruction structures like dikes, dam and spurs to protect the settlements, public building and farm land	DSCO, DTO	DDRC, DDC, VDCs	2 years	
	Promotion of conservation farming techniques	DADO, DSCO	VDCs, DDC	Immediately	
	Plantation on community and private land, river belt and steeps area	DFO, DSCO	VDCs, NRCS	Immediately	
	Develop a master plan for the management of Triyuga river's watershed incorporating social, technical and economic aspect linking with upward and down streams relationship	DSCO	DDC, DDRC, , VDCs and Municipality	2 years	
Hazards on agriculture	-Manage necessary insecticides, fungicides, sprayer and human resources in stand by position.	DADO	DDC, VDC, ASC, NGO working in agriculture sector, Agrovat	1 year	
Crop damage by pest and diseases.	Constructing of following irrigation scheme		Irrigation Divisional Office	DADO, DDC, VDC, Water Users' Association	1 year
	Triyuga Municipality	-Hokse Irrigation wards #. 12, 13, 14 - Annapurna Irrigation wards # 4.			
	Katari ward # 8	- Tawa khola irrigation rehab			
	Tapeshwori	Pokhari Irrigation scheme ward # 8 & 9			
	Mainamaini	-Rampur Pokhari Irrigation scheme			
		-Karkipokhari Irrigation scheme			
-Dumrepokhari Irrigation scheme					
Drought	Constructing well, pond, <i>dhiki</i> pump in drought affected VDCs	Irrigation Divisional Office, Ground water project	Water Consumer Organization, DDC, VDC, DADO	2 years	

Drought	Continuation of Small Irrigation Program	DADO	VDC, DDC, Farmer's Group, DDC	Continuously
	Conducting drip Irrigation systems	Irrigation Divisional Office, Ground water project	DADO, DDC, VDC	Continuously
	Managing separate ward for the treatment of snakebite cases in the peak season of attack	DPHO	SHP/HP, VDC, NRCS	1 Year
Snakebite	Awareness building through the hoarding boards in public places	DPHO	NRCS, VDCs, DDRC	1 year
Drought	Repair and maintenance of old irrigation schemes and activate water users' groups for the smooth operation of their irrigation systems	DIO, DADO	DDC, VDCs, NGOs	2 year

Organizational Capacity Development Related

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All	Set up disaster management unit in DDC and focal desk in other line agencies	DDC and line agencies	DDRC	1 year
All	Form and strengthen DMCs at VDC level	DDC, DDRC	VDCs, NGOs	1 yr
All	Facilitate VDC, DDC and DLAs annual plan that are responsive to disaster risk management	DDC	DDRC, DLAs, line ministries,	1 year
All	Establishment of disaster relief fund in DDC and VDCs in need	DDC	DDRC, VDCs	1 year
All	Develop a district level disaster risk management plan bringing all stakeholders under the umbrella of DDRC/DDC for synergetic effect and best resource mobilization	DDC,	DDRC, NRCS, stakeholders	1 year
All	Managing of necessary relief and rescue materials in ready position as and when needed.	DDRC	NRCS, I/NGOs working in DRM	1 year
All	Mapping of disaster prone VDCs and areas after its recognition	DDC	VDCs, NRCS, DLAs	1 year
Landslide	<ul style="list-style-type: none"> · Recognizing landslide prone areas and categorizing medium and high landslide affected VDCs · Awareness building to settle in a safer places 	NRCS, Nav Prabhat	VDCs, DDC	1 year
Crop damage by pest and diseases.	<ul style="list-style-type: none"> · Developing capacities of DADO staff on IPM · Develop IPM trainers in the district. · Set up a laboratory in DADO for testing of diseases/insects 	DADO	DoA, Plant Protection Directorate, FAO, DDC	2 years
	Facilitate VDCs to allocate fund for crop management, sprayers, pesticides	VDCs	DDC, DADO	2 years
Drought	Promote rain water harvesting technologies in the drought prone area like construction of water harvesting pond.	DIO, DADO	DSCO, DDC, DIO,	2 years
Snake bite	Set up mechanism for the treatment of snake bite case in each SHPs/HPs and District Hospital	DPHO	DDC, NRCS	1 Year

Human Resource Development Related

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All	Train DDC and VDC representatives, political leaders, field based staff of district line agencies on DRM	DDC	DDRC, Nav Prabhat, NRCS	Continuous
All	Develop capacities of VDC secretaries in disaster risk management, record keeping	DDC	NRCS, VDCs	1 year
All, focusing flood	Train the rural youth of disaster affected VDCs on rescue and first aids	NRCS	VDCs, DDRC	Continuous
All, esp. Floods	Provide on farm and off- farm economic development activities targeting women and youth vulnerable to different hazards	Small and Cottage industry Office	VDCs, NGOs, Cooperatives.Saving credit groups	Continuous
Flood	Support households with small animal like goat keeping, poultry depending up on appropriateness on the communities and location	DLSO	DDC, VDCs, NGO	1 year
Landslide and flood	Train and develop animal health workers within the community and support to establish vet shop in the community level.	DLSO	DDC, VDCs, NGO	
Landslide	Training and demonstration on soping agriculture land technology, conservation farming and terraces improvement	DSCO, DADO	VDCs, NGOs	Continuous
Crop damage by pest and diseases.	Train and develop Rural Agriculture Extension Workers from the community level targeting women (in 10 ASC)	DADO	VDC, Regional Training Centre Tarahara	2 years
	Train at least 1 IPM trainer in each ASC Develop farmer IPM trainers group in each ASC	DADO	Regional Training Centre Tarahara, Plant Protection Directorate.	2 years
Cold wave	Promote off season vegetable farming by introducing tunnel technology, selection of resistant varieties	DADO	DDC/VDCs	1 year
	Train and promote coldwave resistant varieties and crops	DADO	VDCs, ASC, farmers' groups	2 year
Drought	Provide training on multi-water use systems	VDC	NGOs	Continuous

Natural Resource Conservation Related

Relevant Hazard	Activity	Main Responsibility	In coordination with	Time frame
Floods, Landslides	Afforestation in degraded land, river banks, community and private land.	DFO, CFUGs,	VDCs, DSCO	2 years
	Controlling of free grazing practices there by replacing stall feeding	DLSO	VDCs, CFUG	1 year
	Prevent overextraction of sand and gravel from the rivers and rivulets.	DDC	VDCs, DFO	1 year
	Plantation of bamboo, broom grasses in the banks river	DSCO	DADO, VDCs	1 year
	Construction of spurs, dams in the river belts with incorporation of bio-engineering measures	DSCO	VDC, DDC, users' group	2 years
	Effective and scientific management of forest resources from community and natural forest.	DFO	DDC, VDC, CFUGs	2 years
	Provide first aid training and raise awareness on preventive measures	DPHO	All stakeholders	Continuous
Drought	Conserve well, spring pond so that the water requirements for nursery could be managed during acute shortage,	Farmers groups,	DADO, DSCO, VDC	Drought

Livelihood Development Related

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All hazards	Support on-farm and off-farm income generating activities like : <ul style="list-style-type: none"> - vegetable farming in commercial scale - small animal rearing - agro-forestry based skill based training - promote high value cash crops- turmeric, ginger, garlic and herbs 	DADO, DFO, Cottage Office	DDC, VDCs, NGO,	Ongoing
All hazards	Train families in on farm, off farm IGAs as per program needs and communities' interest and skill based training(handicrafts) to the families	DADO, DFO, Cottage Office	DDC, VDCs, NGO,	On going
Agricultural hazards	Support to supply the improved seeds and fertilizer to the affected families.	DADO	DDC, VDC and NGOs	

Early Information System Development Related

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
Floods, Landslides	Set up of EWS linking upstream and downstream communities	DDRC	DDC, VDCs, NGOs,	1 year
Floods, Landslides	Identify escape routes and shelters	DDRC, VDC	VDC, NGO, newspaper, FM	Within 1 year
Floods, Landslides	Raising awareness on EWS and mock drill exercises	DPHO, VDCs	DDC, DDRC, CBos, newspapers, radio	1 year
Droughts	Information on intensity, risks and potential mitigation measures	DADO	FM radio, newspaper, magazines	Before drought occurring time
Snake bite	Disseminating awareness information through communication medias before high time of snake bite, i.e. Chaitra-Bhadra	DPHO, VDCS	FM radio, newspaper	Before causing

Relief Activities

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All	Collection of information about the losses, damages caused by disasters.	VDC	NRCS	Immediate
All, esp. Floods, landslides	Disseminate information to affected communities and concerned organizations including central disaster risk management committee for relief assistance.	DDRC	VDC, Organization, Communication media	Immediately
All, esp. Floods, landslides	Mobilization of volunteer, army, police, rescue team for rescue and relief operation	DDRC	Police, Army Red-Cross,	Immediately
All, esp. Floods, landslides	Shift the affected communities to the safer places	DDRC	VDC, NRCS,	Immediately
All, esp. Floods, landslides	Provide health care facilities to the victims if needed	DPHO	DDRC, NRCS VDC	Immediately
All, esp. Floods, landslides	Supply safe drinking water as a utmost need	DWSS	DDC, DDRC	Immediately
All, esp. Floods, landslides	Managing food and non food items by forming mobilizing a separate cluster as envisioned in the plan	DDRCC	NRCS, VDCs, Youth	Immediately
All, esp. Floods, landslides	Collecting details of disaster information using the standard format	DDRC	VDC, Organization, D.D.C	Immediately
All, esp. Floods, landslides	Create awareness to the families not to go in disaster risk area	DDRC	Media- FM, news paper	Immediately

All, esp. Floods, landslides	Setup a temporary settlement to keep the affected families before to send in safe place	DDRC	Police Army, Nepal, VDC Volunteers	Immediately
All, esp. Floods, landslides	Provide safe drinking water and toilets soon after temporary settlement sites	DWSO, DPHO	DDRC, VDC, DDC	Immediately
All, esp. Floods, landslides	Searching for lost people as well as recognizing dead people	D.N.D.R.C	Army, Police, VDCs, Volunteers	Immediately
All, esp. Floods, landslides	Prevention of tailoring hazards such as dioghherea	District Hospital, Red-Cross, VDCs	Newspapers, Schools Magazines, F.M., NGO	Immediately
All, esp. Floods, landslides	Distributing piyush, waterguard, bleaching powder for drinking water purification	DWSS	Red-Cross, District Hospital, NGO	Immediately
Agriculture hazards	Store remaining grains and seeds in safer places	DADO	Farmers' groups, VDC	Immediately
Agriculture hazards	Judicious uses of pesticides on standing crops and stored graing as per technical advised if needed	DADO	Farmers' groups, VDC	In time
Drought	Promote drought stress controlling technology like mulching, shifting in sowing time, resistant varieties/crops	DADO	Farmer's Group, VDCs	In time
Drought	Promote conservation farming, agroforestry, bio-engineering technologies in the farming system	DADO	DSCO, VDC, farmers group	Regular basis

Rehabilitation Activities

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All hazards, esp. Floods, Landslides	Collection of damages loses of lives and properties and required assistance for the rehabilitation program	District Natural Disaster Rescue Committee (DNDRC)/DDRC	DDC , Municipality/ VDC	Within 15 days
All hazards, esp. Floods, Landslides	Explore immediate and temporary utilities like settlement, toilet, drinking water and the like for the rehabilitation	DDRC	DWSS	Within 15 days
All hazards, esp. Floods, Landslides	Conduct health camps the affected area	DPHO	NRCS, HP/SHP Private Hospital	Within 15 days
All hazards, esp. Floods, Landslides	Providing additional healthcare and medicines as per local need to the wounded people	DDRC	DPHO	
All hazards, esp. Floods, Landslides	Finding disappeared people list, and their body and hand over to their family	DDRC	VDC,	Within 15 days

All hazards, esp. Floods, Landslides	Managing for Compensation of destructed house and providing relief to death's family according to rules	DDRC , Red-Cross	VDC, Organization, Municipality	Within 30 days
All hazards, esp. Floods, Landslides	Reconstructing damaged public property	Related Government Office		
All hazards, esp. Floods, Landslides	Preparing basic report of buildings and infrastructure (damaged)	District Technical Office	VDC, Municipality	Within 30 days
All hazards, esp. Floods, Landslides	Proceeding directions for distributing relief materials compulsorily through District Natural Disaster Committee while distributing	DDRC	Red-Cross, NGO, FNCCI	
All hazards, esp. Floods, Landslides	Distributing seeds as well as saplings of vegetables to affected farmers	District Agriculture Development Office	VDC, Municipality, Organization, DDC	
All hazards, esp. Floods, Landslides	Repairing of damaged dams, road, culvert, electricity distribution line, bridge etc. and advocating by concerning office if new to be constructed	D.A.O, N.E.A., Irrigation Office, Road Division Office		
All hazards, esp. Floods, Landslides	Providing fuel wood in cheap rate to the affected	District Forest Office, Community Forest		Within 35 days
All hazards, esp. Floods, Landslides	Organizing income generation programs to affected family after their identification	VDC	NRCS, Cottage Office	
All hazards, esp. Floods, Landslides	Managing necessary relief materials to old aged, pregnant, children, disabled among affected after their recognition	D.N.D.R.C	NGO, VDC, DDC, Municipality, Women Development Office	
All hazards, esp. Floods, Landslides	Managing required uniform, stationary, bags for school going children after their recognition	District Education Office	VDC, Municipality, Organization, NRCS	Within 30 days
Drought	Submitting the collected data of harmed crops to District Agriculture Development Office, DDC and District Natural Disaster Rescue Committee for relief	VDC, ASC	Farmer's Group, NGO	After

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5. Annex

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Annex 1: Summary of National Plan for Disaster Risk Management

International			National	
Hyogo Framework for Action			National Strategy for Disaster Risk Management in Nepal (NSDRM)	
Strategic Goals		Priorities for Action	Strategic Activities	
The integration of disaster risk reduction into sustainable development policies and planning	Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards	The Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery	<p>Make Disaster Risk Reduction a Priority</p> <p>Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation</p>	1. Establish the institutional system for DRM
				2. Formulation/modification and enactment of policies, rules, regulations for incorporation of comprehensive disaster risk management concepts
				3. Mainstream DRR into national development
				4. Integrate DRR and preparedness for better response in the development plans, programmes and regular activities of local development institutions (DDCs, VDCs and Municipalities etc.)
				5. Prepare and gradually implement various policies and protocols, standards, guidelines, hazard-specific Standard Operating Procedures (SOPs), hazard-specific special national programmes for DRR
				6. Establish a network of Emergency Operation Centres (EOCs) – one at the central level and others at the district and municipality levels
				7. Allocate resources and develop sustainable funding mechanisms
The integration of disaster risk reduction into sustainable development policies and planning	Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards	The Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery	<p>Know the Risks and Take Action</p> <p>Identify, assess, and monitor disaster risks – and enhance early warning</p>	8. Assess the disaster risks due to different natural hazards and vulnerabilities at different levels and different scales; and develop a system to periodically update and make it publicly available
				9. Establish and institutionalize an authentic, open and GIS-based Disaster Information Management System (DIMS) at the central, district and municipal levels to cover all disaster-related information
				10. Establish a national system of hazard/risk monitoring and early warning to specific hazards
				11. Prepare land use maps focusing on urban and urbanizing areas, and develop a system for periodically updating and using it for land use planning
The integration of disaster risk reduction into sustainable development policies and planning	Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards	The Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery	<p>Building Understanding and Awareness</p> <p>Use knowledge, innovation, and education to build a culture of safety and resilience at all levels</p>	12. Develop/modify the National Policy on education and implement it so that it gives recognition to schools as important centres for propagating disaster awareness
				13. Implement disaster education
				14. Develop curricula on DRR training for different target groups and implement training programmes for all stakeholders
				15. Develop and implement a comprehensive national programme for disaster awareness

				16. Develop plans, programmes and facilitate for use of mass communication media for dissemination of information on disaster risk and risk reduction
				17. Develop/strengthen and encourage awareness raising programmes on DRM at the local level
				18. Encourage and support NGOs, CBOs and other stakeholders for developing and implementing awareness-raising programmes on disaster risk reduction and preparedness
The integration of disaster risk reduction into sustainable development policies and planning	Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards	The Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery	Reduce Risk Reduce the underlying risk factors	19. Integrate disaster risk reduction consideration into infrastructure development planning and implementation
				20. Assess, protect and strengthen critical public facilities and physical infrastructures
				21. Develop and implement, on a priority basis, special DRR programmes for the most vulnerable segments of the society – the marginalized and Dalit groups; women; the handicapped; disadvantaged groups, children and the elderly
				22. Incorporate disaster risk reduction measures into post-disaster recovery and rehabilitation processes
				23. Develop and promote alternative and innovative financial instruments for addressing disaster risk reduction
The integration of disaster risk reduction into sustainable development policies and planning	Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards	The Systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery	Be Prepared and Ready to Act Strengthen disaster preparedness for effective response at all levels	24. Develop and enact National Integrated Disaster Response System
				25. Develop and implement emergency response and preparedness plan, including setting up a system of emergency operation centres throughout the country
				26. Establish and/or strengthen warehousing and pre-positioning capacities at strategic locations (centre, district, municipality and villages) for storing food, medicines, other relief supplies and rescue tools and equipment
				27. Establish a robust communication system that can be used during emergency situations as well as during preparedness phase
				28. Establish an efficient transport and logistics management mechanism
				29. Enhance emergency response capacities of communities at the VDC level

Annex 2: Standard Operating Procedures for District Departments and Agencies

Contents:

- 2.1 District Development Committee
- 2.2 Municipality
- 2.3 District Public Health Office
- 2.4 District Agriculture Development Office
- 2.5 District Education Office
- 2.6 Department of Urban Development and Building Construction
- 2.7 Department of Water Supply and Sanitation
- 2.8 Nepal Telecommunication Corporation
- 2.9 Search and Rescue Operation
- 2.10 Responsibilities of Other Institutions

2. 1 District Development Committee

The District Development Committee is headed by the District President. It is responsible for the development works in the district. It receives the support of all the Governmental and Non Governmental organizations. It should receive the support of all these actors in the district. The following activities will be carried out by this office.

Before the Disaster

- Ensure the preparation, approval, printing, modifications and updating of the District Disaster Risk Management Plan
- Organize the training of the architects, contractors, engineers, masons and technicians for the incorporation of the disaster resistant works in the District
- Arrange to prepare the bye laws to be used in construction in the urban as well as the rural areas referring the national bye laws and national building code
- Ensure the installation of an Early Warning System for all kinds of potential hazards
- Organize simulation exercises to assess the disaster preparedness Plan
- Make an arrangement of the fund required after the occurrence of the disasters

During Disasters

- Coordinate with the DDRC for search and rescue
- Help the search and rescue activity
- Help to set up the shelter camps
- Mobilize support for the ritual rites of the people killed in the disaster

After Disasters

- Coordinate with the DDRC to return the disaster displaced persons to their respective places
- Initiate activities for reconstruction and rehabilitation
- Arrange for financial support such as grants and soft loans

2.2 Municipality

The Municipality is headed by the Mayor. It is responsible for the disaster management within the municipal territory. It is supported by the Governmental and Non Governmental organizations operating within its boundary. The following activities will be carried out by this office.

Before Disaster

- Prepare a Municipal Disaster Risk Management Plan based on the Disaster Risk Management Plan of the District
- Prepare a contingency plan and test it annually by organizing drills etc
- Arrange to prepare the bye laws to be used in construction in the urban areas referring the national bye laws and national building code
- Get the development plan prepared for the municipality by reviewing the earlier plans so prepared
- Arrange trainings for architects, contractors, engineers and technicians for sound construction resistant to disasters
- Introduce financial packages to encourage the construction of disaster resistant structures in the municipality
- Organize education, training and public awareness level programs for government officials, community members and the other stakeholders.
- Monitor the construction underway in the municipality and initiate necessary action in case of default
- Assess hazards, risks and vulnerability within the territory
- Bring the community members into disaster management arena by providing them initiatives as available
- Establish a reliable contact with the round the clock District Emergency Operation Center
- Create effective access to the stockpiles of Food and Non Food Items provided in the district
- Maintain an inventory of the equipment necessary during the disaster times in the municipality
- Create a suitable administrative and technical structure to face disasters in the district

During Disasters

- Coordinate with the DDC for effective search and rescue activities
- Initiate activities to set up the shelter camp
- Coordinate with the DDRC to carry out treatment of the injured persons

After Disasters

- Coordinate with the DDRC to return the disaster displaced persons to their respective places
- Initiate activities for reconstruction and rehabilitation
- Arrange for financial support such as grants and soft loans

2.3 District Public Health Office

The District Public Health Office is the representative of the Ministry of Health in the district. It has a special role to play before, during and after the disaster so that the bodily suffering of the people is

minimized to the extent possible. Responsible for biological disaster as well as epidemics, it foresees first aid, health and medical care, ambulance arrangements, preventive steps for other diseases, record of dead persons, mobile clinics and supply of medicine. This office has the following duties to perform in disaster related situations.

Before the Disasters

- Prepare a health and nutrition related disaster reduction and emergency response plan for the municipal and village level
- Arrange for the funds required for relief and rescue works
- Monitor the capacity of health institutions in the Municipal and VDC levels
- Arrange for adequate stock of drugs necessary for disaster
- Conduct training for triage
- Disseminate the necessary information in local language through the most effective means such as audio and video
- Execute the 2003 Health Sector DRM Emergency Plan
- Initiate an integrated system for disaster risk reduction and define the roles of all the concerned actors
- Make a vulnerability assessment of the health facilities and retrofit the vulnerable ones
- Build the capacity of Rapid Response Team/Mobile Team of Doctors through training and other suitable means
- Arrange for a very effective communication system in the time of disasters
- Ensure adequate stock of drugs in several places for smooth distribution in the time of disasters
- Ensure the availability of disaster kits

During the Disaster

- Make an assessment of the need of health facility
- Mobilize the rapid response/Mobile Doctor team
- Provide medical service to the affected population
- Make a continuous survey of the need and inform the higher authority to cater accordingly
- Initiate action to nip the outbreak of the disease in bud

After the Disasters

- Be cautious about the possibility of the outbreak of the disease
- Report regularly to the District Office about the prevailing situation

2.4 District Agriculture Development Office

This Department is the representative of the Ministry of Agriculture and Cooperatives in the district. In the event of disaster, this Department has the responsibility of taking timely action so that there is minimum loss of agricultural crops and livestock including possible attacks by the insects. Primarily responsible for pest attacks and cattle epidemics, it carries out assessment of agriculture crops, livestock damage and food needs and provides seeds for early recovery.

Before the disaster

- Identify the areas likely to be affected
- Prepare the Disaster Preparedness and Emergency Response plan for the municipal and village levels
- Integrate DRR issues in the village development plans
- Arrange for storage of seeds, fertilizers and pesticides
- Coordinate with the District Administrative Office
- Build the capacity of the other agriculture related institutions in the district
- Initiate a coordinated effort for making a hazard risk and vulnerability assessment for agriculture with other disciplines
- Create a crop and livestock monitoring system
- Arrange for a agriculture related early warning system in collaboration with the existing disaster early warning system
- Relate the climate and weather forecast with the likely agricultural impact
- Upgrade the local storage practice of agricultural outputs
- Maintain seed bank and storage system
- Help to carry out river training to prevent agricultural impact
- Carry out forestation programs in landslide areas
- Prevent disaster inducing agricultural practices
- Upgrade the construction standard of the cattle sheds
- Introduce disaster resistant crops
- Document good indigenous practices for preventing disasters in agriculture
- Promote agricultural research
- Introduce insurance for likely crop loss
- Insert DRR related curricula in agricultural studies
- Initiated regular contingency planning

During the Disaster

- Assess damage of the crops and livestock and plan for their early recovery

After Disaster

- Make an assessment of the quantum of loss and initiate actions for its rehabilitation
- Make an adequate supply of seeds, fertilizers and pesticides

2.5 District Education Office

The District Education Office is the representative of the Ministry of Education at the centre. It is responsible for offering training on disaster management, running awareness campaigns and mobilizing students and teachers for several works including early warning system.

Before the Disaster

- Incorporate disaster related themes in the educational curricula
- Organize exposure programs for the teachers about disaster risk reduction
- Arrange to construct the School buildings following disaster resistant technologies
- Introduce simple equipments such as rain gauges in Schools
- Assess disaster vulnerability of the Schools
- Plan the School in such a way that it can be used as shelter house in the aftermath of the disasters
- Take the help of the students and teachers to carry out awareness activities about disasters to the community
- Document and proliferate indigenous knowledge related to disasters

During the Disaster

- Use the School Buildings as the Shelter Houses in the aftermath of the disaster
- Take the help of the students and the teachers in the distribution of relief to the disaster victims

After the Disaster

- Make an assessment of the loss in School Buildings and initiate rehabilitation action as soon as possible

2.6 Department of Urban Development and Building Construction

This office is responsible for carrying out the retrofitting of the structures, assessment of physical damage and drafting bye laws. It also provides training to the architects, contractors, engineers and technicians.

Before the Disasters

- Conduct trainings on disaster resistant constructions for architects, contractors, engineers and technicians
- Plan in advance for the provision of open spaces in the aftermath of the disasters
- Prepare and implement building regulations such as building codes for safety
- Devise incentive systems for those who undertake disaster resistant technology
- Make village and municipal level mitigation and adaptation plan for shelter, infrastructure and physical planning
- Conduct triage training for buildings and infrastructures
- Implement effectively the building permit process
- Promote cost effective materials and technology
- Concentrate on the seismic strengthening of historic buildings

- Make a documentation of the indigenous knowledge and use it to the extent possible
- Ensure that the airports are functional
- Initiate insurance for the buildings that may be affected after the disasters

During the Disaster

- Assess the condition of the important buildings and provide information to the District Disaster Relief Committee

After Disasters

- Coordinate with the other agencies for reconstruction and rehabilitation
- Provide technical assistance and supervision for reconstruction works.

2.7 Department of Water Supply and Sewerage

The Department of Water Supply and Sewerage is responsible for providing good quality drinking water before and after the disasters in the disaster prone area.

Before Disaster

- Prepare disaster preparedness and response plan for the municipality and VDC level
- Monitor water quality confirming to WHO standards
- Conserve water sources for disaster situations
- Promote the existing indigenous water supply and sanitation techniques
- Increase awareness among the people to safeguard water resources
- Carry out mapping of water resources
- Maintain traditional water resources such as stone spouts
- Carry out risk assessment of existing water sources and identify feasible options in the event of their breakdown
- Make provision for the storage of water in case of disaster situations

During Disaster

- Mobilize the reserve water supply source at the time of disaster
- Create new sanitary facilities as provisioned in the aftermath of the disasters

After Disaster

- Restore the damaged water supply and sanitation system

2.8 Nepal Telecommunication Corporation

This office is responsible for maintaining an effective communication system in the district before and after the disasters.

Before Disaster

- Provide satellite phone for important institutions and individuals
- Review communication strategy to include DRR
- Make a vulnerability assessment of the communication system and safeguard it against any disaster in future
- Make the existing office buildings disaster resistant
- Build the capacity of the institutions related to communication
- Arrange for the provision of an alternate communication system after the occurrence of disasters

During Disaster

- Use the alternate communication system in the case of breakdown in conventional system

After Disasters

- Rehabilitate the communication system as soon as possible

2.9 Search and Rescue Operation

Before Disasters

- Establish SAR and DANA process in the central and local governance duly defining the roles of Government, NGOs, local bodies, private sector and Community Based Organizations
- Create necessary (at least three) RRTs in the district
- Involve women and people of marginal community in the group
- Institutionalize SAR and DANA so that it can be immediately mobilized
- Arrange for adequate budget for SAR and DANA
- Make the rules and regulations conducive for participation of outside agencies
- Pre position the logistics necessary for SAR and DANA
- Prepare inventory of important, critically important, vulnerable and high occupancy building
- Build capacity of SAR and DANA teams
- Enhance professional competence of first responders such as Nepal Army, Nepal Armed Police and Police

During Disasters

- Make a formal SAR and DANA teams with the participation of the members from Nepal Army, Armed Police, Police and NRCS
- Rescue victims and send to the hospitals or shelter houses as necessary

After Disasters

- Work with the Team in charge of relief operation

2.10 Responsibilities of Other Institutions

DDRC: It will have the overall responsibility and accountability for the management of disasters in all its three cycles

GoN offices: Responsible for delivery of services in their respective fields in all the phases of disaster management

Local Government: Responsible for planning, programming and implementing activities in all the cycles of disaster management

I/NGOs, CBOs

Responsible for assisting the GoN in terms of providing financial and managerial support in all the stages of disaster management by providing relief, conducting awareness and capacity building program, arranging preparedness activities at community level and assisting in rehabilitation and reconstruction.

Corporate Sector: Responsible for supply of essential items in all the phases of disaster management

Donor Agencies: Responsible for making investment in all the stages of disaster management

Annex 3: Schedule of Program

“TRAINING AND CAPACITY BUILDING SUPPORT AND PREPARATION OF DISTRICT DISASTER RISK MANAGEMENT PLAN”

Session	Time (duration)	Topic	Resource Person
Day 1			
	11 00-11:15	Chief Guest, guests and the Chair of the workshop are seated	Field Monitor FAO
1 st	11:15-11:30	Welcome and Introduction of the participants	SP Dawadi
2 nd	11:30-11:45	<ul style="list-style-type: none"> • Introduction to the subject • Objectives of the Training Workshop 	NG Rai
	11:45-12:00	Tea	
3 rd	12:00-1:1 30	<ul style="list-style-type: none"> • Hazard, vulnerability risk and disasters • Disaster defined and is types • National Act, Regul and Strategies • Hyogo FA and its provisions • Vulnerabilities and its assessment • Capacities to withstand disasters • Capacities enhancing • Livelihood for less vulnerability 	NG Rai, SP Dawadi
	1:30-2:00	Tea Time	
4 th	2 00-2:30	Disaster management and Preparedness	SP Dawadi
	2:30-2:50	Discussion	
	2:50-3:00	Planning for next day	
Day 2			
	10:00-10:15	Tea	
1 st	10:15-10:30	Recap of the Day 1 st	FAO Monitor
2 nd	10:30-11:30	<ul style="list-style-type: none"> • Disaster management • Vulnerability reduction 	SP Dawadi
3 rd	11:30-12:30	<ul style="list-style-type: none"> • Weather and climate • climate change: what is causing • impact of climate change • effect of climate change in agriculture and other areas • adaptation or mitigation • adaptation activities in agriculture • combined roles and responsibility 	NG Rai
	12:30-12:45	Snacks	
4 th	12:45-3:45	<ul style="list-style-type: none"> • Participatory Vulnerability Ananalysis • Identifying the hazards • Analyses of loss and repetition • Prioritizing hazards in VDCs • Vulnerability analysis for the district • Prioritization of hazards in the district 	NG Rai & SP Dawadi
5 th	3:45-4:00	Explanation of the field Tools	
6 th	4:00-4:30	Planning ahead	SP Dawadi
6 th	4:30-4:45	Worlds from the Chief Guest and Closing of the Training Workshop	Chief Guest Chair of the Workshop

Annex 4: Participants of PVA Exercise in Udaypur District

SN	Name	Position / Organization
1	Mr. Arjun Kumar Thapa	Local Development Officer /DDC
2	Mr. Jhalak Ram Subedi	Ass. Chief District Officer /DAO
3	Mr. Binod Kumar Jha	Engineer / DIO
4	Mr. Surya Narayan Chaudhary	Soil Conservation Officer/ DSCO
5	Mr. Ram Pukar Thakur	Livestock Officer/ DLSO
6	Mr. Shyam Kumar Poudel	Representative/ Rastriya Prajatantrik Party Nepal
7	Mr. Gaur Bahadur Basnet	Representative /Nepali Congress
8	Mr. Bharat Khadka	Chairperson / Federation of Journalist
9	Mr. Sampat Yadav	Assistant forest officer/ DFO
10	Mr. Eak Bahadur	
11	Mr. Satya Narayan	Secretary
12	Mr. Bharat Kumar Bajagain	Section Officer/ DEO
13	Mr. Utsav Pokharel	Member Secretary/ Amurta F.M.
14	Mrs. Kopila Katel	Representative / Amurta F.M.
15	Mr. Tek Raj Khatri	Representative/ NRCS
16	Mr. Durga Nanda Chaudhary	Chairperson/ Nava Prabhat Nepal
17	Mr. Driga Lal Chaudhary	Representative/ Nepal Communist Party (UML)
18	Mr. Bishwa Jit Rai	Planning Officer/ DDC
19	Mr. Raj Kumar Rai	Secretary/ Nepal Communist Party (ML)
20	Mr. Daya Ram Chaudhary	Representative / Sadbhawana Party
21	Mr. Binod Katuwal	District Incharge/ Nepal Communist Party (Maoist)
22	Mr. Bindeshwor Yadav	Horticulture Officer/ DADO
23	Mr. Basu Prasad Dhungana	Junior Technician/DADO
24	Mr. Ram Bharosh Shah	Junior Technician/ ASC Katari
25	Mr. Mohan Lal Phuyal	Junior Technician / ASC Beltar
26	Mr. Chudamani Bhattarai	Plant Protection Officer/ DADO
27	Mr. Tej Narayan Chaudhary	Agri-Extension Officer/ DADO
28	Mr. Shambhu Chaudhary	VDC Secretary Sundarpur
29	Mr. Pesal Pokharel	VDC Secretary Triveni
30	Mr. Binod Mote	Secretary / Dalit Janajati Party
31	Mr. Prakash Sah	Junior Technician / ASC Murkuchi
32	Mr. Nathu Prasad Chaudhary	Junior Technician / DADO
33	Mr. Nabin Shah	Representative Amurta F.M.
34	Mr. Mani Raj Dahal	Representative/ Akhil Krantikari
35	Ms. Nirmala Bhandari	Radio Triyuga FM
36	Mr. Netra Raj Khatri	Head assistant/ DADO
37	Mr. Nar Gopal Rai	Team Leader/PAC
38	Mr. Shree Prasad Dawadi	Field Officer/PA
39	Mr. Buddhi Pokharel	Field Montor/FAO TCP Udaypur

Annex 5: Field Tools Used for Detailed Planning

Preparedness Planning

Line Agency: _____

Disaster: _____

SN	Activity	Major Responsibility	In coordination with	Time frame	Estimated Budget
<i>Improvement in relevant Policies</i>					
<i>Infrastructure Development and Implementation</i>					
<i>Organizational Capacity Development</i>					
<i>Human Resource Development (TNA included)</i>					
<i>Natural Resource Development</i>					
<i>Livelihood Development</i>					
<i>Early Warning System Development</i>					

Relief Planning

Line Agency: _____

SN	Activity	Major Responsibility	In coordination with	Time frame	Estimated Budget
<i>Disaster – Prioritized-1st</i>					
<i>Disaster – Prioritized-2nd</i>					
<i>Disaster – Prioritized-3rd</i>					
<i>Disaster – Prioritized-4th</i>					
<i>Disaster – Prioritized-5th</i>					

Rehabilitation and Rebuilding Planning

Line Agency: _____

SN	Activity	Major Responsibility	In coordination with	Time frame	Estimated Budget
<i>Disaster – Prioritized-1st</i>					
<i>Disaster – Prioritized-2nd</i>					
<i>Disaster – Prioritized-3rd</i>					
<i>Disaster – Prioritized-4th</i>					
<i>Disaster – Prioritized-5th</i>					

Annex 6: Outputs from VDC level PVA Exercises

6.1 Jalpa chilaune

Identified disasters:

- | | | |
|---------------|--------------------------|---------------------|
| 1) Flood | 5) Fire | 9) Epidemic |
| 2) Landslides | 6) Cold wave | 10) Thunderbolt |
| 3) Earthquake | 7) Crop related diseases | 11) Animal diseases |
| 4) Drought | 8) Forest fire | 12) Hailstone |

Index:

H – High

M – Medium

L – Low

0 - No

Analysis of losses due to disaster and its repetition of Jalpa chilaune VDC of Udaypur district

	Flood	Land slides	Earth quake	Drought	Fire	Cold wave	Insects & diseases	Forest fire	Epidemic	Thunder bolt	Animal diseases	Hailstone
	H	H	L	H	L	M	M	M	L	L	M	L
	H	H	-	M	H	H	H	H	L	M	H	M

Ward level disaster prioritization of Jalpa chilaune VDC of Udaypur district of Nepal

Disaster/ Ward number	Flood	Landslides	Earthquake	Drought	Fire	Cold wave	Insect and diseases	Forest fire	Epidemic	Thunderbolt	Animal diseases	Hailstone
1	M	L	L	L	L	L	M	0	L	L	M	L
2	M	L	L	M	M	L	M	L	L	L	M	L
3	L	L	L	M	M	L	L	M	L	L	L	M
4	H	M	L	H	M	M	M	M	L	L	M	L
5	H	H	L	M	L	M	M	M	L	L	M	L
6	H	H	L	M	L	M	M	L	L	L	M	L
7	L	L	L	L	L	L	L	M	L	L	L	M
8	L	H	L	L	L	L	L	M	L	L	L	L
9	L	H	L	M	L	L	L	L	L	L	L	L

Vulnerability analysis of Triveni VDC of Udaypur district of Nepal

Disaster/Vulnerability	Flood	Land slides	Earth quake	Drought	Fire	Cold wave	Insect and diseases	Forest fire	Epidemic	Thunder bolt	Animal diseases	Hailstone
Population	H	H	H	-	L	0	0	M	M	L	0	0
Land	H	H	0	0	0	0	0	0	0	0	0	0
Crops	M	M	L	H	L	M	M	0	0	0	0	L
Domestic animals	M	H	M	L	L	0	0	L	0	L	H	L
Physical infrastructure	H	H	H	0	M	0	0	0	0	L	0	L
Cultural heritage	M	H	L	L	0	0	0	H	0	0	0	L

Disaster prioritization of Jalpa chilaune VDC of Udaypur district of Nepal

	Flood		Land slides		Earth quake		Drought		Fire		Cold wave		Insect and diseases		Forest fire		Epidemic		Thunder bolt		Animal diseases		Hailstone		
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	
Losses and repetition	2	0	2	0	0	0	1	1	1	0	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1
Ward level prioritization	3	2	4	1	0	0	1	5	0	3	0	3	0	5	0	5	0	0	0	0	0	5	0	2	
Vulnerability	3	3	5	1	2	1	1	1	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	0	
Total	8	5	11	2	2	1	3	7	1	4	1	5	1	7	2	7	0	1	0	1	2	6	0	3	

6.2 Sundarpur

List of identified disasters:

- | | | | |
|----------------|-----------------------------|-------------------------|----------------|
| 1) Flood | 5) Attack from wild animals | 8) Drought | 12) Epidemic |
| 2) Landslides | 6) Road accident | 9) Animal diseases | 13) Storm |
| 3) Fire | 7) Earthquake | 10) Insect and diseases | 14) Snake bite |
| 4) Forest fire | | 11) Cold wave | |

Analysis of losses due to disaster and its repetition of Sundarpur VDC of Udaypur district

Index:

H – High

M – Medium

L – Low

0 - N

	Flood	Landslides	Fire	Forest fire	Attack from wild animals	Road accident	Earth quake	Drought	Animal diseases	Insect and diseases	Cold wave	Epidemic	Storm	snake bite
Loss	H	M	L	M	M	L	L	H	L	M	M	L	M	M
Repetition	H	M	M	H	H	L	0	H	H	H	H	M	H	H

Ward level disaster prioritization of Sundarpur VDC of Udaypur district of Nepal

Disaster/ Ward number	Flood	Land slides	Fire	Forest fire	Attack from wild animals	Road accident	Earth quake	Drought	Animal diseases	Inset and diseases	Cold wave	Epidemic	Storm	Snake bite
1	H	L	L	L	L	L	L	M	L	L	L	L	L	L
2	H	L	M	L	L	L	L	M	M	L	L	L	M	L
3	M	M	L	L	L	L	L	L	L	M	M	L	L	M
4	H	M	L	M	M	L	L	M	M	M	M	L	M	M
5	H	M	L	M	M	L	L	M	M	M	M	L	L	M
6	M	L	L	M	M	L	L	L	L	L	L	L	M	L
7	M	L	L	L	L	L	L	L	L	M	M	L	L	L
8	M	L	L	L	L	L	L	L	L	M	M	L	M	L
9	H	M	L	M	M	L	L	L	M	L	M	L	L	M

Vulnerability analysis of Sundarpur VDC of Udaypur district of Nepal

Disaster/ Vulnerability	Flood	Land slides	Fire	Forest fire	Attack from wild animals	Road accident	Earth quake	Drought	Animal diseases	Insect and diseases	Cold wave	Epidemic	storm	Snake bite
Population	H	L	L	L	M	L	H	0	0	0	L	M	L	L
Land	H	M	0	0	0	0	0	0	0	0	0	0	0	0
Crops	H	L	L	0	M	0	L	H	0	M	M	0	L	0
Domestic animals	M	0	L	L	M	0	L	L	M	0	L	0	L	L
Physical infrastructure	H	0	M	0	M	0	H	0	0	0	0	0	M	0
Cultural heritage	M	M	0	M	0	0	0	L	0	0	0	0	L	0

Disaster prioritization of Jalpachelau VDC of Udaypur district of Nepal

	Flood		Land slides		Fire		Forest fire		Attack from wild animals		Road accident		Earth quake		Drought		Animal diseases		Insect and diseases		Cold wave		Epidemic		Storm		Snake bite		
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	
Losses and repetition	2	0	0	2	0	1	1	1	1	1	0	0	0	0	2	0	1	0	1	1	1	1	0	1	1	1	1	1	1
Ward level prioritization	5	4	0	4	0	1	0	4	0	4	0	0	0	0	4	0	4	0	5	0	6	0	0	0	4	0	4		
Vulnerability	4	2	0	2	0	1	0	1	0	4	0	0	2	0	1	0	0	1	0	1	0	1	0	1	0	1	0	0	
Total	11	6	0	8	0	3	1	6	1	9	0	0	2	0	3	4	1	5	1	7	1	8	0	2	1	6	1	5	

6.3 Triveni

Identified disasters:

- | | | |
|-------------------------|-----------------|------------------------------|
| 1) Flood | 6) Drought | 11) Landslides |
| 2) Earthquake | 7) Snake bite | 12) Attack from wild animals |
| 3) Storm | 8) Fire | 13) Fire |
| 4) Hailstone | 9) cold wave | 14) Dog bite |
| 5) Insects at the crops | 10) Thunderbolt | |

Index:

H – High

M – Medium

L – Low

0 - No

Analysis of losses due to disaster and its repetition of Triveni VDC of Udaypur district

	Flood	Earth quake	Storm	Hails tone	Insect and disease	Drought	Snake bite	Fire	Cold wave	Thunder bolt	Land slides	Attack from wild animals	Forest fire	Dog bite
Loss	H	L	M	L	M	H	M	L	M	L	L	L	M	L
Repetition	H	0	H	M	H	H	H	M	H	M	H	H	M	M

Ward level disaster prioritization of Triveni VDC of Udaypur district of Nepal

Disaster/ Ward number	Flood	Earth quake	Storm	Hailstone	Insect and diseases at crops	Drought	Snake bite	Fire	Cold wave	Thunderbolt	Land slides	Attack from wild animals	Forest fire	Dog bite
1	H	L	L	L	M	M	L	L	L	L	L	L	L	L
2	M	L	L	L	M	M	L	L	L	L	L	L	L	L
3	M	L	L	L	M	M	L	L	M	L	L	L	L	L
4	M	L	L	L	M	M	L	L	M	L	L	L	L	L
5	M	L	L	L	M	M	L	L	L	L	M	M	M	L
6	M	L	L	L	M	M	L	L	M	L	L	L	L	L
7	H	L	L	L	M	L	L	L	L	L	L	L	L	L
8	H	L	L	L	M	L	L	L	L	L	L	L	L	L
9	H	L	L	L	M	L	L	L	M	L	L	L	L	L

Vulnerability analysis of Tribheni VDC of Udaypur district of Nepal

Disaster/Vulnerability	Flood	Earth quake	Storm	Hail stone	Insect and diseases	Drought	Snake bite	Fire	Cold wave	Thunder bolt	Land slides	Attack from wild animals	Forest fire	Dog bite
Population	H	M	L	L	-	L	M	L	L	L	M	L	L	L
Land	H	0	0	0	0	0	0	0	0	0	M	0	0	0
Crops	H	L	M	L	M	H	0	L	M	0	M	L	0	0
Domestic animals	M	L	L	L	0	L	L	L	0	L	L	L	L	L
Physical infrastructure	H	H	L	L	0	0	0	L	0	L	M	0	0	0
Cultural heritage	M	0	L	L	0	L	0	0	0	0	M	0	M	0

Disaster prioritization of Triveni VDC of Udaypur district of Nepal

	Flood		Earthquake		Storm		Insects and diseases		Drought		Snake bite		Fire		Cold wave		Thunderbolt		Landslides		Attack from wild animals		Forest fire		Dog bite	
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M
Losses and repetition	2	0	0	0	1	1	1	1	2	0	1	1	0	1	1	1	0	1	1	0	1	0	0	2	0	1
Ward level prioritization	4	5	0	0	0	0	0	9	0	6	0	0	0	0	4	0	0	0	1	0	1	0	1	0	0	
Vulnerability	4	2	1	1	0	1	0	1	1	0	0	1	0	0	0	1	0	0	0	5	0	0	0	1	0	0
Total	10	7	1	1	1	2	1	11	3	6	1	2	0	1	1	6	0	1	1	6	1	1	0	4	0	1

Annex 7: Contact Lists of Service Institutions

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- 7.11 Active NGO/INGO
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7.1 District Disaster Relief Committee Members

SN	Name , Surname	Post in the DNDRC	Official Position	Office	Phone no.
1.	Basanta Kr Upadhyaya	Chairman	Chief District Officer	District Administration Office	035-420131
2.	Surendra Kr Pokharel	Member	Major	Nepal Army	
3.	Mohan Lal Maskey	Member Secretary	LDO	DDC	035-420144
4.	Manoj Yadav	Member	DSP	Nepal Police	035-420199
5.	Megh Bahadur Shah	Member	DSP	Armed Police Force	
6.	Surendra Prasad Chaudhary	Member	DEO	District Education Office	035-420175
7.	Satya Dev Mandal	Member	DADO	District Agriculture Development Office	035-420130
8.	Shanta Muni Tamrakar	Member	DFO	District Forest Office	035-420134
9.	Bharat Thapa	Member		Agriculture Development Bank, Nepal	035-420166
10.	Surya N Chaudhary	Member	DSCO	District Soil Conservation Office	035-420204
11.	Bidur Basnet	Member	President NRCS	Nepal Red Cross Society – District Chapter	035-420200
12.	Bajra Kishore Thakur	Member	Doctor	District Health Office	035-420188

Political Parties			
13.	CPN – Maoist (CPN-Maoist)	Contact - Ananta	035-420747 /09842824560
14.	CPN (UML)	Secretary -	035-420208/ 9841136395
15.	Nepali Congress (NC)	Contact – Narayan Karki	035-420220/ 974300354
16.	Rashtriya Prajatantra Party (RPP)	Chairman - Secretary -	035-420294/ 035-420272
17.	Chure Bhavar Rastriya Ekta Party	Contact - Dilip Niraula	9842829942
18.	United People Front	Contact – Narayan Burja Magar	9842824267

7.2 DDRC (Emergency Focal Respondents)

SN	Cluster	Leading institution	Helping institution	Focal person & Contact number
1	Information/Co ordination	District Administration Office Udaypur	<ul style="list-style-type: none"> • VDCs • Nepal Telecom • Nepal Police, Nepal Army, Armed Police Force • Federation of Journalist • Local FMs • Nepal Redcross Society • Nawaprabhat Nepal • Local political parties , • UNICEF 	Assistant Chief District Officer 035-420787
2	Search & Rescue	District Administration Office	<ul style="list-style-type: none"> • Nepal Police, Nepal Army, Armed Police Force • Nepal Red cross society • Nawaprabhat Nepal • Triyuga Municipality 	Assistant Chief District Officer 035-420787
3	NFI/Shelter	Nepal Redcross society Udaypur	<ul style="list-style-type: none"> • Nawaprabhat • Industry and commerce organization • Society helping groups • Community forest User's group • Consturctor and builder organization • Soil Conservvation Office • District Forest Office • World Vision International 	035-420200 9743007310
4	Food	District Agriculture Development Office	<ul style="list-style-type: none"> • WFP, FAO, World Vision • Industry and Commerce Organization • Nawaprabhat Nepal • Nepal Redcross Society • Nepal China Friendship Organazation • Himali Yatayat Corporate Organization • Om Halesi Yatayat Corporate Community forest User's group • Chelibeti Club, NESPEC, Muldhar Women Group 	DADO 035-420130

5	WASH	Drinking Water and Sanitation Division Office	<ul style="list-style-type: none"> • District Technical Office, UNICEF, Drinking Water Supply Office • District Livestock Service Office, • Jalpa Youth Group • Muldhar Women Group • Bagmati Service Society • Drinking Water Consumer Federation • Janaki Jagaran Samaj 	Satya Narayan Chaudhary 035-420360 9842824397
6	Health and Nutrition	District Health Office	<ul style="list-style-type: none"> • Organization of Medicine Corporate • Eye hospital, Women rehabilitation center, Suryodaya hospital • World Vision, UNICEF, Nepal Redcross society • District Livestock Service Office • Nepal Army, Nepal Police, Armed Police Force • Nepal China Friendship organization • Federation of Industry and commerce 	District Hospital-035-420178
7	Education	District Education Office	<ul style="list-style-type: none"> • Teacher's Union, PABSON • Area Child Development Centre • Nawaprabhat Nepal • White Rhododendron • UNICEF, NGO-CC, World Vision, • CLRC 	Tularam Bhandari Section Officer 035- 420107 9842202132
8	Protection	Women Development Office	<ul style="list-style-type: none"> • WOREC, Muldhar women group, Chelibeti Club, Creative Women Group, HURENDEC, NEPSEC, CLRC • Nepal Police, Armed Police Force, Nepal Army • UNICEF, Nepal Redcross 	Gyanu Adhikari 035- 420107 9842202132
9	Rehabilitation/ Reconstruction	District Development Committee	<ul style="list-style-type: none"> • District Technical Office, District Land Reform Office, Road Division Office, • Constructor Corporate Organization, Udaypur Cement Factory • Nepal Police, Armed Police Force, Nepal Army 	DE, District Technical Office

(The List of Emergency Focal Respondents is from the draft committee names as agreed on pre-moonoon Contingency Planning workshop held on June 2010)

7.3 District Chapter and sub-chapter officials

List of district Chapter and sub Chapter officials⁶

SN	Name of Chapter	Name	Position	Phone #	Mobile
1	NRC district Chapter	Bidur Basnet	President	035-420225	9851042897
2	NRC district Chapter	Binod Basnet	Mantri	9743007310	9851100399
3	NRC district Chapter	Chakra Bdr Khadka	Treasurer	035-690795	9743014384
4	NRC district Chapter	Subhas Shrestha	Deputy Mantri	035-420221	9842826937
5	Sub branch, Gaighat	Raju Basnet	President	035-420121	9852830387
6	Sub branch, Hadiya	Rudra Bdr Raut	President	035-420478	-
7	Sub branch, Dumre	Hira Bdr Tamang	President	-	9842891430
8	Sub branch, Riskhu	Narayan Lal Shrestha	President	9743029385	9741176041
9	Sub branch, Deuri	Laxmi Pd Kattel	President	-	9842850267
10	Sub branch, Laphagaun	Damber Singh Rai	President	035-690488	-
11	Sub branch, Triveni	Tilak Bdr Budhathoki	President	-	035-691173
12	Sub branch, Bhumarsuwa	Rajesh Karki	President	-	--
13	Sub branch, Bhalayadanda	Puspa Raj Guragain	President	035-690582	9743007091
14	Sub branch, Khambu	Kul Bdr Khatri	President	035-690695	9842826284
15	Sub branch, Katari	Rajiv Thapa	President	035-450021	-
16	Sub branch, Lekhani	Bhim Bdr Joshi	President	035-620173	-
17	Sub branch, Rampur	Jay Pd Subedi	President	035-620287	-
18	Sub branch, Limpatar	Krishna Bdr Khatri	President	-	-
19	Sub branch, Sirishe	Bir Bdr Tamang	President	-	-
20	Sub branch, Basaha	Rabindra Rai	President	-	-
21	Sub branch, Hardeni	Puskar Verma	President	-	9741090527
22	NRC district Chapter	Tek Raj Khatri	Employee	035-420086	9842845241

⁶ Source: NRCS Udaypur

7.4 Volunteers in the District

List of Volunteers in NRCS Udaypur⁷

SN	Sector wise expertise	Name of volunteer	Position	Phone #	Mobile
1	First Aid	Raju Raut	Trainer	035-620420	-
2	„	Gyanendra Khadka	„	035-620523	-
3	„	Tejendra Shrestha	„	-	9842851377
4	„	Lav Raj Phuyal	„	-	9840068099
5	„	Angad Poudel	„	-	9743004692
6	„	Dan Bdr Katuwal	„	-	-
7	„	Dron Rai	„	-	9743008726
8	„	Dirga Laxmi Magar	„	-	9842837508

7.5 Female Community Health Volunteers (FCHV)

PHC = Primary Health Centre **HP** = Health Post **SHP** = Sub Health Post

As of February 2010

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
1.	Devimaya Basnet	2029	1	Aaptar	-	055	√	
2.	Kamala Rai	2034	3	"	5	056	√	
3.	Tirthamaya Karki	2032	4	"	-	057	√	
4.	Manmaya Magar	2034	5	"	-	057	×	
5.	Vedmaya Magar		6	"	-	047	√	√
6.	Sita Karki	2030	7	"	5	056	√	
7.	Radha Raut	2019	8	"	-	047	√	
8.	Purnamaya Karki	2001	9	"	-	047	√	
9.	Gaurimaya Magar	2026	2	"	-	062	×	
10.	Tikamaya Magar	2025	1	Jalpa Chilaune	-	047	×	
11.	Manmaya Magar	2026	2	"	-	047	√	
12.	Durga Pokharel	2024	3	"	8	047	√	
13.	Nirmala Ray	2024	4	"	8	047	√	
14.	Pampha Rai	2004	5	"	-	047	√	
15.	Goma Bhattarai	2018	6	"	-	047	√	
16.	Phulkumari Magar	2039	7	"	5	061	×	
17.	Chandramaya Tamang	2013	8	"	-	047	√	
18.	Dukumaya Rai	2014	9	"	-	047	√	
19.	Maya Rai	2016	1	Balamta	-	046	√	√
20.	Dalsari Rai	2007	2	"	-	046	√	

⁷ Source: NRCS Udaypur

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
21.	Shyamsari Rai	2002	3	"	-	061	×	
22.	Pyari Rai	2037	4	"	SLC	061	√	
23.	Nisha Rai	2037	5	"	7	061	×	
24.	Sujata Rai	2037	6	"	4	059	×	
25.	Jhyapimaya Rai	2025	7	"	-	046	√	√
27.	Ambika Rai	2020	9	"	8	046	√	
28.	Taradevi Rai	2041	1	Lekhgaun	6	059	√	
29.	Jantasari Rai	2015	2	"	-	053	√	
30.	Chandrakala Karki	2008	3	"	5	053	√	
31.	Kavita Shrestha	2034	4	"	8	046	√	
32.	Tilmaya Rai	2009	5	"	-	056	√	
33.	Panchamaya Magar	2027	6	"	5	046	√	
34.	Shyam Tamang	2037	7	"	5	046	√	
35.	Januka Rai	2020	8	"	-	060	√	
36.	Bimala Rai		9	"	-	056	√	
37.	Mansari Rai	1998	1	Pokhari	-	046	√	
38.	Narmaya Dahal	2031	2	"	-	046	√	
39.	Dhruvakumari Shahi	2013	3	Basbote	5	046	√	
40.	Rajkumari Rai	2017	4	"	-	046	√	
41.	Sarumaya Sarki	1978	5	"	-	046	√	
42.	Dirghamaya Shrestha	2016	6	"	-	046	√	
43.	Radha Raut	2031	7	"	-	046	√	
44.	Uttarkumari Magar	2038	8	"	5	061	√	
45.	Kalpana Khadka	2020	9	"	-	061	√	
46.	Narkumari Rai	2019	1	Bhuttar	-	046	√	√
47.	Muna Khadka	2043	2	"	-	060	√	√
48.	Kumari Dahal	2026	3	"	-	046	√	√
49.	Chitrarekha Humagain	2020	4	"	9	046	√	√
50.	Sunkumari Malla	1993	5	"	-	046	√	√
51.	Faudmaya Khatri	2020	6	"	-	056	√	√
52.	Savida Raut	2003	7	"	-	046	√	√
53.	Kalimaya Magar	1992	8	"	-	046	√	√
54.	Motimaya Raut	2022	9	"	-	061	×	
55.	Gaurimaya Shrestha	2012	1	Sorongch habise	-	047	√	
56.	Manmaya Sunuwar	2023	2	"	-	047	√	
57.	Lilamaya Khadka	2016	3	"	-	053	√	
58.	Sumitra Raut	2030	4	"	7	047	√	
59.	Durga Khadka	2024	5	"	5	053	√	
60.	Mandira Thapa	2031	6	"	-	047	√	
61.	Indra Kumari Rana Magar	2011	7	"	-	047	√	
62.	Devi Wagle	2035	8	"	-	047	√	
63.	Dambar Kumari Khadka	2011	9	"	-	047	√	√

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
64	Dabalkumari Rai	2035	1	Saune	SLC	054	√	√
65	Sabitra Rai	2022	2	"	-	047	√	√
66	Lalhira Rai	2001	3	"	-	047	√	√
67	Tulkumari Magar	2023	4	"	-	047	√	√
68	Litkumari Magar	2021	5	"	-	047	√	√
69	Santosh Rai	2024	6	"	-	047	√	√
70	Sarati Rai	2026	7	"	-	047	√	√
71	Santosh Rai	2025	8	"	-	047	√	√
72	Dhankumari Magar	2024	9	"	-	047	√	√
73	Januka Rai	2021	1	Basbote	7	059	×	×
74	Navakumari Rai	2015	2	"	8	046	√	√
75	Hastahira Rai	2014	3	"	3	046	√	√
76	Dhansari Rai	024	4	"	6	056	×	×
77	Sajana Rai	2018	5	"	10	059	×	×
78	Bhagnasari Rai	2014	6	Basbote	-	046	√	√
79	Kesarkumari Rai	2026	7	"	7	058	×	×
80	Maiya Rai	2020	8	"	5	046	√	
81	Mankumari Rai	2021	9	"	6	059	×	×
82	Yasodha Tamang	2040	1	Rampur	8	046	√	
83	Nanumaya Ghimire	2041	2	"	8	056	√	×
84	Yasodha Subedi	2034	3	"	8	046	√	
85	Faliyadevi Chaudary	2038	4	"	8	046	√	
86	Bhawanidevi Chaudary	2031	5	"	8	046	√	
87	Gita Niraula	2037	6	"	8	057	√	
88	Tika Adhikari	2038	7	"	8	046	√	×
89	Devika Magar	2037	8	"	8	046	√	
90	Purnakala Banjara	2032	9	"	8	046	√	
91	Taradevi Chaudary	2029	1	Hadiya	SLC	047	×	√
92	Ashadevi Chaudary	2024	2	"	7	047	√	√
93	Safawati Chaudary	2015	3	"	5	047	√	√
94	Banita Chaudary	2010	4	"	5	047	√	√
95	Pabitramaya Thapa	2021	5	"	5	047	√	√
96	Gitadevi Chaudary	2041	6	"	8	060	√	√
97	Laherwati Chaudary	2024	7	"	-	053	√	√
98	Sanjukadevi Chaudary	2037	8	"	6	060	√	√
99	Krishna M Khatiwada	2021	9	"	7	047	√	√
100	Khadgamaya Karki		1	Baraha	-		√	
101	Dhan MTamang		2	"			×	
102	Manmaya Katuwal		3	"			√	
103	Lilmaya Magar		4	"			√	
104	Pushpadevi Magar		5	"			√	
105	Barsimaya Magar		6	"			√	

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
106	Chupmaya Raut		7	"			√	
107	Kheku Sherpa		8	"			√	
108	Sahamaya Magar		9	"			√	
109	Puspakumari Malla	022	1	Rupatar	-	059	×	×
110	Dhankumari Magar	011	2	"	-	061	×	×
111	Devimaya Magar	028	3	"	-	-	×	×
112	Chini jyu Thakuri	038	4	"	SLC	061	×	×
113	Devi Poudel	016	5	"	8	061	×	×
114	Daman Kri Raskoti	013	6	"	10	047	√	×
115	Ganga Kri Khadka	038	7	"	8	061	×	×
116	Tilkumari Khadka	014	8	"	-	052	×	×
117	Gangamaya Khadka	033	9	Rupatar	5	061	×	×
118	Uma Karki	039	1	Thanagaun	4	060	×	×
119	Shilimaya Magar	015	2	"	-	050	×	×
120	Nandakumari Malla	014	3	"	-	054	×	×
121	Samjhana Rai	044	4	"	4	060	×	×
122	Santokumari Rai	036	5	"	7	056	×	×
123	Menukakumari Rai	038	6	"	5	056	√	×
124	Urmila Sunuwar	037	7	"	4	058	×	×
125	Yashoda Pokharel	020	8	"	3	048	√	×
126	Manmaya Magar	013	9	"	3	047	√	×
127	Ranumaya Rai	013	1	Lafagaun	-	047	√	×
128	Bishnu Malla	012	2	"	SLC	-	×	×
129	Laxmi Rai	-	3	"	-	060	√	×
130	Sabitri Khadka	007	4	"	-	047	√	×
131	Nandakumari Rai	018	5	"	-	047	√	×
132	Tulmaya Rai	006	6	"	-	047	√	×
133	Manmaya Rai	019	7	"	-	060	√	×
134	Sita Basnet	037	8	"	-	060	√	×
135	Nandimaya Rai	006	9	"	-	047	×	×
136	Ramkumari Chaudary	047	1	Sundarpur	10	060	×	×
137	Durgakumari Chaudary	037	2	"	-	061	√	×
138	Sabitrikumari Chaudary	039	3	"	7	057	√	×
139	Kamala Basnet	027	4	"	-	046	×	×
140	Durga Basnet	025	5	"	8	062	√	×
141	Indira Chaudary	017	6	"	7	055	√	×
142	Lila Chaudary	017	7	"	-	053	√	×
143	Bimala Chaudary	016	8	"	-	046	√	×
144	Saraswoti Chaudary	021	9	"	-	055	×	×
145	Naina Karki	023	1	Beltar	10	046	√	×
146	Menuka Rana	024	2	"	SLC	046	√	×
147	Ambika Khatiwada	024	3	"	9	046	√	×

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
148	Radha Bhujel	023	4	"	5	051	√	×
149	Kamala Timilsina	033	5	"	10	057	√	×
150	Sita Karki	004	6	"	S	054	√	×
151	Kalpana Shrestha	026	7	"	10	051	√	×
152	Sawitra Thapa	028	8	"	-		√	×
153	Urmila Katuwal	024	9	"	-	046	√	×
154	Indramaya Tamang	006	1	Barre	-	054	√	×
155	Manmaya Pandey	007	2	"	-	046	√	×
156	Binda Karki	039	3	Barre	SLC	061	×	×
157	Chinimaya Giri	021	4	"	-	046	√	×
158	Dillikumari Magar	019	5	"	-	061	√	×
159	Narmaya Magar	005	6	"	-	054	√	×
160	Tirthamaya Tamang	018	7	"	-	058	√	×
161	Nandamaya Magar	022	8	"	-	046	√	×
162	Takmaya Kshetri	020	9	"	-	046	√	×
163	Parvati Rai	011	1	Tamlichha	-	046	√	×
164	Gitakumari Rai	021	2	"	-	046	√	×
165	Bindkumari Karki	017	3	"	-	055	×	×
166	Padamsari Rai	023	4	"	-	055	×	×
167	Harkasari Rai	027	5	"	-	061	×	×
168	Bhaktimaya Magar	009	6	"	-	062	×	×
169	Ambika Rai	027	7	"	-	055	×	×
170	Mayasari Rai	001	8	"	-	-	√	×
171	Nirmala Khatri	033	9	"	-	061	×	×
172	Hastakumari Rai	019	1	Basaha	-	047	√	×
173	Sunita Rai	039	2	"	8	057	√	×
174	Mina Rai	026	3	"	-	062	×	×
175	Gyankumari Rai	018	4	"	8	047	√	×
176	Gautami Rai	025	5	"	8	049	√	×
177	Sabitra Acharya	039	6	"	8	062	×	×
178	Vaisna Rai	026	7	"	10	048	√	×
179	Ravi Rana Magar	021	8	"	7	060	√	×
180	Sharda Rai	035	9	"	SLC	054	√	×
181	Tirthamaya Karki	012	1	Jate	-	048	√	×
182	Bishnumaya Karki	033	2	"	-	052	√	×
183	Homkumari Thapa	018	3	"	-	056	×	×
184	Shyamalaxmi Rai	021	4	"	SLC	-	√	×
185	Santalaxmi Rai	025	5	"	10	052	√	×
186	Daiya Budhathoki	025	6	"	-	047	√	×
187	Sukhmaya Rai	029	7	"	-	047	√	×
188	Nirlaxmi Rai	033	8	"	-	052	√	×
189	Uma Koirala	027	9	"	-	056	×	×

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
190	Mankumari Magrati	017	1	Okhle	S	046	√	×
191	Kamala Rai	036	2	"	5	053	√	×
192	Sunmaya Magar	011	3	"	-	057	√	×
193	Birkhakumari Sen	006	4	"	-	058	×	×
194	Kamala Rai	022	5	"	10	056	√	×
195	Khesarmaya Magar	033	6	Okhle	10	056	√	×
196	Sumitra Sen	045	7	"	10	056	√	×
197	Ramu Baral	039	8	"	10	046	×	×
198	Mandira Sen	008	9	"	5	058	×	×
199	Bishnumaya Tamang	028	1	Dumre	-	060	×	×
200	Toskumari Magar	028	2	"	-	038	√	×
201	Bhuwankumari Rai	034	3	"	-	058	√	×
202	Buddhimaya Rai	015	4	"	-	058	×	×
203	Suryakumari Rai	010	5	"	-	058	√	√
204	Lakhmaya Tamang	020	6	"	-	058	×	√
205	Gitakumari Pulami	039	7	"	-	058	×	√
206	Bhagwati Thapa	034	8	"	-	058	√	√
207	Nandakumari Karki	030	9	"	-	058	√	√
208	Raharmaya Rai		1	Babala	-	047	√	×
209	Shuvmaya Magar	007	2	"	-	047	√	×
210	Jeena Magar	039	3	"	-	055	×	√
211	Radha Rai	022	4	"	-	055	×	×
212	Foolmaya Majhi		5	"	-	047	√	×
213	Manmaya Majhi	015	6	"	-	047	√	×
214	Masirimaya Rai	023	7	"	-	055	×	×
215	Asmita Magar		8	"	-	055	×	×
216	Jaikumari Rai	007	9	"	-	047	√	×
217	Manlaxmi Tamang	011	1	Siddhipur	-	056	√	×
218	Dhanmaya Magar	022	2	"	4	047	√	×
219	Balkumari Rai	014	3	"	-	047	√	×
220	Pampha Rai	015	4	"	-	056	√	×
221	Suryamaya Magar	012	5	"	-	047	√	×
222	Harkamaya Magar	016	6	"	-	047	√	×
223	Chitrakala Rai	032	7	"	9	058	√	×
224	Jaylaxmi Magar	028	8	"	-	055	√	×
225	Chandra Rai	036	9	"	-	058	√	×
226	Pasupati Thapa	037	1	Khanbu	5	060	√	×
227	Chitradevi Magar	030	2	"	7	051	√	×
228	Devika Magar	033	3	"	10	060	√	×
229	Minadevi Karki	010	4	"	-	050	√	×
230	Ratnamaya Thapa	008	5	"	-	047	√	×
231	Dinkumari Samal	034	6	"	-	047	√	×

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
232	Dilmaya Magar	025	7	"	-	060	√	×
233	Amritmaya Magar	007	8	"	-	050	√	×
234	Dirghamaya Magar	012	9	Khanbu	-	054	√	×
235	Hirakumar Budhathoki	024	1	Mayakhu	-	047	√	×
236	Devmaya Raut	015	2	"	-	058	×	×
237	Chhayadevi Khatri	014	3	"	-	047	√	×
238	Mankumari Pulami	004	4	"	-	047	√	×
239	Padamkumari Karki	012	5	"	-	056	×	×
240	Krishnakumar Sunuwar	026	6	"	-	047	√	×
241	Ambakumar Raut	022	7	"	-	047	√	×
242	Mankumari Pyakurel	011	8	"	-	059	×	×
243	Lilakumari Pyakurel	032	9	"	-	048	√	×
244	Januka Danuwar	024	1	Risku	-	057	√	×
245	Binda Pokharel	029	2	"	9	059	√	×
246	Jhukumaya Danuwar	025	3	"	-	048	√	×
247	BAlganga Koirala	024	4	"	10	053	√	×
248	Yamkumari Bhujel	024	5	"	-	057	√	×
249	Sobha Thapa Magar	037	6	"	7	053	√	×
250	Saraswoti Pokharel	026	7	"	-	057	√	×
251	Bishnu MTamang	019	8	"	-	057	√	×
252	Hom Kumari Magar	024	9	"	8	048	√	×
253	Lila Urab	023	1	Tapeswori	8	047	√	×
254	Niru devi	015	2	"	-	047	√	×
255	Latadevi Ghimire	032	3	"	SLC	055	√	×
256	Sitadevi Chaudary	028	4	"	9	055	√	×
257	Rajdevi Chaudary	028	5	"	5	047	√	×
258	Durga Dahal	024	6	"	9	055	√	×
259	Sundar Chaudary	028	7	"	8	055	√	×
260	Khilawati Chaudhary	026	8	"	10	053	√	×
261	Kaliyadevi Chaudary	030	9	"	SLC	058	√	×
262	Shila Karki	018	1	Bhalayada nda	5	047	√	×
263	Buddhamaya Karki	024	2	"	-	054	√	×
264	Devsari Rai	019	3	"	8	047	√	×
265	Manmaya Shrestha	008	4	"	-	047	√	×
266	Sarita Tamang	042	5	"	5	047	×	×
267	Rupmaya Tamang	019	6	"	-	047	√	×
268	Chimaya Tamang	038	7	"	-	057	×	×
269	Sommaya Tamang	007	8	"	-	045	√	×
270	Hiramaya Magar	027	9	"	-	057	×	×
271	Hiramaya Budhathoki	-	1	"	-	045	√	×
272	Kalpana Khadka	026	2	Triveni	-	047	√	×
273	Vadra Karki	-	3	Triveni	-	054	√	×

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
274	Kusum Koirala	-	4	"	-	054	√	×
275	Kamal TAMang	-	5	"	-	050	×	×
276	Khambakumari Singh	017	6	"	-	044	√	×
277	Netra Gautam	012	7	"	-	044	√	×
278	Dipa Karki	-	8	"	-	050	×	×
279	Poonam Dhamala	032	9	"	-	060	×	×
280	Bhamadevi Chaudary	038	1	Jogidaha	7	058	×	×
281	Manmaya Chaulagain	005	2	"	-	047	√	×
282	Binadevi Chaudary		3	"	6	047	√	×
283	Manju Chaudary	023	4	"	10	047	√	×
284	Hansadevi Chaudary	021	5	"	-	047	√	×
285	Padma Bista	028	6	"	5	053	√	×
286	Laganwati Chaudary	008	7	"	-	053	√	×
287	Rameswori Chaudary	019	8	"	5	047	√	×
288	Shanti Khadka	022	9	"	10	047	√	×
289	Foolhira Rai	003	1	Nametar	-	046	√	×
290	Dachiki Sherpa	1993	2	"	-	046	√	×
291	Dadki Sherpa	1993	3	"	-	046	√	×
292	Krishna kumara Pulami	029	4	"	-	046	√	×
293	Durgamaya Raut	032	5	"	-	046	√	×
294	Tirthamaya Bista	031	6	"	-	055	√	×
295	Sommaya Tamang	001	7	"	-	046	√	×
296	Manmaya Basnet	047	8	"	-	055	√	×
297	Panmaya Tamang	037	9	"	-	046	√	×
298	Saranwati Raut	023	1	Hardeni	-	046	√	×
299	Tejkumari Raut	017	2	"	-	046	√	×
300	Chaalmaya BAsnet	032	3	"	-	061	√	×
301	Agnimaya Basnet	018	4	"	-	046	√	×
302	Krishnamaya BAsnet	018	5	"	-	046	√	×
303	Sunmaya Khatri	023	6	"	-	046	√	×
304	Surya Kri Tamang	016	7	"	-	046	√	×
305	Gita Budhathoki	012	8	"	-	046	√	×
306	Romkumari Basnet	030	9	"	-	061	×	×
307	Dhalkumari Rai	030	1	Chaudandi	-	057	√	×
308	Chandrakala Katuwal	030	2	"	8	047	√	×
309	Rukma Karki	034	3	"	-	057	√	×
310	Krishnamaya Rai	021	4	"	-	047	√	×
311	Atimaya Tamang	020	5	"	-	047	√	×
312	Thunga Tamang	022	6	Chaudandi	-	047	√	×
313	Balkumari Rai	026	7	"	-	047	√	×
314	Durgadevi Rai	025	8	"	-	047	√	×
315	Sensur Rai	036	9	"	10	059	×	×

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
316	Hastimaya Rai	025	1	Mainamai ni	-	047	√	×
317	Dipakumari Rai	025	2	"	8	047	√	×
318	Dhikmaya Rai	023	3	"	-	047	×	×
319	Panchakumari Rai	010	4	"	-	047	√	×
320	Antarimaya Rai	017	5	"	-	054	√	×
321	Dhanmaya B.K.	010	6	"	-	054	√	×
322	Kalpana Rai	041	7	"	-	060	×	×
323	Pancha kumari Rai	016	8	"	-	054	√	×
324	Dambarkumari Khadka	016	9	"	-	047	√	×
325	Bishnumaya Tamang		1	Katari				
326	Radha Bhattarai		2	"				
327	Dilkumari Tamang		3	"				
328	Mina Tamang		4	"				
329	Januka Khadka		5	"				
330	Pabitra Rai		6	"				
331	Ambika Basnet		7	"				
332	Shova Sapkota		8	"				
333	Dilkumari Basnet		9	"				
334	Poornamaya Magar		1	Murkuchi				
335	Devmaya Magar		2	"				
336	Ramkumari Magar		3	"				
337	Nandamaya Magar		4	"				
338	Kalpana Raymajhi		5	"				
339	Namita Rikhay		6	"				
340	Chandramaya Magar		7	"				
341	Datimaya Magar		8	"				
342	Gita KC		9	"				
343	Ramkumari B.K.		1	Udaypurgadhi				
344	Laxmi Bhandari		2	"				
345	Binda Mote		3	"				
346	Lilamaya Magar		1	Tawasri				
347	Mahamaya Magar		2	"				
348	Kalpana Kafle		3	"				
349	Laxmi Dahal		4	"				
350	Radhika Kunwar		5	Tawasri				
351	Usha Magar		6	"				
352	Sona Lama		7	"				
353	Devkumari Jogi		8	"				
354	Parvatikumari Tamang		9	"				
355	Manmaya Budhathoki		1	Sirise				

SN	Name of FCHV	Year of birth in BS	Ward #.	VDC	Education level	Work started year	Training Received	
							Basic	Refresher
356	Sanatamaya Magar		2	"				
357	Sarada Magar		3	"				
358	Kalimaya Magar		4	"				
359	Pabimaya Magar		5	"				
360	Patna Gurung		6	"				
361	Tekmaya Magar		7	"				
362	Madhumaya Magar		8	"				
363	Sunmaya Magar		9	"				
364	Farendrakumari Basnet		1	Limpatar				
365	Januka Karki		2	"				
366	Bishnumaya Khatri		3	"				
367	Anita Shrestha		4	"				
374	Ambikakumari Khatri		5	"				
368	Rojkumari Budhathoki		6	"				
369	Bhimkumari Karki		7	"				
370	Pampha Thapa		8	"				
371	Foolmaya Balampaki		9	"				
372	Krishnamaya Rana		1	Lekhani	Literate	047	√	×
373	Laxmi Shrestha		2	"	"	047	√	×
374	Gita Sunuwar		3	"	"	047	√	×
375	Hommaya Khatri		4	"	"	051	√	×
378	Belmaya Joshi		7	"	"	047	√	×
379	Mangal M Lamichhane		8	"	"	058	√	×
380	Parvatimaya Lamichhane		9	"	"	047	√	×
381	Charimaya Magar		1	Iname	"	047	√	×
382	Dillimaya Magar		2	"	"	051	√	×
383	Dhanmaya Magar		3	"	"	051	√	×
384	Laxmikumari B.K.		4	"	"	048	√	×
385	Shantamaya Tamang		5	"	"	047	√	×
386	Pushpakumari Tamang		6	"	"	047	√	×
387	Chandrika kri Sunuwar		7	"	"	058	×	×
388	Dilli Dhungana		8	"	"	058	×	×
389	Shantamaya Tamang		9	"	"	069	×	×

Nepal Red Cross Society Records⁸

A) District Office

Section/Unit	Staff assigned (position)
Planning Section	Livestock Development Officer, JT, Junior Technical Assistant
Animal Health	Veterinary Doctor, JT, Junior Technical Assistant,
Admin/ Finance	Sub Accountant, <i>Kharidar</i> and Office Helper-4

B) Livestock Service Centers (FOUR)

Name of Service Center	Staff assigned (Position)	VDC under Service Center
Livestock Service Center Beltar	JT, Office Helper	Beltar, Basaha, Chaundandi, Siddhipur
Livestock Service Center Katari	JT, JTA, Office Helper	Risku, Triveni, Katari, Tawashri, Sirishe
Livestock Service Center Pokhari	JT, JTA, Office Helper	Laphagaun, Apatar, Pokhari, Khanbu
Livestock Service Center Baraha	JT, JTA, Office Helper	Tamlichha, Bansbote, Baraha, Balamta

C) Livestock Service Sub Center (SEVEN)

Name of LSCs	Staff assigned (Position)	VDCs under each Sub Service Center
LSC Gijingchaur Soraun Chhabise	JTA and Office Helper	Lekhani, Mamankhu, Soruang Chabishe, Limpatar, Hardeni
LSC Chisapani Lekgaun	JTA and Office Helper	Iname, Lekhgaun, Okhle, Rupatar, Thanagaun
LSC Nepaltar Bhalayadanda	JTA and Office Helper	Barre, Dumre, Bhalayadanda, Panchawati
LSC Bhuttar	JTA and Office Helper	Jante, Bhuttar, Nametar, Rauta
LSC Deuri Triyuga Municipality	JTA and Office Helper	Triyga Municipality, Jalpa Chilaune
LSC Rampur	JTA and Office Helper	Mainamaini, Katunjebabala, Rampur Thoksila, Tapeshwari
LSC Hadiya	JTA and Office Helper	Sundarpur, Saune, Hadiya, Jogidaha

⁸ Source: Annual Progress Report of DLSO, Udaypur, 2065/66

7.7 Ariculture Service Centre (ASC)

SN	Name and Location of ASC	VDCs covered by the Service Centre	Services provided	Contacts	
				ASC Chief	Phone/mobile
1.	ASC Rampur	Mainamaini, Katunje, Rampur, Tapeswori	Agri-extension, demonstration, training	Badri Gautam, JTA Bishwamohan Sah JTA	9842896709
2.	ASC Beltar	Beltar, Basaha, Chaudandi, Sidhipur, Hadiya, Sundarpur	Agri-extension, demonstration, training	Mohanlal Phuyal JT Nathuni Yadav JT	9743000296 9844124003
3.	ASC Murkuchi	Jalpa Chilaune, Bhuttar, Rauta, Nametar	Agri-extension, demonstration, training	Prakash Sah JT Satyanarayan Yadav JTA	9804705245 9804734080
4.	ASC Pokhari	Lafagaun, Aaptar, Jante, Pokhari	Agri-extension, demonstration, training	Laxmi P. Yadav- HDO Tulsi P. Sah JT	033690547 9804788262
5.	ASC Lekhgaun	Iname, Lekhgaun, Okhle, Rupatar, Thanagaun	Agri-extension, demonstration, training	Ramdayal Sah JT	9804805923
6.	ASC Katari	Risku, Triveni, Katari, Sirise Tawasri, Limpatar, Hardeni	Agri-extension, demonstration, training	Hiralal Sah JT Ramvarosa Sah JT Laxminarayan Yadav JTA	9842824375 9807735481 9741121833
7.	ASC Deuri	Triyuga Municipality, Khanbu, Saune, Jogidaha	Agri-extension, demonstration, training	Narnath Regmi JT Malakumari BK JT	9743018012 9842840020
8.	ASC Nepaltar	Barre, Dumre, Bhalaydanda, Panchawati	Agri-extension, demonstration, training	Horil Sah JTA	9842887113
9.	ASC Baraha	Tamlichha, Basbote, Baraha, Balamta	Agri-extension, demonstration, training	Gorkha P. Yadav JT	033-691784 9804788262
10.	ASC Gahubari, Lekhani	Lekhani, Mayankhu, Sorung Chhabise	Agri-extension, demonstration, training	Brahmadev Yadav JT Shaila Kr Sah JTA	980487687 In education holiday

7.8 Emergency kits (First Aid Kits) stocks

The following emergency kits are stocked with Nepal Red Cross Society District Chapter Udaypur.

SN	Name of First Aid Kits	Number in stock	Status (adequate/not)	Procurement source (in case of additional need)
1	First aid kits set	-	not	own source
2	Bag (tie up in waist)	20	adequate	„
3	Stripe belt	8	„	„
4	Splint	4	„	„
5	Splint bag	4	„	„
6	Stricture	20	„	„
7	Helmet	20	„	„
8	Jacket	15	„	„
9	Tent	1	„	„
10	Roller Bandage 2"	15	„	„
11	Roller Bandage3"	20	„	„
12	Roller Bandage4"	15	„	„
13	Roller Bandage6"	15	„	„
14	Beta dine lotion	10	„	„
15	Mask Cotton	30	„	„
16	Handy plast tape	150	„	„
17	Adhesives tape USP	4	„	„
18	Crepe Bandage	7	„	„
19	Dettol soap	5	„	„
20	Tri Korn Patti	50	„	„
21	Glove	30	„	„
22	Gauge cloths	5	„	„
23	Tarpaulin	5	„	„
24	Blanket	5	„	„

7.9 Local Media (print and radio)

As of February 2010

SN	Name of Media	Media		Contact Person	
		Media Type (Paper/FM)	Phone Number	Name	Mobile
1.	Triyuga FM	FM	035-690675 035-420767	Baburam	9842822799
2.	Amurta FM	FM	035-420305		
3.	Reporters' Federation	Federation of mediapersons	035-420320		
4.	Purnapushti Weekly	News paper (weekly)	035-420730		
5.	Gorkhapatra Samachardata	News paper (daily)			9842825981
6	RSS, Udaypur	News paper			9842824392
7	Image	Radio and Television			9852830656
8	Nepal Television's repretative	Television		Tualsi Koirala	9842825570
9	Radio Nepal's representative	Radio		Bimal Khatiwada	9842838945
10	Kantipur	Print & electronic		Dill R Khatiwada	

7.10 Political Parties

As of February 2010

SN	Parties	Contact person	Phone no.
1	CPN – Maoist	Contact - Ananta	035-420747 / 09842824560
2	CPN -UML	Secretary -	035-420208 / 9841136395
3	Nepali Congress	Contact – Narayan Karki	035-420220/ 974300354
4	Rashtriya Prajatantra Party (RPP)	Chairperson Secretary	035-420294/ 035-420272
5	Chure Bhavar Ekta Rastriya Party	Contact - Dilip Niraula	9842829942
6	United People Front	Contact – Narayan Burja Magar	9842824267

Active NGO/INGO

(These organisation are carrying DRM Programme in the District)

SN	Name of Organisation	Focal Person	Contact #	Remarks
INGOs				
1	World Vision International	Purusottam Sharam	035-421173 98440-22081	
2	CARE International- Community Support program	Deepak Budhathoki	9852831666/ 035420628	Supported by DFID
NGO(particularly working in the field of Disaster Risk Management)				
1	Nava Prabhat Nepal	Durga Nanda Chaudhary	9852830872	Partnership with Action Aid Nepal
2	Samaj Sewa Samuha Udaypur	Narayan Prasad Pokharel	9853003585	Partnership with Oxfam Nepal
UN Agencies				
1	World Food Program	Laxmi Chaudhary	9743006003	Protected Relief and Recovery Operation Project (PRRO)
2	UNICEF	Manju Wagle		
3	FAO			
	Food Facility Program	Shiva Shrestha	9741059171	EU Food Facility Project
	CCA and DRM	Buddhi Pokharel	9751000817	TCP 3201 D (Climate Change Adaptation and Disaster Risk Management)

7.12 Health Service Providers (As 7.5)

7.13 Service Institutions

Service Institution: *District Agriculture Development Office, Udaypur*

Contact Person (name, post and Phone numbers)	Satya Dev Mandal
	035-420130
	9743003527
Total Numbers of office in the District	DADO buidling – 1 , Office quarter-1 Agriculture Service Centers – 6 . Contact Centers – 4.

Locations (where are they)	Gaighat, Rampur, Beltar, Murkuchchi, Pokhari, Katari, Nepaltar, Basaha, Lekhani
Working area (activities)	whole district

Particular	Number	Status (Adequate or Deficit)
Infrastructure/buildings	Building-1 Residence-1	Required-14, Presently not sufficient Required-5, presently not adequate
Equipments	The following equipments are planned for response during any disasters: 1Pick up; 3 motorcycles; 2 sprayer tanks; 4 computera	
Human Resources	25	25 human resources are trained in DRM

Service Institution: *District Soil Conservation Office, Udaypur*

Contact Person (name, post and Phone numbers)	Contact person: Surya Narayan Chaudhary, DSCO Udaypur
	Office Phone No. 035-420204
	Contact person's No. 9743004825
Total Numbers of office in the District	One in the Municipality - 2
Locations (where are they)	Currently working VDCs -Beltar, Katunje, Babala, Hadiya, Jogitar, Basaha, Katari, Triveni, Risku, Panchawati, Laphagaun & Triyuga Municipality, its mandate is to work whole district.
Working area (activities)	whole district

Particular	Status (Adequate or Deficit)
Infrastructure/buildings	Office is running in rented house, there is acute need of office building
Equipment	1 pick up and 4 motorcycles available for disasters management
Human Resources	Rajkumar Gupta - SMS Prabhunarayan Yadav -SMS Premnarayan Jha.

Service Institution: *District Forest Office, Udaypur*

Contact Person (name, post and Phone numbers)	Shanta Muni Tamrakar, DFO Udaypur
	035-420134 (O) 035-420748(R)
Total Numbers of office in the District	District Forest Office-1, Ilaka Forest Office-3, Rangepost-15 (however Triveni, Lalpata and Murkuchi have buildings)
Locations (where are they)	Ilaka Forest Offices-3 (Katari, on rent while Sundarpur and Motigada have own building)
Working area (activities)	Whole district (protection, utilization ,development of Forest)
Category of the office	Governmental

Particular	Number	Status (Adequate or Deficit)
Infrastructure/buildings (vehicles)	4 2	Inadequate
Equipment		No items we have for DRM
Human Resources	10	Insufficient

Service Institution: *District Livestock Service Office, Udaypur*

Contact Person (name, post and Phone numbers)	Ram Pukar Thakur
	035-420647
	9743009768
Total Numbers of office in the District	VDC-1 nos., Service center-4 nos., sub-service center-4 nos.
Locations (where are they)	Triyuga Municipality, Beltar, Rampur, Hadiya, Deuri, Pokhari, Basha, Katari, Bhuttar, Chisapani, Nepaltar, GijingChaur
Working area (activities)	Whole district

Particular	Number	Status (Adequate or Deficit)
Infrastructure/buildings	Building-2 Residence-2	Required-8, Presently not sufficient Required-12, presently not adequate
Equipment	None	No specific items related to DRM
Human Resources	5	These HRs can be utilized for disaster management

Records for Nepal Red Cross Society

a) District Hospital, Gaighat, Udaypur

Positions(only technical staff)	Nos	Remarks
Medical Doctor	4	
Senior Auxiliary Health Worker	1	
Staff Nurse	4	
Auxiliary Health Worker	2	
Auxiliary Nurse Midwife	3	
Lab Technician	1	
Lab Assistant	1	
Radio grapher	1	
Dark Room Assistant	1	
Medical Recorder	1	
Office Helper/Peon	3	

b) Primary Health Center, Katari, Udaypur

Positions(only technical staff)	Nos	Remarks
Medical Doctor	3	
Sister	1	Officer level
Staff Nurse	2	
Auxiliary Health Worker	1	
Auxiliary Nurse Midwife	3	
Lab Assistant	1	
Radio grapher	1	
Office Helper/Peon	3	

C) Primary Health Care, Beltar

Medical Doctor	1	Auxiliary Nurse Midwife	3
Health Assistant	1	Lab Assistant	1
Staff Nurse	2	Office Helper/Peon	3
Auxiliary Health Worker	2		

C) Health posts (NINE)

Balampa, Rupatar, Mayamkhu,	Bhuttar, Lekhgaun, Murkuchi,	Udaypurgadhi, Rampur, Deuri
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In each HP the following human resources are extending their support regularly.

Health Assistant	1	Village Health Worker	1
Auxiliary Health Worker	1	Office Helper	1
Auxiliary Nurse Midwife	1		

D) Sub- Health Post (35)-

In the rest following VDCs, one sub health post (SHP) is located in the district and they are providing health care facilities to the residents of the same VDCs.

1. Mainamaini	13. Apatar	25. Iname
2. Chaudandi	14. Pokhari	26. Okhle
3. Basaha	15. Khanbu	27. Thanagaun
4. Siddipur	16. Limpatar	28. Barre
5. Katunjebabala	17. Tamlichha	29. Dumre
6. Tapeswari	18. Bansbote	30. Bhalayadanda
7. Sundarpur	19. Baraha	31. Panchawati
8. Saune	20. Tawashree	32. Hardeni
9. Hadiya	21. Sirishe	33. Sorauchhabise
10. Jogidaha	22. Jante	34. Triveni
11. Jalpa Chilaune	23. Rauta	35. Risku
12. Laphagaun	24. Nametar	

In each SHP the following medical staff are extending their services.

Auxiliary Health Worker	1
Village Health Worker	1
Maternal and Child Health Worker	1
Office Helper	1

Annex 8: Central Level Cluster Details

Central level Cluster Leads in Emergency Response	
(as of 11th September 2009)	
Central Disaster Relief Committee	Cluster Leads Agencies Kathmandu, to support CDRC Lead

FOOD SECURITY				
Lead Organization	Ministry of Agriculture	WFP	Alternate (WFP)	
Focal Point	Dr.Dhanaraj Ratala / Mr. Hem Raj Regmi	Kimberly Deni	Jayoung Lee	
Mobile Number	9851002247 / 9841324608	9851029168	9851105248	
Phone Number	4228137	5542607 Ext 2409	5542607	
Email	hregmi1@hotmail.com	kimberly.deni@wfp.org	jayoung.lee@wfp.org	
Lead Organization		FAO (Sub-Cluster Agriculture)	Alternate (FAO)	
Focal Point		Guido Agostinucci		
Mobile Number		9803450694		
Phone Number		01-5010089		
Email		guido.agostinucci@fao.org		
Supporting Members:	ActionAid, ADRA CARE Nepal, CARITAS Nepal, CECI, Concern, DEPROSC, FAO, Hellen Keller International, ICRC, IFRC, IRD, LWF, Mercy Corps, NRCS, Oxfam, RCDSC, SAPPROS, Save the Children, UNFPA, UNICEF, World Vision			
HEALTH				
Lead Organization	MOHP Rep	Cluster Lead	WHO	Alternate (UNFPA)
Focal Point	Mr. Damodar Regmi	Dr. Sanadra Raj Uprety	Hyo-Jeong Kim	Dr. Rajendra Gurung
Mobile Number	9841359973		9851100191	98510 - 88394
Phone Number	4-262696	4255796 / 4262268	01-5523200	01-5523200
Email			kimh@searo.who.int	gurung@unfpa.org
Supporting Members:	ACF, ADRA, CARE, CIDA, CONCERN, DFID, ECHO, EDCD, GTZ-H, HECA, HI, HKI, ICRC, IFRC, INF, IRC, MDM, MERLI, MSF-H, NFHP, NPCS, NRCS, NSET, NTAG, NYOF, PSI, Save the children, SDC, TDH, TPO ,UNOCHA, UNAIDS, UNICEF, UNDP, UNFPA, USAID, WB, WV			

NUTRITION				
Lead Organization	MoHP	MoHP (CHD)	UNICEF	Alternate (UNICEF)
Focal Point	Mr. Damodar Regmi	Dr Shyam Raj Uprety	Zivai Murira	Pragyan Mathema
Mobile Number	9841359973	9851088382	98511 10684	9851038822
Phone Number	4-262696	01-4261463	5523200 ext. 1143	55223200
Email		drshyam@hotmail.com	zmurira@unicef.org	pmathema@unicef.org
Supporting Members:	ACF, ADRA, CARE, CIDA, CONCERN, DFID, ECHO, ED CD, GTZ-H, HECA, HI, HKI, ICRC, IFRC, INF, IRC, MDM, MERLI, MSF-H, NFHP, NPC S, NRCS, NSET, NTAG, NYOF, PSI, Save the children, SDC, TDH, TPO ,UNOCHA, UNAIDS, UNICEF, UNDP,UNFPA, USAID,WB, WV			

WATER AND SANITATION (WASH)			
Lead Organization	Ministry of Physical Planning and Work	UNICEF	Alternate
Focal Point	Mr. Suman Sharma	Madhav Pahari	
Mobile Number	9851059948	9851010970	
Phone Number	4226051 (off)/4361715 (Res)	01-5543053	
Email	spsharma77@gmail.com	mpahari@unicef.org	
Supporting Members:	WSSDO, KUKL, Lalitpur Sub-Municipalit, KVNSMB, Oxfam GB, NRCS/IFRC, MPPW, NGO Forum/Federation, NEWAH, ENPHO, ACF, Concern, World Vision Int., Mercy Corps, ICRC, WHO, UN-Habitat, Plan Nepal, SNV Nepal, IRD		

EDUCATION		
Lead Organization	Ministry of Education	UNICEF
Focal Point	Mr. Haribol Khanal / Mr. Ananda Paudyal	Hugh Delaney
Mobile Number	9851011335 / 9841358531	9851112857
Phone Number	6630588	01-5523200 Ext: 1133
Email	cdc@ntc.net.np / paudel.ananda@gmail.com	hdelaney@unicef.org
Co- Lead Organization		Co-Lead (Save the Children)
Focal Point		Rajkumar Dhungana
Mobile Number		9841575949
Phone Number		4258519
Email		rajkumar.dhungana@savethechildren.org.np
Supporting Members:	Save the Children, UNESCO, IRC Child Protection, UNFPA, World Education	

PROTECTION/CHILD PROTECTION/GENDER BASE VIOLENCE		
Lead Organization	OHCHR	Alternate (OHCHR)
Focal Point	Anthony Cardon	Lukas Heinzer
Mobile Number	98510 - 29407	98510 10940
Phone Number	01-4280164	01-4280164
Email	acardon@ohchr.org	lheinzer@ohchr.org
Lead Organization	UNICEF(Sub-Cluster Child Protection)	Alternate (UNICEF)
Focal Point	Radha Gurung	Joanne Doucet
Mobile Number	9841220289	98510 77083
Phone Number	5523200 ext 1106	5523200 ext. 1131
Email	rgurung@unicef.org	jdoucet@unicef.org
Lead Organization	UNFPA (Sub-Cluster GBV)	
Focal Point	Ms. Michiyo Yamada	
Mobile Number		
Phone Number		
Email	yamada@unfpa.org	
Supporting Members:	UNDP, UNFPA, UNMAS, UNHABITAT, UNHCR, OCHA, NRC, UNIFEM, WOREC, INSEC, IRC, Save the Children, Mine Action, Women Development Network	

EMERGENCY SHELTER / RECOVERY SHELTER		
Lead Organization	Ministry of Physical Planning and Work	IFRC (Emergency Shelter)
Focal Point	Mr. Om Dharananda Rajopadhyaya /Mr. Amrit Tuladhar	Gerard Ferrie
Mobile Number		9851014304
Phone Number	01-4262474	5542816
Email	amrit@errrp.org.np	esc.coord1.nepal@gmail.com
Lead Organization		UNHABITAT (Recovery Shelter)
Focal Point		Prafulla Man Singh
Mobile Number		98510 88522
Phone Number		5542816
Email		prafulla.pradhan@unhabitat.org.np
Supporting Members:	CARE, CARITAS, ICRC, IOM, NRCS, NSET, TDH, UNICEF, World Vision International	

CAMP COORDINATION AND CAMP MAMAGENMENT(CCCM)			
Lead Organization	Ministry of Physical Planning	IOM	Alternate (IOM)
Focal Point	Mr. Om Dharananda Rajopadhyaya /Mr. Amrit Tuladhar	Chandra Rana	
Mobile Number		9851104502	
Phone Number	01-4262474	023 585 201	
Email	amrit@errrp.org.np	cccmfcc@gmail.com	
Supporting Members:			

LOGISTICS			
Lead Organization		WFP	Alternate (WFP)
Focal Point		Nigel Sanders	Manoj Upreti
Mobile Number		98510 22432	985 110 4518
Phone Number		5542607	5542607
Email		nigel.sanders@wfp.org	manoj.upret@wfp.org
Supporting Members:	NRCS,CARE, INSET, ICRC,World Vision, UNICEF,UNMIN, Nepal Army , USAID ,UNHABITAT, WHO, UNFPA		

EMERGENCY COMMUNICATION	
Lead Organization WFP	
Focal Point	Bhawana Upadhyay
Mobile Number	9851047841
Phone Number	5542607 ext 2800
Email	bhawana,upadhyay@wfp.org
Co- Lead Organization	
UNICEF (Co-Lead)	
Focal Point	Ujwal Pradhanang
Mobile Number	9851054141
Phone Number	5523200 ext 1146
Email	upradhanang@unicef.org
Supporting Members:	OCHA

EARLY RECOVERY

Lead Organization	UNDP	Alternate (UNDP)
Focal Point	Ghulam Sherani	
Mobile Number	98510 38891	
Phone Number	5010060 ext. 138	
Email	ghulam.sherani@undp.org	
Supporting Members:	All Clusters	

Annex 9: Transportation Network in Udaypur District

District Road: Class “A”⁹

SN	Name of the road	Total (km)	Finished (km)		Operational (km)
			Earthen	Gravel	
1	Katari-Risku-Nepaltar	25	24	1	25
2	Nepaltar-Gaighat	35	20	15	35
3	Gaighat-Beltar	25	15	10	24
4	Beltar-Chatara	40	40	-	40
5	Majhkharka-Baraha-Bansbote	25	-	-	-
6	Katari-Bahuntar-Kurkuntar-	40	7	2	7
7	Mukurchi-Puware-Bhuttar	10	5	-	-
8	Risku-Tawasri	15	4	1.50	4
9	Fattepur-Gaighat	30	23	7	30
10	Beltar-Chisapani-Buwajor	25	2	-	2
11	Ranibas-Bange-Chisapani-	20	20	-	14
12	Mohanpur-Kakani	10	7	3	5
13	Puware-Majhkharka	15	3	-	-
14	Okhle-Dharapani-Kolvanjyang-	32	2	-	-
15	Gahubari-Mayankhu-Chitrenage	16	-	-	-
16	Dame-Ramite-Nametar	10	-	-	-
17	Mainamaini-Chatara	5	-	-	-
18	Gaighat-Rupani	14	2	-	-
19	Nepaltar-Udaypurgadhi	10	10	-	10
20	Sundarpur-Beltar	10	5	5	10
21	Fattepur-Basaha	10	7	3	10
22	Municipality ringroad	25			

⁹ Source: District Road Office, Udaypur

Rural Road Class 'B'¹⁰

SN	Name of the road	Total (km)	Finished (km)		Operational (km)
			Earthen	Gravel	
1	Betini-Rautkharka-Okhle	11	7	-	7
2	Tapeshwori-Rampur	22	2	2	22
3	Saune-Beltar	18	2	-	-
4	Khakingkhola-Jate	7	-	-	-
5	Okhle-Rupatar-Thanagau-Bansbote	35	2	-	-
6	Chisapani-Malbase-Pokhari	18	-	-	-
7	Baraha-Basbote-Balamta-Tamlichha	30	-	-	-
8	Gaighat-Simaltar	4	-	4	4
9	Kanchanpur-Shikharpur	10	-	-	-
10	Beltar-Shikharmadi	15	14	1	10
11	Majhkharka-Jate	20	-	-	-
12	Naule-Nametar-Dahar-Majhkharka	15	-	-	-
13	Bhuttar-Naule-Okani	9	-	-	-
14	Gaighat-Laxmipur-Bahedawa	8	-	7	7
15	Kurkuntar-Barre	6	-	-	-
16	Udaypurgadhi-Naule	9	-	-	-
17	Betini-Sorong	10	-	-	-
18	Pokhari-Rasuwa	20	-	-	-
19	Deuri-Sripur-Damauti	7	3	-	-
20	Lalpatta-Ghanchakre-Mainitar	5	12	-	5
21	Barre-Sagbote-Dumre	10	-	-	-
22	Rampur-Katunje	3	-	-	-
23	Bhuttar-Salthumka	15	-	-	-
24	Hadiya-Jyamire	12	3.50	-	3.50
25	Limpatar-Chantar	4	-	-	-
26	Foksingtar-Rauta	12	-	-	-
27	Asari-Vusune	3	3	-	3
28	Chilaunevanjyang-Sukaura	6	3	-	-
29	Sukaura-Murkuchi	2.5	2.50	-	2.50
30	Bokse-Beldovan	7	2	-	2
31	Lalpatta-Kharkhola	5	1	-	-
32	Ranibas-Khabu Madi	3	3	-	3
33	Patnavanjyang-Baseri	15	-	-	-
34	Risku-Sombhari-Deulikuna	6	6	1.50	6
35	Sarkitol-Jogidaha	2	2	-	2
36	Dhansitole-Jogidaha	1	1	-	1
37	Jogidaha-Mainaha	2	2	-	2

¹⁰ Source: District Road Office, Udaypur

Transportation service from *Himali* Transportation Entrepreneur's Association

From/To	To/From	Number of Buses plying
Udaypur	Dharan	32
Udaypur	Biratnagar	35
Udaypur	Rajbiraj	9
Udaypur	Kakarvitta	23
Udaypur	Janakpur	3
Udaypur	Rampur	5
Udaypur	Udaypur Nepaltar	3
Udaypur	Siraha	7
Udaypur	Saune	3
Udaypur	Birgunj	2
Udaypur	Kathmandu	41
Udaypur	Murkuchi	
Udaypur	Ghurmi	35
Udaypur	Sindhuli	2
Vehicle for transporting materials/ truck		80/ day

Source: District Transport Union's Association Office, Udaypur, Dec. 2009

Annex 10: Name list of District Implementation Task Group

SN	Organization	Name of representative and their organizations	Remarks
1	DDC Udaypur	Bishwojeet Rai, Programme Officer,	
2	DFO, Udaypur	Sampat Yadav, Assistant DFO	Transferred
3	DSCO Udaypur	Surya Narayan Chaudhary, DISCO	
4	DIO, Udaypur	Ambar Karki, Engineer	Transferred
5	DLSO, Udaypur	Ram Pukar Thakur, Livestock Officer	Transferred
6	DAO, Udaypur	Bashudev Khatiwada, Head Assistant DAO	
7	DADO, Udaypur	Satya Dev Mandal, Acting DADO Member Secretary	Replaced by confirmed DADO Mr Kamalesh Tiwari
8	FAO /TCP representative	Buddhi Pokharel, Field Monitor	



Disaster Risk Management Plan for Udaypur District

Government of Nepal
Ministry of Agriculture and Cooperatives (MOAC)
Singha Durbar, Kathmandu, Nepal
Phone: 977-1-4211706, 4211950, 4211981
Fax: 977-1-4211935
E-mail: memoac@moac.gov.np
Website: www.moac.gov.np

Food and Agriculture Organization of the United Nations
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Fax: +977-1-5526358
Email: FAO-NP@fao.org
Website: www.fao.org/world/nepal

Climate, Energy and Tenure Division (NRC)
Via delle Terme di Caracalla
00153 Rome, Italy
E-mail: climate-change@fao.org
Website: <http://www.fao.org/climatechange/en/>



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