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Disaster Risk Management Plan Siraha District



April 2011

Priority Framework for Action

Climate Change Adaptation and Disaster Risk Management in Agriculture

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Acronyms and Abbreviations

ABPSD	Agri-Business Promotion and Statistics Division
ASC	Agriculture Service Centre
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	United Kingdom's) Department for International Development
DFO	District Forest Office
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 DDNRC	District Natural Disaster Relief Committee
DoA	Department of Agriculture
DoE	Department of Education
DoF	Department of Forests
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 & Watershed Management
DSCWMO	District Soil Conservation & Watershed Management 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 & 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 Office/r
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
NAF	Nepal Armed Forces
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

Siraha 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 which is its policy and legal framework for disaster management. 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 sort of disaster management has not been used as an –**ex ante** consideration of disaster preparedness through development planning, administration and management. As an effort of proactive planning for Disaster Risk Reduction (DRR), the District Disaster Risk Management Plan (DDRMP) has been formulated for the Siraha.

The preparation of 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 Siraha district's DDRMP along with three other districts viz. Udaypur, Kapilvastu and Arghakhanachi.

Due to the district wide implication of the DDRMP, the Siraha DDC has been made accountable of the coordination and monitoring of the activities listed in the DDRMP; and since the DDRMP laid heavy emphasis on potential disaster in the agricultural 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 planning processes.

The DDRMP has been developed through a multi-stakeholder participatory planning process to inform the local governance, community, DDRC and other stakeholders towards 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 has provided a framework of key sectors and possible priority areas to consider in the Siraha DDRMP. By employing the framework provided by the NSDRM, the Siraha DDRMP has effectively implemented the Hyogo Framework of Action (HFA) 2005-2015, which is a 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 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 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 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.

Part II contains the background information with institutional response to disasters and builds linkage with national strategy and the district context.

Part III introduces the features of Siraha district followed by analyses of hazards; and 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.

In this section, the major part of the document has been devoted to the action plan based on district weaknesses and key priorities with extension to the national priorities. The detailed plan of activities for Siraha 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), media persons, other district-based supporting organizations and community people were involved. They are much appreciated for their active involvement in the different processes of the DDRMP development. The then-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 has implemented the activities and facilitated the preparation of 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.

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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 Raj Regmi Krishna, National Expert, FAO has provided coordination support during the preparation of the plan and also in facilitating meeting 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 mixing 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, prepare and cope to 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 to Nepal's specific context, and sets an agenda for priority action to mainstream disaster risk management into Nepal's development. The aim of the District Disaster Risk Management Plan is to support and extend downward the needs assessment started at the national level with the National Strategy for Disaster Risk Management by assessing the district level hazard risk context in Siraha, 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, droughts, pest and crop disease, epidemics and cold wave**. This is based on a participatory assessment taking into account **levels of loss, recurrence of events, prevalence of risk across the district's Village Development Committees, the vulnerability to the hazards of the local population and the resources the latter depends on**.

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, non-governmental organisations and 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. Strengthen village and local level organizations to mainstream disaster risk management into their activities;
2. Formalise district level protocols governing inter- and intra- institution disaster risk management strategy at the district level;
3. Support widespread initiatives on personal hygiene and community sanitation in the form of awareness raising, resource distribution and community-based monitoring mechanisms;

4. Improve structural risk reduction, including but not exclusively through bio-engineering solutions;
5. Support targeted income-generation diversification training and resource subsidies to highly vulnerable social groups and high risk locations;
6. Focus on community forestry institutions to mainstream disaster risk management into their activities;
7. Facilitate awareness raising and trainings in good practices;
8. Focus on building agricultural resilience against pest, disease and drought through trainings on input practices and improved institutional input management (emphasis on adoption of better agriculture technology);
9. Invest in mapping landscape-wide water resources, developing and building new irrigation systems;
10. Emphasise importance of building institutional capacity and storage infrastructure to ensure food security and clean water during emergency and rehabilitation;
11. Improve availability of financial support and subsidized resources for recovery;
12. Develop the network of locally accessible health care services.

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

The detailed District Disaster Management Action Plan lays 196 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 organisation from risk mitigation and disaster preparedness activities were identified through district level consultation with key stakeholders, including Government line agencies.

For the implementation of the activities outlined in this plan, the Siraha District Development Committee has to take the lead. There are several activities that fall into the working domain of more than one line agencies, the District Development Committee 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 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 District Disaster Risk Management Plans

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 Disaster Risk Management Plans from the national level down to the local level, highlighting the links between disaster management and development. The cross-sectoral nature of a disaster risk management (DRM) plan should identify the priority needs and allocate responsibilities for action to a variety of government, civil and private actors.

The National Strategy for Disaster Risk Management (NSDRM) (2009) in Nepal links the International Hyogo Framework of Action 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 Siraha district (see Table 1).

1.2. Objectives of the Siraha DDRMP

The aim of the DDRMP is to support and extend downward the needs assessment started at the national level with the NSDRM by assessing the hazard risk context in Siraha, 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, and then plan a set of strategic priority activities across the district.

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

The goals of the plan follow those of the Hyogo Framework for Action (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
- Building Understanding and Awareness
- Reduce Risk
- Be Prepared and Ready to Act

The plan seeks these goals through a contextualised approach relevant to Siraha and with special emphasis on the agriculture sector. These contextualised goals and specific objectives are set out in Table 1.

Table 1: Aim, goals and objectives of Siraha's DDRMP inline with the HFA and National Strategy for Disaster Risk Management (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 District Administration Office, District Development Office, Nepal Army, Nepal Police, Department of Agriculture, Department of Livestock Services, Department of Forestry and Soil Conservation, Department of Irrigation, District Education Office, District Health Office, Women Development Office, I/NGOs, Local representatives etc., (A complete list is annexed)

1.3. Methodology

1.3.1. Framework for DDRMP Preparation

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

The Siraha DDRMP supports and extends the international DRM framework, embodied by the International Strategy for Disaster Reduction's Hyogo Framework for Action, and Nepal's 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, have 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.

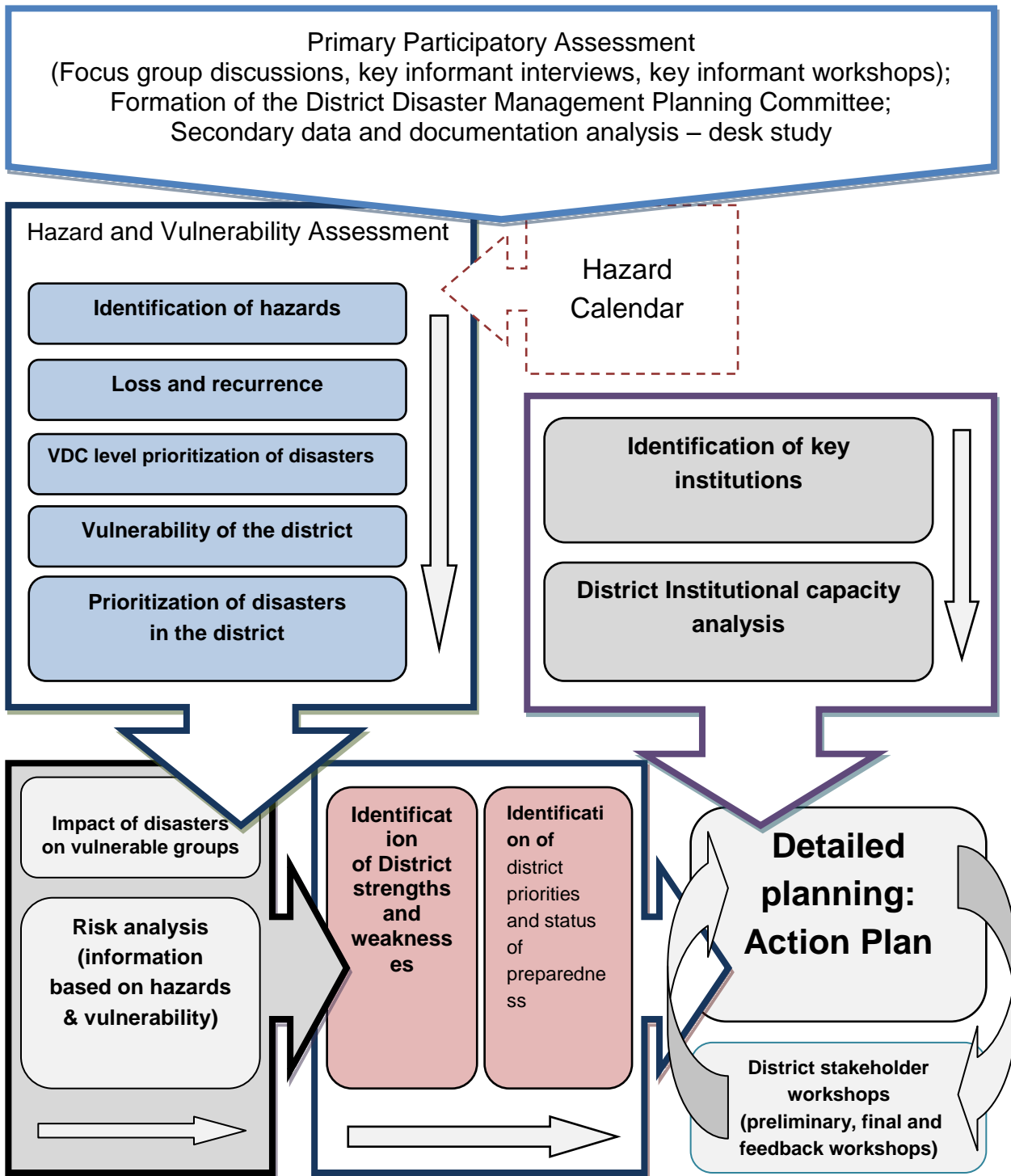
A number of existing documents of the Food and Agriculture Organization shaped this document as well. Existing DDRMPs for Chitwan, Nawalparasi, Banke and Bardia, and VDC level disaster management plans from Chitwan and Nawalparasi offered some lessons in effective planning. The baseline study report of the Siraha (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 Siraha

The core output of the DDRMP is the District Disaster Management **Action Plan (DMAP)**. This is a list of strategic activities recommended for Siraha 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 Siraha's disaster context was conducted. The important steps of this process are summarised in Table 2.

Table 2: Steps to assessing the disaster context of Siraha



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 the members of the plan facilitation team visited selected VDCs and the vulnerable communities and observed on-the-ground realities of hazards and vulnerabilities. Informal interactions with local communities elicited information on historical timeline of hazards and their 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 an historical timeline of disasters experienced in the district. The historical time line of the disasters focused 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 (A): 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 (H) whereas (M) and (L) were assigned to other losses with descending order of their importance to the communities. A period of one to two years was considered to have a frequency of (H), whereas around five years and 10 years of recurrences were used for the score of (M) and (L), respectively. With the exception of earthquake,

hazardous events which had not occurred in the past thirty years were assigned the value of zero.

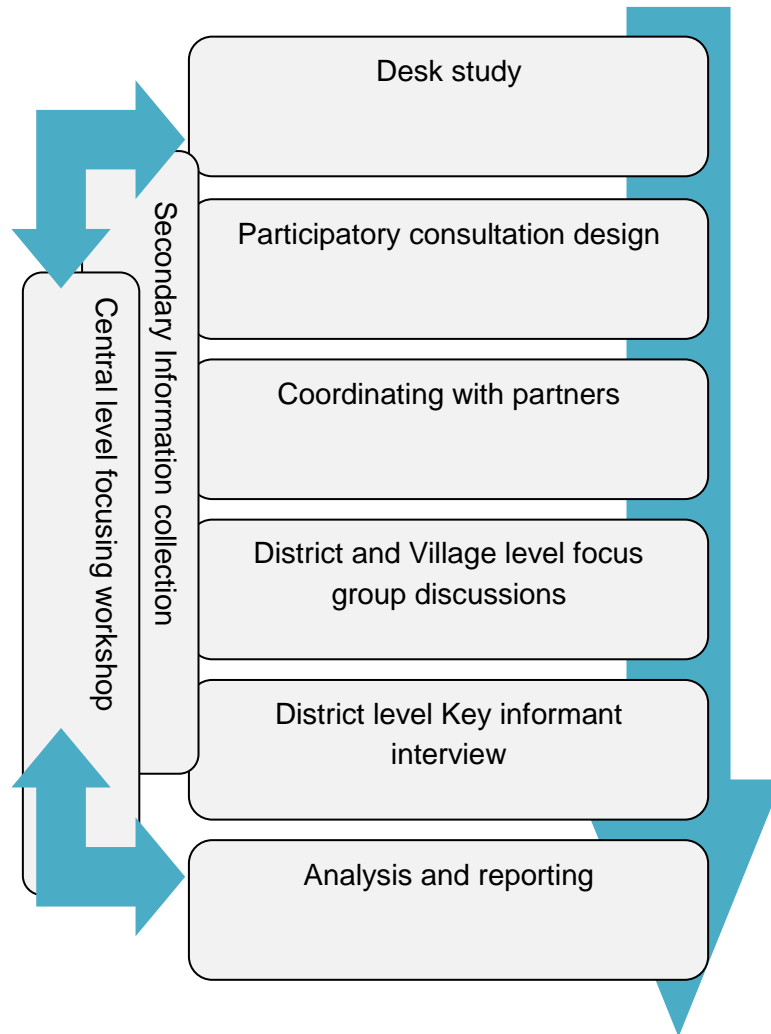
iii. VDC-level Prioritization of Disasters in the District (B): This step tried to ascertain the extent of loss in each VDCs of the district against the past disasters. This assessment was done on two grounds: the extent of loss itself and the capacity of the community to withstand the particular risk. 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 as well as greater capacity of the community to counteract that hazard and lesser loss experienced.

iv. Vulnerability of the District (C): 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 the 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 a High vulnerability against the particular disaster which has high potential of incurring losses and against which communities have low capacity in combating. Other scores are assigned with similar logical estimations.

v. Prioritization of the Disasters in the District: The previous exercises (A, B and C) aim to determine the disasters causing greater losses in the district, and which have a trend of higher recurrence. From this it is possible to extrapolate those with a high potential for incurring losses in the 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 that 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 was the results of institution identification. This activity was an integrated part of the District Development Committee 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 on which the more detailed Action Plan focuses.

Detailed Planning

The method of Key Informant Interview (KII) and district-level workshops was used for the purposes of detailed planning. The interviews with government-line agencies, service institutions, businesses, 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 a DDRM Plan consisting of policy, institutional, organizational, human resource development, livelihood improvement and technical elements. The final form of the Plan intends to integrate DRM fully 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 (FAO) by Practical Action in 2009 and the FAO reports by the National Development Research Institute (NDRI) were used extensively (FAO 2009a, 2009b). Other secondary data sources include reports from various line agencies in the district and in Kathmandu based organizations like the 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 was triangulated and verified for its precision. Information from primary and secondary sources was compared for its relevance and the most reliable sources were fed into the further analysis.

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 a 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 Siraha 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. Within Part 3 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 the 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. Firstly 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 at a district and national level are 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 on its support with additional 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 being required.

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 cause a significant number of casualties and loss of assets. Disaster caused by flood, landslide, earthquake, epidemics, fire drought, famine, hailstorm, and some 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 homes and assets.

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 have ranked Nepal 11th in terms of risk from earthquake and 30th in terms of flood risk (UNDP/BCPR 2004). Another study conducted by the World Bank has classified Nepal as one of the 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 life 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 life from the major disasters in Nepal from 1983 to 2004 shows that in the last 22 years more than 21,000 people have lost their lives due to various disasters. The data base spanning from 1983 to 2004 showed the greatest loss of life was from the epidemics (11,912 people) followed by flood and landslide (6,843 people).

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-sized disasters throughout the country. The summary of the Dis-Inventar database (

Table 4) is presented next, 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

2.1.3. 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	41lb		
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 rising temperatures, Nepal could face drier phases during dry seasons and wetter monsoon with chances of flooding and landslides during rainy seasons with subsequent impacts on agriculture and livelihoods.

In 2004, the Ministry of Agriculture and Cooperatives (MOAC) estimated damage to major agricultural crops by flood to have been in the region of 111,654 ha. A total of 586 VDCs were affected by the flood which cost 180,282 lives (Table 6). There is a clear discrepancy between the number of lives lost reported by the MoAC (180,282 people) and the Dis-Inventar Database), NSET (154,104 people) given in

² Source: Dis-Inventar Database, NSET

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

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 agricultural sector provides employment to over 65% of the population and hydropower is the primary source of electricity. Nepal could therefore be affected by climate change impacts on several fronts: hydropower, irrigation and water for livestock, domestic water uses and from 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.

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 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 the 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 show trends consistent with global climate change at the local level, through analysis of meteorological data, it is not possible to forecast future changes reliably or their 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)

Hyogo Framework of Action 2005-2015 (HFA) is the consensus strategy adopted by 168 member countries in 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 programmes. 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 its 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 tried to be 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 provision of the 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). 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 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 the district water supply office, district education office and district health office. 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 and 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 groups 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 for monitoring the integration of DRR into the development programs. The responsibility of civil society monitoring of DRR should be a part of the monitoring process. The 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 Disaster Risk Management 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 incorporate risk reduction approaches systematically 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 five Key priority activities in different priority sectors (Table 8) the 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. Siraha DDRMP

3.1. Introduction to Siraha

3.1.1. Geo-physical Settings

Location and Physiography

Siraha district lies between Latitude 26° 33' to 26° 55' due North and Longitude 86°6' to 86° 26' due East. The district is bordered by Saptari on the East, Dhanusha district on the West, Udhayapur district on the North and Madhubani district of India on the South. The average length and breadth of the district is 29.9km (East-West) and 42.4km (North-South) respectively. With Siraha *Bazaar* (market) as its district headquarters, the district covers an area of 1,228km² and caters for a population of 572,551 (Census 2001). The district, with 106 VDCs and two municipalities, is divided into six political constituencies and 17 administrative Illakas.

The land towards the North is made up of the Chure hills, which have gradients of greater than 20°. Although this is a very small percentage (6 %) of the total land area in the district, this topography means that flooding and inundation are common natural phenomena in this district.

Climate

Tables 9 to 12 provide a 20-year aggregate summary of Siraha's climate over its Lahan station (26.440, 86.090) and Siraha station (26.390, 86.130). Both parameters are outputs of the European Centre for Medium-range Weather Forecast's ERA-Interim reanalysis model (spatially and temporally consistent), drawing on Lahan, Siraha and nearby field stations and further international data (including satellite data).

Table 9: Siraha (Lahan) climate

Months	Mean temperature at 2m (C)	Mean Total Daily 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: Siraha climate

Months	Mean temperature at 2m (C)	Mean Total Daily 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 11: Siraha (Lahan) climate (1989-2009 monthly aggregates)

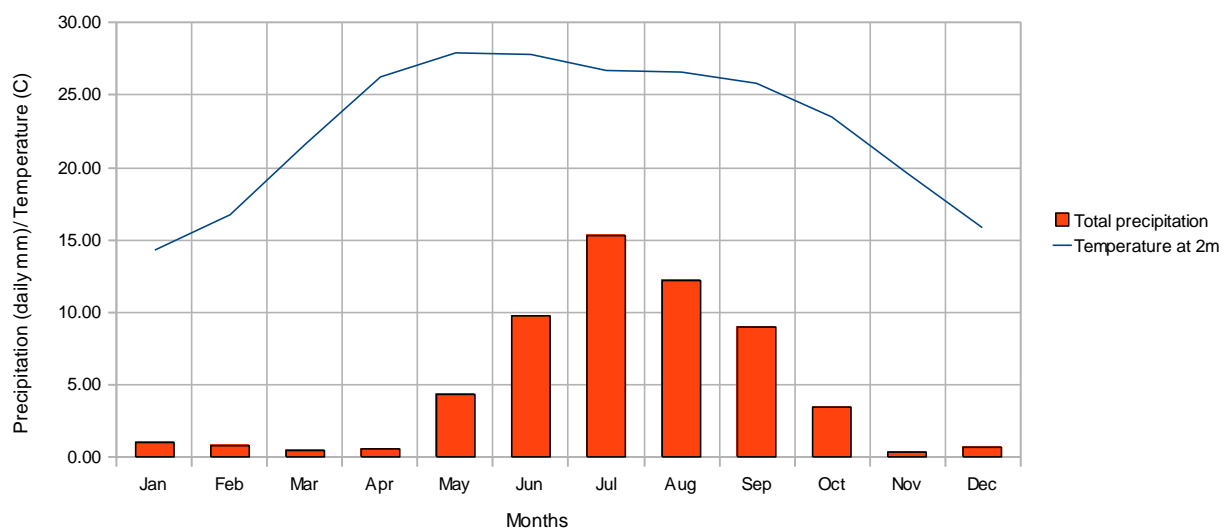
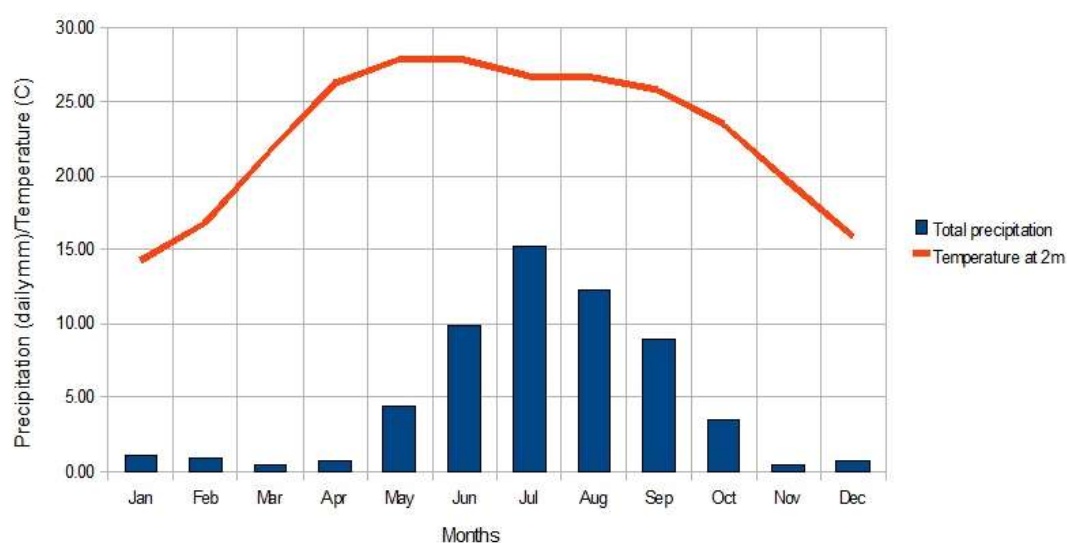


Table 12: Siraha climate (1989-2009 monthly aggregates)



Topography

The elevation in the district ranges from 76km to 887km from mean sea level. Siraha district can be divided into two kinds of topography.

Table 13: Topographical Distribution and Land Use (Area in ha.) (DADO 2009)

Physical Condition	Agriculture land		Pasture and forest land			
	Cultivated	Non-cultivated	Pasture	Forest	Others	Total
Siwalik	1,477	151	35	25,763	358	27,784
Terai	79,289	7,438	1,279	2,392	4,615	95,013
Total	80,766	7,589	1,314	28,155	4,973	122,797

3.1.2. Configuration of Social Fabric

As per the Census of 2001, the total population of Siraha was 572,551. Out of the total population, 294,052 are men and 278,499 are women with population having an annual growth rate of 2.03% (DDC, 2009). The population density is 466 per sq. km (CBS, 2001). By religion, 91.65 % of the population is Hindu, 1.3 % Buddhist, 6.47 % Islam; and rest of the 0.58 % of the population follow Christianity, Jainism and other religions. The literacy rate of men and women is 55.5% and 44.5 % respectively.

3.1.3. Natural Resource Endowment

The agricultural area, forest and water resources are the main natural resources of the district. The land covered by agriculture in the district is very big (74 %). Similarly, about 21 percent of the total land area of the district is covered by forest. The district is drained by many streams and rivers. Kamala, Ghurmi, Balan, Mainabatti, Khutti, Gagan, Sarre, Sahaja, Bataha, Jiba and Bhedawa are the major rivers and streams of the district.

Land use: DDC (2007) reveals that 80.52% of the population is still dependent on agriculture. The total area of the district is 122,796.9 ha. Of this, agriculture covers 71,011 ha, and irrigated land covers 21,003 ha. The area covered by paddy, wheat, maize and millet is 72,300 ha, 14,390 ha, 300 ha and 1,200 ha respectively. In terms of geographical areas, 94,900 ha are covered by Terai and Bhabar whereas 27,900 ha are covered by Churia and Dun.

The distribution of land is not equal. The data from DDC (2007) reveals that only 9.52% people have more than 5 ha of land and 26.93% people have 1 to 5 ha of land. Similarly,

31.73% people have 0.5 to 1 ha and 31.82% have 0.25 to 0.50 ha of land. It clearly shows that about one-third of the population has less than 0.5 ha of land.

Forest: Siraha is rich in forest resources. However, the rate of forest depletion is an increasing trend. The area covered by forest was 27,707.9 ha but now it is only 14,000 ha owing to a high level of deforestation (DoF, 2004). The community forest area covers 5,068.74 ha. This indicates that about 50% of the forest resources have been depleted within the last 27 years. This is one of the reasons why the downstream population is threatened by floods every year. People mostly depend on the forest of Churia. The forest-based small-scale industries within the district are being negatively impacted by the depletion of the forest. There are two plywood factories, 50 saw mills, eight bidi (cigarette) manufacturers and 36 brick factories (DDC 2004), which are entirely dependent on forest resources in one way or another.

Major rivers: The major rivers and rivulets of the district are Kamala, Balan, Khutti, Ghurmi, Mainawati, Gagan, Sahaja, Bataha, Jiwa and Bhedawa. There are 975 ponds located in the district. Among them, 280 are public and 148 ponds are private (Siraha District Profile, 2001). There are 15 different irrigation projects implemented within the district (DDC, 2004). Despite the abundance of water resources in these rivers and the different irrigation projects working to improve overall irrigation facilities, the majority of the land is still rain fed.

3.1.4. Natural and Historical Landmarks

Some important natural, historical landmarks and religious sites in Siraha district with potential for tourism are listed in Table 14:

Table 14: Important Historical Landmarks in Siraha

SN	Important Sites	Importance	Location
1	Sahles Phoolbari	Historical, natural resource	Siswani, Padriya
2	Manikdaha	Natural resource, religious	Malhaniya, Govindpur
3	Salhes Gahwar	Historical, religious	Siraha Municipality
4	Saraswor Mahadev	Historical, religious	Saraswor
5	Hariharnagar Pataal Pond	Historical, natural resource, religious	Luxmipur, Pattari
6	Parasnath Mahadev	Historical, religious	Itari Prasai
7	Balasundari Bhagwati	Historical, religious	Bhagwanpur
8	Hanumandhoka daha	Natural resource, religious	Maheshpur Pattari
9	Kamaldaha	Natural resource, religious	Phulbariya
10	Nandababa temple	Historical, religious	Badharamaal
11	Budhangarha	Historical	Brahman Gorchhari
12	Akashganga	Natural resource, religious, Social	Muksar
13	Dhamiyain Maain	Religious	Asanpur
14	Dinabhadri	Religious, Social	Pipra Pradha
15	Kabhre Mahadev Temple	Historical, religious	Taregana
16	Pakdiyagarha	Historical	Bhadaiyya

3.1.5. Livelihood Assets

The people of the district are involved in different occupations. The major occupations are agriculture, business and government services. The majority of the people, about 81 % of the total population, are involved in agriculture. The average household farm size in the district is 1.09 hectares (CBS, 2001). Most of the VDCs' household farm size is small (less than 2 ha). Bishnupurkatti VDC has a majority household farm size of more than 3 hectares. The density of the population relying upon agriculture is higher in the VDCs which have smaller farm sizes. This means that the larger population depends on the smallest division of agricultural

land in the district. The irrigation facilities in the district are good compared to the other districts. The irrigated land in the district is 38.13 % of the total agricultural land (CBS, 2001).

In the past two decades, the percentage of people going to Arab and other Asian countries for employment has been increasing. With regard to the foreign employment statistics, the trend has been more prominent in Siraha with approximately 18% of young people migrating for foreign employment since 1996.

3.2. District Disaster Scenario

3.2.1. Hazard analysis: Prioritization of hazards in the District

Identification of Hazards

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

Table 15: Identified Hazards in the District

SN	Hazards	SN	Hazards
1	Flood	7	Hail storm
2	Drought	8	Lightening
3	Fire	9	Epidemic
4	Cold wave	10	Soil Erosion
5	Wind storm	11	Pest and Crop Disease
6	Earthquake	12	Heat Wave
		13	Damage by wild animals

History of Major Floods in the District

VDC Lahan and Siraha Municipality and Harakatti VDC have a high risk and fall into the second priority. The rest of the VDCs have a moderate risk and fall into the third priority VDCs.

Table 16: Historical Account of major floods in Siraha

SN	Parameter	2002	2004	2007
1	Duration of flood	Incessant rain from July 21 to July 23	Incessant rain from July 6 to July 12	Heavy rain from July 17 to August 1
2	Numbers of affected VDC/Municipalities	34 VDCs and 2 Municipalities	70 VDCs and 2 Municipalities	81 VDCs and 2 Municipalities
3	Death caused by the flood	1	11	4
4	Wounded during the flood	5	33	15
5	Totally affected Households	1095	2711	4286
6	Partially affected Households	2220	7282	5718
7	Total affected Households	3315	9993	10004
8	Affected population	18729	57289	570379
9	Estimated loss of land	30,000 Bigha	50,000 Bigha	50,000 Bigha
10	Estimated loss in monetary terms	7 carors	10 carors	10 carors

The above statistics have played a pivotal role in defining and identifying the flood-prone, vulnerable and high-risk VDCs in the district.

Flood Hazard in Siraha District

Owing to its location, the plain area of Siraha has a high probability of flooding. Kamala, Gagan, Ghurmi, Mainbatti, Khutti and Sarre are the major streams and rivers that cause flooding in the district. There is the possibility of frequent flood hazard events in Aurahi, Adaharamal, Bariyarpatti, Betauna, Bhaganpur, Dhodhana, Harakatti, Khirauna, Lahan Municipality, Madar, Maheshpur Patari, Majhaura, Sarswar, Siraha Municipality, Sukhachina and Tenuwapatti VDCs. About 41 % of VDCs of the district are in a flood hazard zone. Bariyarpatti, Bhaganpur, Harakatti, Jighaul, Lahan Municipality, Maheshpur, Patari, Siraha Municipality and Sukhachina VDCs are in a high hazard zone for floods. The two municipalities of the district are included in these flood hazard zones.

Similarly, Sukhachaina VDC is identified as a very high vulnerability zone for the district. Siraha Municipality is also in a high vulnerability zone. Harakatti, Khirauna, Lahan Municipality, Majhaura and Navarajpur VDCs lie in moderate hazard zones. Most of the VDCs' condition is similar in terms of flood vulnerability and they lie in low vulnerability zones in comparison with the other VDCs.

In terms of risk from flood, Sukhachaina VDC is in a very high risk zone and falls in a first priority VDC. Lahan and Siraha Municipality and Harakatti VDC fall in high risk, second priority zones. The rest of the VDCs have a moderate risk and are third priority VDCs.

Epidemic-Prone VDCs in Siraha District

Epidemics have been identified as another major hazard in Siraha. The episodes of epidemics are reported to be more prevalent during the flood and drought periods. The exercise identified the following VDCs which are more prone to epidemics.

Table 17: Epidemic prone VDCs in Siraha District

SN	VDC	SN	VDC
1	Lagada Gadhiyani	11	Silowar pachwari
2	Majhauriya	12	Luxmipurwatari
3	Chikana	13	Janakinagar
4	Bhokraha	14	Kavilasi
5	Malhaniya Gamhariya	15	Bachewa
6	Harkatti	16	Anoma Brahamapuri
7	Anoma Baniniya	17	Itatar
8	Badhara maal	18	Mhnaur
9	Kusha Luxminiya	19	Wariyar patti
10	Muksar	20	Sukhipur

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 can be seen above, flood scores highly and has a large impact on the population, land, crops, domestic animals, and physical infrastructure with a corresponding extent of quantity of loss. Similarly, landslide is also seen to have a significant impact on land, crops and natural resources, with medium and low levels of effect on the population and domestic animals respectively.

Table 18: Prioritized Hazards in Siraha District

	1	2	3	4	5	6	7	8	9	10	11	12	13	Frequency
1		1	1	1	1	1	1	1	1	1	1	1	1	13
2			2	2	2	2	2	2	2	2	2	2	2	12
3				4	3	3	3	3	9	10	11	3	13	6
4					4	4	4	4	9	4	11	4	4	9
5						5	7	5	9	10	11	5	13	4
6							7	8	9	10	11	12	13	1
7								7	9	10	11	7	13	5
8									9	10	11	12	13	2
9										9	11	9	9	10
10											11	10	10	8
11												11	11	11
12													13	3
13														7

Legend:							
1	Flood	5	Wind storm	8	Lightening	11	Pest and Crop Disease
2	Drought	6	Earthquake	9	Epidemic	12	Heat Wave
3	Fire	7	Hail storm	10	Soil Erosion	13	Damage by wild animals
4	Cold wave						

The above scoring has concluded the hazards: 1, 2, 11, 9 and 4 have descending prioritized for needing immediate attention for preparation and management. These numerical correspond to flood, drought; pest and crop disease, epidemic and cold wave as the five top-most prioritized hazards in the district.

Table 19: Siraha priority hazards

SN	Hazard	Priority
1	Flood	1 st
2	Drought	2 nd
3	Pest and Crop disease	3 rd
4	Epidemics	4 th
5	Cold wave	5 th

Hazard Calendar

Table 20: Siraha hazard calendar

Hazards	Months (in AD)											
	A/M	M/J	J/JI	J/A	A/S	S/O	O/N	N/D	D/J	J/F	F/M	M/A
Flood			///	///	///							
Drought	///	///									///	///
Pest and crop disease	///	///			///						///	///
Epidemic			///	///	///			///			///	
Cold Wave								///	///			

Focus group discussions at the local level identified flood risk as most severe during the summer monsoon months from June to September. Drought is most prevalent at the end of the dry winter months of February and March. In years when the first rains come late, the most severe droughts occur between March and May. Crop diseases are prevalent during these same dry months, and also at the end of the monsoon season. Cold waves occur only during the mid-winter months of December to February. Disaster risk management experts suggest that epidemics can occur at any time, but based on historical occurrence, the local consultations tracked epidemics as prevalent between June and September, and in November and February.

From the hazard calendar, it appears that mostly the drought and attack by pest and crop disease occur simultaneously in the district; whereas the episodes of epidemics coincide with the flooding period. Epidemic can appear concurrently with drought and crop disease as well.

3.2.2. 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 process are presented in Tables 21 to 27. 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 42 – 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.

Table 21: Impacts and Vulnerability on Agriculture and Food Security

Sector	AGRICULTURE AND FOOD SECURITY	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Decrease in food security due to loss of cultivable land	Landless, small and medium farmers
	Washing away of stand crops and seedlings	Landless, small and medium farmers
	Silt and debris deposition destroying crops and destroying cultivable land	Landless, small and medium farmers
	Loss and death of livestock	Landless, small and medium farmers
	Decrease in food security due to washing away of standing crop	Landless, small and medium farmers
	Destruction of various crops simultaneously during the flood	Landless, small and medium farmers
	Disruption of agricultural calendar due to flooding	Landless, small and medium farmers
	Destruction of seed bank due to washing away of the patch of land	Landless, small and medium farmers
	Damage and destruction of fish ponds	Fishing HHs
Drought	Decrease in crop productivity	Landless, small and medium farmers
	Irrigation systems fail	Irrigated farmers
	Increase in market prices of staple grains due to decrease in crop productivity	Landless, small and medium farmers
	Increase in rodent and pest population thriving in dry weather	Small and medium farmers
	Delay in planting activities due to late rain leading to drop in productivity	All Farmers
	Lack of water for livestock feeding	Women and Children
	Displacement of communities (due to loss of food security due to drought)	Landless, small farmers
	Loss of genetic resources	Small and medium farmers
Crop Loss due to Pests, Insects and Disease	High risk staples: maize, wheat	Maize and wheat growing farmers
	Pests affect beneficial insects populations (e.g. bees) with impact on ecosystem regeneration	Forest dependent poor especially, smallholder farmers
	Food supply reduction	All through supply reduction in markets, small holder farmers through income reduction
	Low yield and production	Small and medium farmers
	Disproportionate impact on nursery and young plants	Large farm operations
	Detrimental effect on soil health	All farmers
	Reliance on pesticides and reactive chemical use introduced into wider system – Upstream/downstream effects	Downstream farmers and households especially
Epidemics	Reduction in labour resources (manpower) during human epidemics	Farmers hiring labourers
	Loss of livestock from swine influenza and bird influenza	Livestock farmers
	Crop destruction from plant epidemics (kalaazar)	Crop farmers
	Further loss of livestock and crops through damage control	All farmers
Cold Wave	Ground freezes kill winter crops	Small and medium farmers
	Blights kill legumes	Small and medium farmers
	Mild dews at the end of cold waves further decimate crops	Small and medium farmers
	Disproportionate impact on cash crops	Commercial crop growers
	Inability to store crops	All

Table 22: Impacts and Vulnerability on Health

Sector	HEALTH	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Psychological effects on the communities	Women, children and disabled
	Injuries, disabilities and possibilities of loss of lives	HHs in high risk locations, individuals with limited mobility, the young and old
	Snake bites	HHs in high risk locations, individuals with limited mobility, the young and old
	Increase in water-borne disease	People without private shallow tubewell
Drought	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 incidence of various water borne diseases	Disadvantage segment of the affected communities
	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	Illiterate and poor communities
Crop loss due to pest, insects and disease	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
	Associated vector-borne disease prevalence increase	All, especially immune-compromised individuals
Epidemics	Permanent disabilitation, and possibility of death in humans	Socially disadvantaged, poor, immune-compromised individuals, the young and old
Epidemics	Permanent disabilitation, and possibility of death in humans	Socially disadvantaged, poor, immune-compromised individuals, the young and old
	Increase in demands for medicine and medical resources strains effective delivery	The sickly
	Increase in incidence of psychological trauma	All
Cold Wave	Frequent death of immuno-compromised, young and old	Immuno-compromised, young and old
	Increased frequency of vehicular accidents	Community groups relying on transport related activities

Table 23: 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
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
Epidemics	Possible temporary and long-term discontinuation of schooling due to quarantine measures and if staff is affected	School-going children
Cold wave	Disruption of regular classes due to cold wave	All children specifically from disadvantaged segment of the affected communities

Table 24: Impacts and Vulnerability on Shelter, Infrastructure and Physical Planning

Sector	SHELTER, INFRASTRUCTURE AND PHYSICAL PLANNING	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Destruction of houses, roads, bridges, cultural heritages etc	All community
	Washing away of irrigation canals	Irrigated farmers
	Displacement of people and temporary migration	Land Less, disadvantaged and disabled groups
	Destruction of seed storage bins	Small and Medium Farmer
	Shifting VDC boundaries	All community
	Need on the revision of physical planning	Planning targeted groups
	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
Drought	Loss of shelter due to drought	Landless, small and poor communities
Epidemics	Road becomes high risk area for epidemic transfer	All, especially those using roads frequently

Table 25: Impacts and Vulnerability on Livelihood Protection

Sector	LIVELIHOOD PROTECTION	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Limited access to income generating activities	Landless labourers
	Destruction of raw-materials and finished products of small cottage industry	Small Traders and business community
	Allocation of less budget in other sectors due to emphasized financial allocation on flood-hit areas	All but specially socially disadvantage communities
	Excessive tax burden linked to uncultivable land	Owners of silt deposited land
	Washing away of fish ponds	People who depend on fishing
	Uneven re-distribution of natural resources due to river cutting/flood, causing conflict	Socially disadvantaged communities
Drought	Drop in business due to decrease in production; decrease in crop productivity affecting livelihood	Small Entrepreneurs
	Falling levels of fish ponds stress fisheries	Fish Farmers
	Allocation of less budget in other sectors due to emphasized financial allocation on drought	All communities of the district
	Increase in prices of staple grains	All communities of the district
	Increase in conflict situation among the communities	All communities of the district
Crop loss due to pest, insects and disease	Destruction in production fruits and vegetable due to rotting and indirect effect in other crops	Fruits and Vegetable farmers and business
	Reduced production in staple crops	Farmers with limited pesticide access and appropriate practices
	Food security reduced	All, especially poor
	Land quality reduced – long term impact of yields	All
Epidemics	Social division and conflict as a result of fear and quarantine measures	All, especially the socially disadvantaged
	Restrictions on traditional customs and practices	All, especially the socially disadvantaged, and indigenous
	Access restrictions to basic resources due to quarantine measures	All, especially those depending on communal resources
Cold Wave	Increase in financial burden due to lack of work during the cold wave	Landless, small , medium farmers and disadvantage communities
	Loss of forest resources	Marginal farmers and landless

Table 26: Impacts and Vulnerability on Water and Sanitation

Sector	WATER AND SANITATION	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Contamination of clean water sources (water pollution)	All specially 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
Drought	Lowering of ground water table, affecting wells and tube wells	Women and Children
	Destruction of crops plants due to inadequate water for irrigation	Medium and Big Farmers
Crop loss due to pests, insects and disease	Reliance on pesticides and reactive chemical use introduced into wider system – Upstream/downstream effects	Downstream households and farmers
Epidemics	Diseased waste contamination in water system	All, especially those depending on open water sources
	Increase in clean water demands	All, especially high water demand social groups (women and children)

Table 27: Impacts and Vulnerability on Information, Communication, Coordination and Logistics

Sector	INFORMATION, COMMUNICATION, COORDINATION AND LOGISTICS	
Hazard	Impacts	Highly Vulnerable Community Groups
Flood	Disruption of agricultural calendar due to flooding	Farmers with specialized cropping pattern
	Cut-off from outside information	All affected
	Damage of electricity, phone and communications	Students and sick
	Possible damage of government line agencies buildings and injury to staff of coordination of focal points	Government service receivers
Epidemics	Lack of information and knowledge about symptoms (of viral fever, infection and dysentery) , basic precautionary measures and immunisation opportunities add strain to logistics	Illiterate social groups especially
	Increased effective waste disposal demands	All
	Large demands on logistical infrastructure	All
Cold Wave	Interruption in the service giving line agencies	Government service receivers

3.3. 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 organizations 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.

3.3.1. Livelihood Assets

This plan organizes 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 resources. *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 accessing some resources 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.

Table 28: Livelihood Assets in Terai Districts (FAO 2009b) presents the results of a household survey conducted in the Terai districts of Kapilvastu and Siraha. 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 between 70 and 80% of respondents felt capable of answering the questions. 74% of respondents claimed to have adequate access to physical resources, which include both public facilities and private assets. 9% answered that they did not have sufficient access to physical resources. 62% of respondents answered that they had adequate access to financial capital, comprising financial savings, credit services and personal assets that they can sale in emergencies. 20% said that they did not have adequate access to financial capital, the highest negative percentage across the capital classes. The same percentage replied that they had adequate access to knowledge and skills used in improving their income-generating practices and access to health-care services. Social capital, capturing access to relationships and groups such as cooperatives that lower transaction costs, was reported as 58% in agreement, while only 58% of respondents answered that they had adequate access to goods and services provided by the natural environment, such as water and forest resources.

These findings suggest that local perceptions of their man-made environment, both private and public, are fairly positive. However the low 'yes' percentage for natural capital and high 'no' score for financial resources suggest that improved access to financial support instruments and better and more inclusive natural resource management are priorities for better livelihood security in Siraha district.

Table 28: Livelihood Assets in Terai Districts (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	361				
	Yes (%)	53	74	58	62	62
	No (%)	16	9	17	20	8
	No Answer %	31	17	25	18	30

3.3.2. Natural Resource Endowments

The district's self-regeneration capacity has been viewed primarily from the point of richness of its natural resources. Agriculture has also been analyzed as it is inextricably linked to the usage of land resources. The computation has been made from secondary sources of information.

Water Resource

Siraha is rich in water resources. Various small and large rivers and ponds are the main sources of water in the district. Kamala, Balan, Ghurmi, Gagan and Bataha are large rivers. Khuti, Mainnawati, Sare, Sahan, Jeeva and Bhedwa are small rivers which swell up with enormous volumes of water during the monsoon season. Among the above, Kamala, Mainabari, Balan are major causes of flooding in India too. These rivers' destructive span is aggravated by soil erosion in Churia range.

Apart from irrigation, these water resources have not been properly utilized. These water sources can be taken as natural resources that can be harnessed to build the overall socio-economic resilience of the district.

Although the majority of cultivated land still depends on rain feeding, alternative irrigation practices are beginning to spread with the support of local NGOs and district government offices. Shallow tube wells, treadle pumps, repair and rehabilitation of farmer-managed irrigation systems and construction of water-holding ponds and tanks are favoured technologies.

Land

Siraha district is an agriculture-based district. About 81% of the total population is still dependent on agriculture (Siraha DADO, 2009). The total area of the district is 122,796.9 ha. Out of this, agricultural area covers 71,011 ha, and irrigated land covers 21,003 ha. The area covered by paddy, wheat, maize and millet is 72,300 ha, 14,390 ha, 300 ha and 1,200 ha respectively. In terms of geographical areas, 94,900 ha are covered by Terai and Bhabar whereas 27,900 ha are covered by Churia and Doon (valley).

The distribution of land is not equal in Siraha district. The data from (Siraha DADO, 2009) reveals that only 10% people have more than 5 ha of land and 27% people have 1-5 ha of land. Similarly, 32% people have 0.5-1 ha and 32% have 0.25 -0.50 ha of land. The land ownerships in the district are shown in the following table.

The total cultivable land in the district is about 73,913 ha, whilst *khetland* is 60,757ha and *bariland* is around 11,543 ha. The district has only 21,533.5 ha of land with all-year-round irrigation facilities (DDC, 2006). In a FAO's study site of Sarshwor, canal irrigation provides 30% of the irrigation, while tube wells contribute 20%, and the rest comes from ponds and rainwater. This is similar in Sukhipur, while in Badharamal, up to 50% of irrigated land is supported by the Kamala River. These trends reflect the high dependence on rudimentary river-fed canals. Droughts and variable river loads are therefore

critical risks for water resource use in the study sites and reflect the wider district reality. Shallow tube-wells are also vulnerable to prolonged drought, and the technology also faces serious seepage problems.

**Table 29: Land use and its distribution
(District Agriculture Development Office, Siraha, 2009)**

Land distribution (<i>ha</i>)	HHs		Land Use	
	Number	Percentage	<i>Ha</i>	Percentage
0-0.25	32533	31.82	3037.84	4.11
0.26-0.5	32441	31.73	6075.68	8.22
0.51-1	27534	26.93	24302.75	32.88
>1	9733	9.52	40497.20	54.79
Total	102241	100.00	73913.50	100.00

The entire society, not least the farmers, has a good understanding of the value of the forests and their resources. Livestock rearing households in particular see enormous benefit of foraged fodder and grass, and appreciate the need to conserve the forest and sustainably use its resources. This reflects particular emphasis over many years on community-managed forestry initiatives, and their continued popularity institutionally.

Land distribution is highly heterogeneous. A small number of farmers own large areas of land with most households owning only small plots or no land at all. Landless households have little legal access to public land, but some use it illegally while other lease land from neighbours with greater-sized plots.

3.3.3. Household-level capabilities

The literacy rate in the district is still low compared to the hilly districts. As of the 2001 census, the district had a literacy rate for men and women of 43.5 and 13.3% respectively. The gender ratio of the district was found to have increased to 106 in the census of 2001 from that of 1991 when the gender ratio was 105.

In spite of that, one of the growing strengths of the district is reflected in the educational attainment which is rapidly progressing, as seen in the following table

Table 30: Trend in Sex Ration and Literacy Rate (DoE 2009)

Particulars	1981 census	1991 census	2001 census	2009 projection
Sex ratio	108	105	106	123
Literacy rate %	17.6	29	40.31	47

This assessment has been guided towards ascertaining the communities' built-in capacities, practices and cultural strengths that are helpful in fighting disasters at several stages of events. The communities' assessment was carried out through Focus Group Discussion (FGD) and Key Informant Interviews (KII).

Table 31: Educational Facilities in Siraha (DoE 2009)

SN	School	Community	Private	Total
1	Primary	282	41	323
2	Lower Secondary	37	6	43
3	Secondary	47	15	62
4	Higher Secondary	4	3	7
Total		370	65	435

Technical Agricultural Skills

Nepali agricultural products struggle to compete with Indian imports. Indian farmers receive substantial input subsidies, which lower the overall cost of production considerably so that Indian produces often reach Nepali markets at prices below Nepali production costs.

The incentives of commercialisation are therefore weak in Nepal and in Terai districts such as Siraha. Subsistence farming and local market supply are therefore widespread, with indigenous and traditional practices commonplace and not updated.

Attempts to commercialise agriculture more widely do occur, but are not supported by best practice knowledge or skills, or efficient advice on inputs.

Use of inputs

DADO's annual reports (2007 and 2008) indicate that use of pesticides, and chemical fertilizers are increasing. The perception of input use by Siraha farmers is that seeds, agricultural tools and loans are also increasing. However there are serious concerns about the quality of these inputs, which are readily available in the markets and through private agro-vets. Cooperative procurement of inputs tends to be perceived as more reliable. Widely accessible micro and small loans are available through community savings, credit groups and the cooperatives. Effective irrigation is reported by local farmers to have not improved in recent years.

Availability of knowledge and information about input use has not kept up with the availability of pesticides, insecticides, chemical fertilizers and seeds. As a result, some farmers use these inputs very inefficiently. Technical assistance provided by agricultural service centres is reported to be unreliable. DFO, DADO and DLSO provide some valuable training but it is not sufficient. DADO supports the construction of small irrigation projects, while DLSO supports fodder saplings distribution, milk and meat production training, prevention of livestock diseases and pests, vaccinations and other livestock-related resilience-building activities.

Siraha farmers report that locally available inputs are of poor quality and often not available at the appropriate time. The open border to India makes it easy to get more reliable and often cheaper inputs, but the extra distance to these markets is often inappropriate for regular use.

Table 32: Major Strengths and Weaknesses of agricultural activities in Siraha (FAO 2009b)

Sectors	Strengths	Weaknesses
Agriculture	<ul style="list-style-type: none"> • Some technical advice received from ASC • Irrigation facilities in some area • Practice of using improved variety of seeds and other inputs • Emergence of farmers organizations and cooperatives • Started to cultivate market-led crop varieties for income generation • Increase area for in winter crops to compensate crop failure in monsoon • Practice of making gaps in seedbed preparation to reduce the risk of flood 	<ul style="list-style-type: none"> • Inputs are not readily available in terms of timeliness and quality. • Have to depend largely on rain water for irrigation • Inadequate skills and knowledge about the right application of inputs • Reluctant to invest in improved inputs due to poor confidence and assurance • Reluctance in changing cropping patterns
Livestock	<ul style="list-style-type: none"> • Basic service acquired from LSCs • Practice of farming improved breeds of livestock • Practice of grass and forage plantation • Have practices of periodic check up for livestock 	<ul style="list-style-type: none"> • Less grazing area for livestock • Explosion of epidemic in livestock • Inadequate fodder and litter (bedding materials) for livestock
Fisheries	<ul style="list-style-type: none"> • Practice of raising improved species of fingerlings • Have basic knowledge about the feeds for fish • Have sufficient knowledge on the cost and benefit analysis • Good market facilities at local haat bazaar 	<ul style="list-style-type: none"> • Excess use of chemical fertilizer, insecticides and pesticides cause high mortality of fish • Lack of water resources, fishery ponds are going to be abandoned • Not availability of technical information readily for fishery promotion
Homestead garden	<ul style="list-style-type: none"> • Ensured market encouraged to farmers to invest more in vegetables farming • Use of improved varieties of vegetables • Adequate knowledge and skills of vegetable farming 	<ul style="list-style-type: none"> • Unable to treat the disease timely and adequately • Poor irrigation facilities due to longer droughts

3.3.4. Public Service Facilities

The infrastructure of road network is one of the most important indicators of the capacity in linking the district to the outside world. The district has a total of 195 km of black-topped, gravelled and earthen road network. The status of the major roads in the district as of 2009 is shown in the following table.

Table 33: Motor-able transportation network in Siraha

SN	Road Network	Span (km)	Status	Remark
1	East West Highway	40	Black topped	
2	Choharwa-Siraha-Madar	234	Partial BT	Black topped only up to Siraha
3	Siraha-Kalyanpur-Mirchaiyya	23	Gravel	
4	Kamala-Balan (<i>Hulaki road</i>)	29	Gravel	Need culvert (bridge)
5	Zero Mile-Bariyarpatti	18	Gravel	
6	Lahan-Bhagwanpur	18	BT and Gravel	
7	Goal Bazaar-Langdi Gadiyani	26	Earthen	
8	Dhangarhi-Maheshpur pattari	18	Gravel	

The major commercial centres in the district are: Mirchaiyya, Goal Bazaar, Lahan, Siraha, Bhagwanpur, Thadi, Bariyaratti, Sukhipur and Kalyanpur. On average, the district is food sufficient and people enjoy comparative comfort in terms of economic gains. There are a total of 1,090 industries functioning in the district (DDC, 2009). The recently expanding Maruti cement industry and many other agricultural processing plants are indicators of growing options for economic opportunities in the district.

3.3.5. Institutional Capacity

Annex 6 lists contact details of service institutions in the district and details of the district-level disaster contingency cluster set-up.

Local level organisations

FAO (2008) identifies a number of types of local institutions active in Siraha. Each organisation has its clear working sectors and areas, and there is limited capacity to address cross-cutting issues such as DRR.

The core roles of these institutions, their weakness and capacity-strengthening recommendations are elaborated in

Table 34.

Existing local institutions consistently lack information and technical skills and knowledge to make the most out of their considerable cooperative will to invest time and effort into agriculture, income-generation and community development. Understanding of the importance of DRM is low but the existing capacity of local institutions in other areas nonetheless provides some DRR capabilities.

Community Forestry Users' Groups (CFUGs) are particularly well developed socially in Siraha, coordinating activities at a local level that reach far beyond their original designations. This reflects a wider local mobilization towards community development works, including road building and agricultural support amongst CBOs and local NGOs.

Local organisations have encouraged a group approach, coordinating and cooperating to minimise transaction costs. In particular, farmers' groups and cooperatives coordinate on input procurement and service demand to improve their access to fulfil their needs. Privately, local vendors and agro-vets have sought to extend district markets to the local level with some success. However, a critical constraint is their inability to guarantee quality of the products they supply.

Local groups have also begun to encourage income-generating activities and the growing local supply of credit and savings services is facilitating this small-scale commercialisation. Continued expansion is limited by ongoing local conflict and limited access to training in diversification.

Local mobilization in water resource management, through the CFUGs and Water Users' Associations (WUA) is considerable, and pond conservation, small-scale cooperative irrigation, and rainwater collection is widespread. Limited local resources prevent more extensive and large-scale projects.

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

- Unequal 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 a failure to address cross-cutting issues and also leads to ineffective delivery of key services such as grazing governance and pasture-forest management. Even within a village, coordination between CFUGs and WUAs is often poor.
- Interventions are supply driven due to local and community-based mobilization
- Lack of access to higher-level knowledge on ecological management and disaster risk management
- Trainings delivered without follow-ups or refreshers, contributing to poor knowledge sharing of best practices
- Lack of financial resources leads to an imbalance, leaning towards soft interventions by government line agencies and away from urgently required hard-technology support

Table 34: Local level institutions in Siraha (FAO 2009b)

VDC Organisation types	Strengths: Working areas	Institutional Weaknesses	Capacity-building needs (Prioritized)
Village Development Committee (VDC)	Most important village level coordination centre; key focal committee for district level offices and governmental live agencies; responsible for overall developmental planning at village level; VDC has coordinating responsibility at village level during the time of flood	<ul style="list-style-type: none"> • Over-emphasis on infrastructure development • Direct benefits of cooperatives rarely reaches the poorest and social excluded sections of the community • Poor awareness of disaster risk and CC linkages • Lack of integration of DRM and climate change risk in their developmental (especially infrastructure) planning 	<ul style="list-style-type: none"> • Refocus towards climate change resilience and DRM mainstreaming • Develop wider portfolio of activities to include soft-technological approaches
Agriculture / Livestock Service Centres	Technical assistance and training in livestock management and agriculture	<ul style="list-style-type: none"> • Coordination difficulties because they cover more than one VDC • Poor awareness of disaster risk and CC linkages • Over-emphasis on technologically orientated farming improvement 	<ul style="list-style-type: none"> • Refocus towards climate change resilience and DRM mainstreaming • Develop wider portfolio of activities to include soft-technological approaches
Community Forestry Users' Groups	Sustainable forest management and extension activities, including community plantations and alternative energy supply and education (biogas, bio-briquettes) Oversees local governance, management and coordination of forestry resources, including agriculture and livestock inputs. Active in soil erosion, river cutting risk reduction, road and small bridge construction, water and sanitation management, and path building	<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 	<ul style="list-style-type: none"> • Maintenance of financial transparency • Improving governance through better executive training and exposure • Improving nursery and NTFP management <p>Training in:</p> <ul style="list-style-type: none"> • Fodder and fruit tree plantation in erosion prone areas • Farmer forest input resource management • Forest-based income-generating diversification • Improved grazing practices (rotational grazing) • Effective common property regimes • Water resource management
Water Users' Association	Irrigation management coordination	<ul style="list-style-type: none"> • Poor awareness of disaster risk and CC linkages • Inadequate training in sustainable integrated 	<ul style="list-style-type: none"> • External resource mobilization for weir construction/rehabilitation, canal lining

VDC Organisation types	Strengths: Working areas	Institutional Weaknesses	Capacity-building needs (Prioritized)
		<p>water resource management-irrigation management</p> <ul style="list-style-type: none"> • Lack of resources for physical construction/repair • Limited women's representation 	<ul style="list-style-type: none"> • Regulatory development in equitable water resource management (including preferential treatment of flood and landslide affected groups) • Improved seasonal, spatial and social distribution of water resources • Awareness raising on climate change
Farmers' Groups	<p>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 climate change through alternative cropping, and also conduct minor activities relating to flood risk reduction through bio-engineering</p>	<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 	<p>Training through field schools on:</p> <ul style="list-style-type: none"> • IPM • Pesticide selection and handling • Seed quality choices • Fertilizer application • Soil fertility management and alternative agriculture • Resource optimization • Drip and Sprinkle irrigation • Climate change impacts and resilient practices • Resource mobilization for insurance systems • Coordination for input access • Good practices demonstration plot
Savings and Credit Groups	<p>Operate as micro-banks offering credit and saving facilities to members. Contributing to resilience building in agriculture through credit for inputs and liquidity in times of hardship</p>	<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 	<p>Training in:</p> <ul style="list-style-type: none"> • Innovative new practices (new group lending and credit mobilization) • Diversification of income generation (off-season) • Revolving fund management • Climate change impacts and resilient practices • Field visits to raise awareness for alternative income-generating activities • Develop protocols for special circumstances for disaster-affected (providing them with special treatment)
Cooperatives	<p>Conducting varied activities, mostly to reduce output marketing costs of agriculture, sometimes in production</p>	<ul style="list-style-type: none"> • Highly vulnerable to infrastructure damage • Sometimes coordinating risk-exacerbating practices 	<ul style="list-style-type: none"> • Ensuring investment in off-farm activities • Strengthening of district and regional market linkages

VDC Organisation types	Strengths: Working areas	Institutional Weaknesses	Capacity-building needs (Prioritized)
	activities also. Some large-scale credit activities. Vary to the extent of cooperation of farming activities	<ul style="list-style-type: none"> • 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"> • Facilitating small scale technology transfer • Developing credit products towards low interest rate structures • Develop protocols for special circumstances for disaster-affected (providing them with special treatment) • 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 	<p>Awareness raising activities relating to:</p> <ul style="list-style-type: none"> • DRM • Ecological health and biodiversity conservation • Watershed management • Basic infrastructure maintenance • Climate change impacts
Musjid	Management of <i>Urdu</i> education to Muslim children		

District level disaster risk management

Table 35 presents the service institution resources available at each VDC.

Table 35: Performance of District Capability Analysis

SERVICE PROVIDING INSTITUTIONS IN DISTRICT										
V.D.C.s/Municipalities	Types and numbers of service provider organization							Other service provider organization		
	Police	Health post	Agriculture centre	Vet Service	School /College			Number of financial institute*	Institutions, cooperatives and mother groups based on non-government org. and community*	INGOs
					Primary	Secondary	Higher Secondary			
Arnaama (Pra.Pi)			1	1	3	1	0			2
Arnaama (Pra.Sa)					3	0	1			
Asanpur	1	1	1	1	4	0	1			11
Auraahi	1	1			1	1	0			1
Ayodhyaanagar					0	0	0			
Badaharaamal					3	1	1			4
Balhi					3	0	2			2
Balkawa					1	1	0			
Barcharwa					0	0	0			
Bariyarpatti	1	1	1	1	0	0	2			
Bastipur					5	1	1			3
Belha					3	0	0			2
Betauni					2	0	1			
Bhadaiya					1	1	0			2
Bhagwanpur		1	1	1	3	0	1			
Bhagwatipur (Ta. Su)					3	0	0			
Bhawanipur					2	0	0			3
Bhawanipur (Ka.Ba)					2	0	0			1
Bhediya					1	1	0			
Bhokraha					1	0	0			
Bidyanagar					1	0	1			
Bishnupur Pra.Ma				1	9	1	1			
Bishnupur Pra.Sa					1	1	0			
Bishnupurkatti	1				9	1	1			
Brahman Gorchari					1	0	1			1
Chandra Ayodhyapur					3	0	0			1
Chandralalpur					2	0	1			3
Chandroyapur					2	0	1			
Chatari					1	0	0			
Chikanaa					2	0	0			
Devipur					3	0	0			1
Dhangadi	1		1	1	6	0	1			5
Dhodhana					5	0	1			4
Dumari					4	0	0			
Durgapur					1	0	0			2
Fulbariya					4	0	1			2
Fulkaahakatti					0	0	0			1
Gaadhaa					4	0	0			
Gamhariya Maheshpur					3	0	0			
Gauripur					1	0	1			1

Gautaari					2	0	0			1
Gobindapur					3	0	1			2
Golbazar										2
Hakpaara					3	1	0			2
Hanuman Nagar					3	0	1			
Hanumannagar (Pra.Dha)					3	1	0			
Harkatti					3	0	0			2
Inarwa					5	1	1			2
Itaari Prasaahi					2	0	0			
Itaataar					2	0	0			
Itharwa					2	0	1			
Jamadaha					1	0	1			1
Janakinagar					1	1	1			1
Jijhaua					7	0	1			3
Kabilaasi					2	0	1			
Kachanaari					4	1	1			
Kalyanpur (Ka. Ba)					2	0	0			
Kalyanpur jabdi					3	1	1			
Karjanha					3	0	1			1
Kharukiyahi					2	0	1			
Khirauna		1	1	1	2	0	0			
Kishanpur					3	1	0			
Kushaha Laxminiya					4	2	0			1
Lagadi Goth					3	1	0			
Lagdi Gadiyani					2	0	1			
Lahal										1
Lahan (Na.Pa)	1	1	1	1	9	2	2			22
Lalpur					4	0	1			
Laxminiyan					1	1	0			
Laxminiyan (Pra.Ma)					0	0	0			
Laxmipur Pataari					2	0	1			
Maadar					2	0	2			1
Mahadeva Portaha					3	1	0			2
Mahanaur					0	1	0			1
Maheshpur	1		1	1	3	0	0			1
Majhauliya					2	1	0			
Majhaura					4	1	1			
Malhaniya Gamhariya					0	1	0			
Malhaniya Khori					2	1	0			
Mauwahi					1	0	1			1
Mirchaiya										6
Mohanpur Kamalpur					2	0	1			2
Muksar					1	0	0			1
Nahara Rigaul					2	0	0			2
Narha Balkaawa				1	2	0	0			
Nawarajpur		1	1	1	7	0	1			
Padariya					2	0	1			3
Pipra (Pra.Dha)					2	0	0			
Pipra (Pra.Pi)					4	0	0			
Pokhar Bhinda					1	0	1			3
Radhopur					1	1	0			
Rajpur					3	0	1			2
Ramnagar Mirchaiya					3	0	1			
Rampur Birta					2	1	0			
Saarswar					2	0	1			1

Sakhuwanankarkatti					3	0	0			
Sanhaitha					3	0	1			1
Sikraun					4	0	0			
Silorba Pachhari					4	0	0			1
Siraha Na.Pa					11	2	1			21
Sishwani					2	0	1			1
Sitapur (Pra. Da)					1	1	0			
Sitapur (Pra. Ra)					2	0	1			
Sonmat Mabhaura					2	0	1			
Sothiaain					2	0	1			1
Sukhcheina					0	0	0			1
Sukhipur	1		1	1	3	0	2			2
Tareganaa Govindapur			1	1	3	1	0			
Tenuwapatti					2	0	0			1
Thalha Katahaa					3	0	0			2
Tulsipur					2	0	0			
	8	7	11	13	284	35	56			150

*Data on 'financial institutions' and 'Institutions, cooperatives and mother groups based on non-government org. and community' are not available

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 next table summarizes the adequacy of the facilities available in Siraha district. Through consultations with different stakeholders, it was noted that there exists adequacy in various facility types including health centres, ambulance, doctors/nurses/ health assistants, excavators, engineers/overseers, telecommunication facilities and vehicles with skilled drivers. However a deficiency of a higher number of factors, some of which include fire brigades, power supply and financial resources, were also found. There is also no provision for food and clothes reservations as preparedness towards disaster.

Table 36: Adequateness of the Resources Available in Siraha District

S.N.	Particular	Status		Source and supplier	
		Adequate	Deficit		
1	Ambulance	*		NRCS	Total
2	Health centres (various types)	*		DPHO	4 Primary Sub
3	Doctors/Nurses/Health Assistants	*		DPHO	
4	Fire Brigade		*	Lahan Municipality	
5	Excavator	*		Road Division Office	
6	Trained rescue and relief operators		*	NRCS	
7	Engineers/Overseers	*		DTO, DWSD, DDO, Road Division Office	
8	Volunteers		*	NRCS	Tot
9	Skilled Drivers	*		—	
10	Vehicles (truck, bus, jeep, rickshaws, dodgers and boats)	*		DDO, RDO, District Police Office, Agriculture Development Office, DDNRC	
11	Road network	*		DDO, RDO	
12	Telecommunications	*		NTC	
13	Power supply		*	NEA	
14	Food reserves/provisions		*	Nepal Food Association	No syst
15	Clothing reserves/provisions		*	—	No syst
16	Water tankers		*	DWSA	
17	Financial Resources		*	—	There

Table supports Table 36 by rating the availability and reliability of the service institution resources available at different sub-district levels.

Table 37: Adequacy of the facilities available in Siraha District

Service and resources	Capacity			Availability			Durability/Reliability		
	V.D.C. level	Area level	District level	Easily Available	Reportedly Available	Not available	Short	Medium	Long
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									

Profile of the District Disaster Relief Committee (DDRC)

Table 36: Profile of the District Disaster Relief Committee⁴

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 of the DDRC are the representatives of the district-level offices of the various public sector agencies such as the district water supply office, district education office, district health office, representatives of national level political parties, Nepal Red Cross Society; In-charge of the Nepal Army Unit, District Police Office, District Housing and Town Development Office, Divisional Irrigation Office, District Forest Office, District Agriculture Development Bank, reputed Social Workers, DADO, DSCWMO, and so on. 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 the 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 update periodically
- Coordinate with national CDRC at times of disaster in the district

In

⁴ FAO 2009b

Table 37 below are the Strengths, Weaknesses, Opportunities and Threats organisation of the DDRC in Siraha.

Table 37: 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 <p>Relief and response at time of disaster in district</p>	<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 preparatory activities

As part of the detailed planning process consultations focused on the capable institutions active at the district level able to take responsibility to coordinate and lead the activities that the Action Plan recommends. This process was highly participatory, with key district stakeholders and informants discussing the relative strengths and weaknesses of different institutions and how well they would lead and coordinate proposed activities.

As a result of this process some district level institutions, (those deemed capable by district experts) appear in the Action Plan a number of times.

Table 38 provides a summary of the capacity of these institutions to support the practitioner in dealing with these institutions.

The institutions considered in

Table 38 are those recommended in the Action Plan for disaster prevention activities: risk reduction, mitigation and preparedness initiatives conducted in preparation for hazard impact.

Table 38: Key institutions for Action Plan Activities

Key Institutions (Institutional Strength)	Capacity			
	Manpower	Equipment	Budget/Finance	Coordination/Expertise
District Agriculture Development Office (DADO)	Only 46 district level staffs for 106 VDCs	Few old equipment, machines, technology but not enough. For logistics 1 old building with need to be repaired 1 Jeep, 2 motorcycles not in condition out of 9,	As per Government of Nepal, usually less budget	Community, 17 Service Centres, Storage Centre for community level agricultural focused works Overall it has got the capacity but lacks the enough resources
District Health Office (DHO)	2 doctors, 15 health workers	Only general equipments available like x-ray, medication items. Old building with only 5 reparable vehicles and not enough	Low budget separated by Government	Community and Primary Health Centre for provide health service and education Overall it has trained manpower but very less stock medical items
Department of Disaster, Water Induced Disaster Prevention (DWIDP) Division-2	Not enough civil engineers, overseer and other staff	Enough gabbier boxes	Low budget separated by Government	DADO, Red – Cross, Ground Water Development Project, Community Group for work on flood mitigation wok Overall it has not enough manpower and resources to operate in Janakpur as a result of which division; political parties are demanding to operate in Siraha. Some people even do not know the existence of this division.
District Development Committee (DDC)	180 employees – enough civil engineers, overseers	6 buildings with 2 working jeeps, 3 not in condition pick up/truck and 12 motorcycles out of which 10 not in condition	Enough budget separated by Government	Political Parties, VDCs, Red Cross, Community for works overall development sectors Overall contribution for road, drinking water, small bridge, mitigation and preparedness works.
Drinking water and Sanitation Division Office (DWSD) –	Only 22 employees	Only 2 and not sufficient vehicles		Local Water Users Group for water supply distribution and provide awareness on sanitation

DNDRC	All Nepal Police Army, Red – Cross for rescue and relief, DADO for livelihood enhancement to disaster affected people by Small Cottage Industry, DFO for doing disaster preparedness work (plantation and forest conservation and management) DDC for logistic management, & DHO for health service provision during disasters	Since it is a network, resources are as available to district level stake holders	Enough Fund	Coordinated by District Administrative Office with all District level Stakeholders for networking to Focus on overall disaster management works
Red- Cross	Trained 80 primary care health and 120 disaster relief staff	Good condition 1 Red Cross Building, 1 car, 3 ambulances and other needful equipments	Fund collection are made from individual and relief fund are separated from their HO. Enough budget for relief works.	Red Cross Branches and Community for disaster preparedness training and aware and conduct post disaster relief works.

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

Since the last earthquake with its epicenter in Siraha, several International NGOs and local organizations have been actively involved in the area of disaster response. However, there has not been any disaster management planning until a few months ago when the Nepal Red Cross with the help of Save the Children US took the initiative to prepare the District Contingency Plan (DCP) for floods in the district.

The DCP has used the cluster approach as the framework for response in all major new emergencies. These clusters are still operational in Nepal and planned to be expanded to all hazard-prone districts in the nation. The cluster approach ensures predictability and accountability in international responses to humanitarian emergencies, by clarifying the division of labour among organisations, and better defining their roles and responsibilities within the different sectors of the response.

In line with the Inter-Agency Standing Committee (IASC), the cluster approach requires that the international humanitarian community is more structured, accountable and professional, so that it can be an effective partner for host governments, local authorities and local civil society.

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

Table 39: District level Cluster Lead Agencies in Siraha (DCP 2009)

Cluster	Cluster Leads	Responsible Individual	In coordination with	
Coordination, search and Rescue	DNDRC	CDO	<ul style="list-style-type: none"> • Nepal Army • Nepal Police • Armed Police Force 	<ul style="list-style-type: none"> • NRCS • Political Parties
Emergency shelter and non food items	Nepal Red Cross Society	Chairman (district chapter-NRCS)	<ul style="list-style-type: none"> • DDRC • NRCS • Save the Children • UNICEF 	<ul style="list-style-type: none"> • Department of Urban Development • Non Governmental Organizations
Health and Nutrition	District Public Health Office	DPHO	<ul style="list-style-type: none"> • FAO • UNICEF • Save the Children 	<ul style="list-style-type: none"> • Nepal Family Health Program • NRCS
Education	District Education Officer	District Education Officer	<ul style="list-style-type: none"> • UNICEF • Save the Children • World Education • NRCS • Teachers Union 	<ul style="list-style-type: none"> • Bhawani Integrated Development Center - NGO • Indrenin Sewa Society - NGO
Protection	Women Development Office	Women Development Officer	<ul style="list-style-type: none"> • UNICEF • Save the Children • NRCS 	<ul style="list-style-type: none"> • NSEC • Human Right Organizations
Water Supply and Sanitation	District Water Supply Officer	Officer in charge	<ul style="list-style-type: none"> • UNICEF • Save the Children 	<ul style="list-style-type: none"> • NRCS • DDC • Other I/NGO
Agriculture, livelihood	District Agriculture Office	DADO		
Logistics	DDC (DNDRC)	LDO	<ul style="list-style-type: none"> • DDRC • VDC 	<ul style="list-style-type: none"> • Municipality
Food	DDNRC	CDO	<ul style="list-style-type: none"> • FNCCI • Trade Unions 	<ul style="list-style-type: none"> • Other Government and NGOs

3.4. Action Plan

3.4.1. District priorities on disaster risk reduction

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 40: Gaps, limitations and key priorities

Limitations and Gaps		Key Priorities
1	Limited capacity at district level to coordinate local level disaster risk management	Strengthening village and local level organizations to mainstream disaster risk management into their activities
2	Lack of formal protocols and standard procedures in preparedness and emergency coordination	Formalising of district level protocols governing inter and intra institution disaster risk management strategy at the district level
3	Poor hygiene and sanitation practices, especially relating to water resource management	Widespread initiatives on personal hygiene and community sanitation through awareness raising, improving access to resources and community-based monitoring mechanisms
4	River banks with high risk of breaking, high vulnerability of key public infrastructure	Improving structural risk reduction measures (including but not exclusively bio-engineering solutions).
5	Low resilience and adaptive capacity of highly vulnerable social groups and communities in high risk locations	Training and resources for diversified income-generation options to highly vulnerable social groups and in high risk locations
6	Important institutions such as community forestry institutions not mainstreaming DRR into their plans	Focus on community forestry institutions to mainstream disaster risk management into their activities
7	Weak adoption of hazard resistant agricultural practices, especially in relation to pest and disease control and coping with drought	Focus on building agricultural resilience against pest, disease and drought through trainings, improved irrigation facilities and institutional set up for management (emphasis on adoption of better agriculture technology)
9	Poor landscape-wide water resource management	Investment in mapping landscape-wide water resources, developing and building new irrigation systems
10	Poor management of food and clean water resources at times of emergency and rehabilitation	Strengthen response mechanism through institutional set ups at local level.
11	Limited financial support for disaster-affected households and communities for recovery	Improving DDRC function for recovery support
12	Limited provision of basic health care service at the local level	Developing the network of locally accessible health care services

3.4.2. Linkage between district and the National Priorities

Although it was suggested using the NSDRM priorities for DDRMP, district level consultations concluded that focusing only into NSDRM could limit to close problem focus around the suggested national activities and the plan would not properly recognize Siraha's specific individual needs and priorities. Therefore, planning process focused on the district priorities considering the national priorities as well. Table 41 reflects the consistency between the national and district-level priorities. (See Annex 1 for elaboration of each NS Strategic activity.)

Table 41: 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																													

3.4.3. 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 a District Disaster Management Plan rests on the local government bodies, mainly coordinated by the District Development Committee (DDC) and subsequently at the VDC/municipality level coordinated by the respective bodies. However, the local institutions lack adequate human resources and experience for developing such plans. These local institutions need support in building the institutional capacity and technical skills needed for moving towards development and implementation of the strategy in an integrated manner.

Institutional Requirements

For functionalizing the activities outlined in this DDRMP, the Siraha District Development Committee has to take the lead. There are several activities that fall into the working domain of more than one line agencies, and the DDC has to coordinate and disburse the activities among the district line agencies. DDC would be better establishing as DRR desk in the district development office.

Establishing focal people 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.

Each VDC and municipality needs to prepare integrated disaster risk reduction plans and endorsed by the respective councils. There may arise a need for a set of working guidelines for implementing agencies that have to notify an authorized body about their work in any area of the VDC.

Formation of disaster management committees at the VDC level in vulnerable VDCs will ensure DRR is mainstreamed into development planning and provide the downward focus to work at the local level with district coordination.

Streamlining of mechanisms 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 government and other agencies who deliver their services in more than one VDC, can assist the relevant VDC.

Human resource development

Awareness raising 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, the DDC and the respective VDCs need to ensure the budget allocation, both from internal and external sources, to implement the activities included in the plan.

The primary priority is to establish the emergency fund, particularly at VDC and a transparent protocol for disbursement.

Updating of DDRMP

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

3.5. Hazard Focus

Table 42: High Risk VDCs for prioritised hazards

Hazard Type	Flood		
Hazard Priority	1		
High Risk VDCs and Municipalities			
Gada, Sakuwan, Nankarkati, Itarhawa, Bhagwanpur, Tulsipur, Jighaul, Kachanari, Agrahi, Pipra, Harkatti, Itatar, Lagadigadhiyani, Lagadigot, Sukchaina, Mada, Malhanigamhariya, Sarswor, Khirauna, Laxmaniya, Bhadiya, Sikron, Maghauriya, Raghpur, Kalyanpur, Chatari, Ithahariprasai, Gokhra, Chikna, Siraha Municipality – total 31 VDCs among 106 VDCs			
Hazard Type	Drought		
Hazard Priority	2		
High Risk VDCs and Municipalities			
All VDCs in the district			
Hazard Type	Pest, insects and disease in crops		
Hazard Priority	3		
High Risk VDCs and Municipalities			
All VDCs in the district			
Hazard Type	Epidemics		
Hazard Priority	4		
High Risk VDCs and Municipalities			
Lagada Gadhiyani	Harkatti	Silowar pachwari	Anoma Brahamapuri
Majhauliya	Anoma Baniniya	Luxmipurwatari	Itatar
Chikana	Badhara maal	Janakinagar	Mhnaur
Bhokraha	Kusha Luxminiya	Kavilasi	Wariyar patti
Malhaniya Gamhariya	Muksar	Bachewa	Sukhipur
Swine flu and bird flu livestock losses: VDCs on Indian border			
Hazard Type	Cold wave		
Hazard Priority	5		
High Risk VDCs and Municipalities			
All VDCs			

Table 43: Identified Hazards in the District

SN	Hazards	SN	Hazards
1	Flood	7	Hail storm
2	Drought	8	Lightening
3	Fire	9	Epidemic
4	Cold wave	10	Soil Erosion
5	Wind storm	11	Pest and Crop Disease
6	Earthquake	12	Heat Wave
		13	Damage by wild animals

3.6. Detailed Plan of Activities

The detailed plan of activities is organised splitting into preparedness, response including relief and recovery phases. The plan also includes relief activities during an emergency and rehabilitation and recovery activities after an emergency. Under the preparedness 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
- establishment of relevant early information systems

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. 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.

Before Disaster Phase (preparedness activities): Policy Related Activities

Relevant to Hazards	Activity	Leading Responsibility	Support responsibility	Time frame
All	Mainstreaming DRR into forest management including community forestry	DFO	Government Agencies, GNOs, CBOs. community	1 year and continuous
All	Raising awareness on DRR and relevant policies	DDRC	Government agencies, NGOs	Year 1 and continuous
All	Establishment of Focal Desk or focal person in each relevant government agency	DDRC	Government Agencies,	1 year
All	Assessment of hazards and vulnerabilities in the district	DDRC	Government Agencies, VDCs, NGOs	Year 1 and continuous
All	Formation of DMCs in VDCs and municipalities	DDC	VDCs, NGOs	2 years
All, esp. Agricultural hazards	Promotion of hazard resistant crops, technologies and structural and non-structural inputs	DADO	NGOs	Continuous
Drought	Improvement access to water resources and promotion of drought resilient crops and varieties including agricultural technologies. Diversification of crops and income options	DADO	NGOs, MOA, NARC	Year 1 and continuous
Insects, pests and diseases of crops	Introduction of effective insect-pest management technologies and approaches	DADO	NGOs, CBOs, NARC, DAO	Year 1 and continuous
Health hazards, esp. Epidemics	Establishment of mechanisms for reducing hazards and surveillances for both persisting hazards and epidemics such as bird flue	DPHO	VDCs, NGOs,	Year 1 and continuous

Physical Infrastructure Development and Construction

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All	Provision of storing rescue and relief materials in the district and vulnerable VDCs.	DDRC	DDC, VDC, line agencies, NGOs	3 years
All	Establishing market collection centres in different parts of the district to improve capacity for income generation	DADO	VDCs, DDC, NGOs	Continuous
Flood, landslide, earthquake	Construction of emergency shelters in hazard prone VDCs considering their multiple use during without disaster periods	DDC/DADO/DEO	NGOs, VDCs, private sector	Continuous
Agricultural hazards	Implementing <u><i>saleha purwahi Irrigation</i></u> in Siswani V.D.C.	Eastern Irrigation Development Division no. 4	Users group, Government agencies NGOs	2years
Agricultural hazards, esp. Drought	Implementing Katariya Irrigation Plan for irrigation in Bariyapatti VDCs	Eastern Irrigation Development Division no. 4	Users group, Government agencies NGOs	2 years
Agricultural hazards, esp. Drought	Implementing Gagan Irrigation Plan for irrigation in Sukhipur VDC	Eastern Irrigation Development Division no. 4	Users group, Government agencies NGOs	Design phase
Water-related hazards, esp. Floods and drought	Providing deep tube well for irrigation and tube well for drinking water management in drought affected VDCs	Eastern Irrigation Development Division no. 4	Users group, Government agencies NGOs	2 years
Water-related hazards, esp. drought	Installation of <i>Dhiki pump</i> in drought affected VDCs after visit A	District Agriculture Development Office	Government agencies, NGOs	2 years
Water-related hazards, esp. drought	Construction of Shallow tube wells in potential areas A	UGIP, DADO	DDC, VDC, NGOs	2 years
Water-related hazards, esp. Floods and drought	Repair and upgrading of dams and irrigation channels in the district	Eastern Irrigation Development Division no. 4	Government agencies, NGOs	2 years
Water-related hazards, drought and inundation	Repair and maintenance of Shallow and deep tube wells	UGIP	VDC, municipality, Community	Continuous
Health hazards, esp. Epidemics	Construction of toilets in the households	Households	Health Office, V.D.C., NGOs, Red-Cross	1 year
Health hazards, esp. Epidemics	Construction of waste disposal plants, waste management mechanisms and drainage	DDC, VDC, municipality	DDRC, NGOs, CBOs	2 years

Flood	Construction of embankments in the flood prone rivers in the district	DWIDP	VDC, DDC, NGOs, Community	Year 1 and continuous
Flood	Flood mitigation works in Arnama VDC, Ward No. 2, and Hakpada VDC , Ward No. 1 and Lalpur. (D)	DWIDP DIVISION OFFICE Division-2	V.D.C., D.D.C., NGOs, Community	2 years
Flood	Gagan river control from Kasha, Aurahai, Harkati, Tulispur to Lagadi Gadiyani and also in Muksahar and Baniya (D)	DWIDP DIVISION OFFICE Division-2	V.D.C., D.D.C., NGOs, Community	2 years
Flood	Carrying out controlling of: 1. Baburam river in Vidhyanagar(D) 2. Mutani river in Bhadaiya - 4(D) 3. Darai river in Bishnupurkatti and Govindapur(D) 4. Jaruwa river in Foolbariya(D) 5. Water river in Bhadaiya(D) 6. Badhar river from Hanumannagar to Siraha Municipality and Laxmania (D) 7. Jiba river in Ramnagar, Mirchaiya(D) 8. Katariya river in Tenuapatti, Sivanagar (D) 9. Tharuwahi river in Nahara Ridhaura (D) 10. Dina river in Gautari(D) 11. Kalyandevi river in Mauwahi(D) 12. Vhadya river in Badharamal(D) 13. Mainawati river in Chandralalpur and Brahmapuri (D) 14. Juka river in Bandipur (D) 15. Bataha river in Matynia, Raghapur, Sikron and Majhauria (D) 16. Ghurmi river in Parsahi, Sitapur, Bastipur and Rudalpur, Piluhuwa(D) 17. Trisula river in Wariparpatti (D) 18. Khuti river in Bhadiuwa, Lahan -5 19. Balan river in Bhagwanpur, Kalyanpur, Sakhuwannanirkati, Ghada and Iriuwa (D) 20. Small river in Dothana - 2 and Sigaltoki and Bhaidwa river in Badharamal ward no. 5,7 and 8	DWIDP Division	V.D.C., D.D.C., NGOs, Community	2 years
Flood	Constructing dam in Kamala River in Sukhaina, Mhalhaniya Gamhariya, Sarswar, Vedia, Sikron, Majhauria, Kalyanpur, Thatari, Ithari, Prasahi, Vokraha, Chikana and Siraha Municipality (D)	DWIDP Division	V.D.C., Municipality, D.D.C., NGOs	3 years
Drought	Constructing drinking water taps in drought prone V.D.Cs	Drinking water and Sanitation Division Office, DTO, Red-Cross	V.D.C., DDC, NGOs	4 years

Organizational Capacity Development

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All	Effective implementation of community based forest management approaches including DRR issues	DFO	Community	2 years
All	Formation of community based disaster management institutions in vulnerable communities	Red-Cross	V.D.C., D.D.C., NGOs,	3 years
All	Formation of DMCs in VDCs and municipalities	DDC	VDC, municipality, NGOs	3 years
All	Enhance capacity of institutions and stakeholders for hazard and vulnerability mapping and risk assessment	Red-Cross, V.D.C., D.D.C.	Government Agencies, NGOs	Continuous
All	Organize disaster preparedness meetings at district and VDC/municipality level involving stakeholders including communities	DDRC, DDC, VDC	Government Agencies, NGOs	Every year
All	Awareness raising and mock drill exercises	DDRC	Government Agencies, NGOs, Communities	Every year
All	Provision of emergency fund in VDCs and municipalities	DDRC/DDC	Government Agencies, VDCs, NGOs	1 year
All	Improve capacity of institutions to storing and managing rescue and relief materials	Food Corporation, Red-Cross	Government Agencies, NGOs	3 years
Water-related hazards: drought	Formation and institutionalization of water user groups in the district	Respective government agency	VDC, NGOs, CBOs	1 year
Drought	Forming of cooperatives for micro-financing and saving – credit schemes.	Division cooperative office, DADO	NGOs	2 years
Agricultural hazards	Managing and forming Agricultural crop VDCs.	DADO	Government Agencies, NGOs	1 year

Long-term preventive measures

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
Agricultural, esp. Insects, pests and diseases of crops	Promotion of improved and resilient seeds and technologies on agriculture	DADO	D.D.C. Service Centers, NGOs	Continuous
Agricultural, esp. Insects, pests and diseases of crops	Promote effective adaptive integrated pest management	DADO	D.D.C. Service Centers, NGOs	Continuous
Agricultural, esp. manure & fertilizer	Promote compost and green manure technologies and approaches through trainings and demonstration	DADO	D.D.C. Service Centers, NGOs	Continuous
Health hazards, esp. Epidemics	Increase awareness on preventive measures for potential diseases leading to epidemics	Drinking water and Sanitation Division Office	Government Agencies, NGOs	1 year
Health hazards, esp. Epidemics	Implement effective hazard monitoring system	District Health Office	Government Agencies, NGOs	1 year
Health hazards, esp. Epidemics	Orientation programs for health volunteers	District Health Office	Government Agencies, NGOs	1 year
Health hazards, esp. Epidemics	Emergency medical group for medical treatment of plague	District Health Office	Government Agencies, NGOs	Within a month
Health hazards, esp. Epidemics	Spraying insecticides for kalajar(B)	District Health Office	Government Agencies, NGOs	Every year
Health hazards, esp. Epidemics	Awareness programmes through radio and other media	District Health Office	Government Agencies, NGOs	1 year
Health hazards, esp. Epidemics	Raising awareness through hoarding boards, pamphlet etc. in the plague affected area	District Health Office	Government Agencies, NGOs	1 year
Health hazards, esp. Epidemics	Vaccination against plague	District Health Office	Government Agencies, NGOs	1 year
Flood	Establishment of a Branch Office of Water Induced Disaster Prevention in Siraha	Political Parties, D.D.N.R.C., D.D.C	Government Agencies, NGOs	2 year
Cold Wave	Raise awareness on preventive and response measures on the impacts of cold waves	Red-Cross, DPHO	NGOs, DDC, VDC	1 year
Cold Wave	Promotion of cold wave resilient crop varieties and farming approaches	DADO, Community	Government Agencies, NGOs & NARC	1 year
Cold Wave	Switching crop calendar to avoid cold wave period	DADO, community, Agrovets	Government Agencies, NGOs	1 year
Cold Wave	Raise awareness and sensitize communities on climate change impacts and adaptation measures	DADO	Government Agencies, NGOs	1 year

Human Resource Development

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
All	Community Based Forest Management Trainings, practices and demonstration sites	DFO	Community forest management committee, NGOs	1 year
All	Capacity building training to volunteers and increasing number and networks of volunteers	Red-Cross	Government Agencies, NGOs,	2 years
All	Establishment and strengthening of joint networks of civil society organizations and government agencies	DDRC and NGOs	VDC, government agencies	1 year
Water related hazards, esp. Drought	Sanitation trainings through mother groups, schools and other civil society organizations	DHO, Drinking water and Sanitation Division Office	Government Agencies, NGOs	2 years
Water related hazards, esp. Drought	Multi-water use training and demonstration	Eastern Irrigation Development Division no. 4, DADO	Community, Government Agencies, NGOs	1 year
Water related hazards, esp. Drought	Training on shallow tube well construction and maintenance.	Eastern Irrigation Development Division no. 4	Community, Government Agencies, NGOs	1 year
Agricultural, esp. Insects, pests and diseases in crops	IPM training to LRPs and farmers	District Agriculture Development Office	Service Centers, NGOs	1 year
Agricultural, esp. compost manure	Training and demonstration on compost preparation and use	District Agriculture Development Office	Service Centers, NGOs	1 year
Health hazards, esp. Epidemics	Training on water purification technologies and materials in those VDCs, communities which are prone to harm by plague	Drinking water and Sanitation Division Office	Government Agencies, Red-Cross	1 year
Health hazards, esp. Epidemics	Increasing social awareness at community level for sanitation and personal hygiene	Drinking water and Sanitation Division Office	Government Agencies, Red-Cross	1 year
Health hazards, esp. Epidemics	Giving training to volunteers about Kalajar and Malaria (B)	District Health Office	Government Agencies, Red-Cross	2 years
Health hazards, esp. Epidemics	Increasing awareness for preventing bird flu and swine flu (B)	District Health Office, District Animal Development Office	Government Agencies, NGOs	2 years
Cold Wave	Trainings on prevention and mitigation of cold wave impacts	District Agriculture Development Office	Government Agencies, NGOs	1 year
Flood	Awareness and influence on Chure conservation through appropriate mechanisms and programmes	DFO, DWSSO Division Office	Community forest management committee,	1 year

Flood	Training and awareness on water purification	DWSSO Division Office	Red-Cross ,DTO	2 years
Flood	Training of rescue and first Aid	Red-Cross, Nepal Police and Army	Government Agencies, NGOs	4 years
Flood	Training on relief and shelter management	Red-Cross	Government Agencies, NGOs,	2 years
Flood	Conducting training on basic primary health care to volunteers (H)	Red-Cross, DPHO	Government Agencies, NGOs,	2 years
Flood	Organizing training on bioengineering to flood affected communities (G)	DSCWMO	Government Agencies, NGOs	2 years
Cold Wave	Organizing training about improved breeds of animals and animal husbandry (A)	District livestock Service Office	Government Agencies, NGOs	2 years

Natural Resource Conservation

Relevant Hazards	Activity	Main Responsibility	In coordination with	Time frame
Water related hazards	Conserving water springs and watersheds	DSCWMO	Government Agencies, NGOs, communities	1 year and continuous
Water related hazards	Managing community forest and preventing deforestation and degradation	District Forest Office	Government Agencies, NGOs, community	2 years
Water related hazards	Promotion of adaptive natural resource management technologies and approaches in the context of climate change	DDC and line agencies	Red-Cross, V.D.C., NGOs	Continuous
Water related hazards	Monitoring and regulation of quarry sites and gravel/sand collection	District Development Committee, Political Parties, DDNRC	V.D.C., NGOs, private sectors	Continuous
Water related hazards	Enforcement of EIA and building codes	DDC, DDRC and line agencies	VDCs, NGOs and private sectors	Continuous
Health hazards, inc. Epidemics	Examining and experimenting drinking water sources before distributing drinking water to community	Drinking water and Sanitation Division Office	Government Agencies, Red-Cross, NGOs	2 years
Flood	Restoration of degraded and denuded lands/hill slopes	DSCWMO, DFO	Community forest users group, NGOs, V.D.C	2 years
Flood	Instructing tree plantation along the river banks and dams	Relevant agencies	D.D.C., V.D.C., NGOs	2 years

Livelihood Development

	Activity	Main Responsibility	In coordination with	Time frame
All	Promotion of improved seeds, varieties and breeds	DADO	Government Agencies, NGOs	1 year
All	Income generating enterprises trainings – off farm and on farm	Red-Cross	Government agencies, NGOs	2 years
All	Training on painting, tailoring, T.V./ radio repairing, candle making, incense sticks, house wiring, auto mechanics training to disaster affected community people for making them self-reliant	Small and cottage industry Office, Women Development Office	Government agencies, NGOs	1 year
Crop diversification	Bee keeping and promotion	DADO	Government Agencies, NGOs	Within 2 years
Crop diversification	Mushroom farming training with input supports and market promotion	DADO	Government Agencies, NGOs	Within 2 years
Crop diversification	Fish farming training and promotion in the community and private ponds	DADO	Government Agencies, NGOs	Within 2 years
Crop diversification	Managing seasonal vegetable farming training and distribution of seeds (E)Managing training on off season vegetables farming and availability of seeds	DADO	Government Agencies, NGOs	Within 2 years
Crop diversification	Promotion of NTFP enterprises (broom, baskets etc)	DFO, DSCO, SCIO, WDO	NGOs, Private sector	Continuous

Early Information System Development

	Activity	Main Responsibility	In coordination with	Time frame
Agricultural hazards, esp. Insects, pests and diseases in crops	Early information through media and community meetings	District Agriculture Development Office	Field worker, communication medias	in need
Health hazards, esp. Epidemics	Early information on risk and mitigation measures	District Public Health Office	Media, NGOs, DDC, VDC, NRCS	in need
Cold Wave	Information on risk and potential impacts along with mitigation measures to be taken at the HH and community level	D.D.N.R.C	Media, NGOs, DDC, VDC, NRCS	In need
Flood	Establishment of effective mechanism of communication	D.D.N.R.C.	Nepal police, NTC, Radio (F.M.), Newspaper	In need
Flood	Ensure reliable information flow from upstream to downstream	DDRC/DDC	All stakeholders in the district	Always
Drought	Information on risk and potential consequences along with mitigation measures to be taken at different level	D.D.N.R.C.	All stakeholders in the district	In need

Response and Relief Activities (During Disaster)

	Activity	Main Responsibility	In coordination with	Time frame
All	Search and rescue mobilization	DDRC	Relevant agencies	Immediate when in need
All	Treatment of injured and hospitalization	DDRC	Relevant agencies	in need
All	Emergency shelter management	DDRC	Red cross	in need
All	Maintain social security, law and order	DDRC	Relevant agencies	Always
All	Information collection and communication to DDRC on victims, losses and damages	V.D.C. , municipality	D.D.N.R.C.	Immediately
All	Management of dead bodies	Nepal polices and concerned community	DDRC and relevant agencies	Immediately
All	Providing emergency food and non-food stuffs	DDRC	All stakeholders	immediately
All	Providing health services	District Health Office	D.D.N.R.C, private	immediately
All	Counselling to affected families	DDRC	All stakeholders	immediately
All	Management of logistics	D.DRC.	Assigned agencies	immediately
Drought	Providing seeds and inputs	DADO	D.D.N.R.C., Red-Cross, NGOs	immediately
All, esp. Flood	Management of sanitation	District Health Office	D.D.N.R.C.	immediately
Agricultural hazards, esp. Pests, and disease off crops	Demonstration on Judicious use of insecticides/ pesticides and IPM methods	District Agriculture Development Office (DADO)	Service Centers, NGOs, V.D.C	immediately
Cold Wave	Providing fuel wood and warm clothes	DDRC, Redcross	Nepal police, army	immediately
Flood and drought	Water supply for drinking and HH needs	District DWSSO Division Office	Red-Cross, Technical office, D.D.N.R.C.	immediately

Rehabilitation and Reconstruction (after/post disaster)

	Activity	Main Responsibility	In coordination with	Time frame
All	Assist with financial and material inputs to affected for reconstruction	DDRC	NGOs	Immediate within 1 year
All	Providing loan for buying agricultural stuffs and animal husbandry	D.A.D.O.	D.D.C., NGOs	Within 1 year
All, esp. Flood	Conducting income generating activities in flood affected areas (E)	DADO	D.A.O., V.D.C., NGOs	1 year
All, esp. Flood, Drought	Distributing seeds, saplings to affected communities.	DADO	D.D.C., V.D.C., NGOs	1 year
All, esp. Flood	Advocating for providing relevant compensation to affected communities	D.D.N.R.C.	D.D.C., V.D.C., NGOs	1 year
Flood	Repairing irrigation sources which were damaged due to flood under Water resources irrigation Plan	Eastern Irrigation Development Division no. 4, Rajbiraj, Saptari	Water users group, VDC. DDC., NGOs	evaluation and According to damage
Flood	Repairing water sources damaged by flood and repairing drinking water supplies	District DWSSO Division Office	District Technical Office, NGOs	2 years
Drought	Providing drought resistant seeds to drought affected community	District Agriculture Development Office	Government Agencies, NGOs	in need
Epidemics	Preventive measures for future events	D.N.D.R.C.	D.D.C., Red-Cross, NGOs	1 year
All	Diversifying income and employment options for affected communities	DDRC/DDC	All stakeholders	Continuous
All	Mainstreaming DRR into development planning at community, VDC and district level	DDC/DDRC	All stakeholders	Continuous

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5. Annexes

List of Annexes

1. Summary of National Plan for Disaster Risk Management
2. Standard Operating Procedures for District Departments and Agencies
3. Schedule of Program
4. Participants of PVA Exercise in Siraha District
5. Field Tools Used for Detailed Planning
6. Contact Lists of Service Institutions
7. Central Level Cluster Details
8. Name list of District Implementation Task Group (DTITG)

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 style="text-align: center;">Make Disaster Risk Reduction a Priority</p> <p style="text-align: center;">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 style="text-align: center;">Know the Risks and Take Action</p> <p style="text-align: center;">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 style="text-align: center;">Building Understanding and Awareness</p> <p style="text-align: center;">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 Sewerage
- 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 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 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 obilizing 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 (DDRMP)”

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 of the FAO
1 st	11:15-11:30	Welcome and Introduction of the participants	SP Dawadi (SPD)
2 nd	11:30-11:45	<ul style="list-style-type: none"> Introduction to the subject Objectives of the Training Workshop 	Nar Gopal Rai (NGR)
	11:45-12:00	<i>Tea</i>	
3 rd	12:00-1:1 30	<ul style="list-style-type: none"> Hazard, vulnerability risk and disasters Disaster defined and its 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 	NGR, SPD
	1:30-2:00	<i>Tea Time</i>	
4 th	2 00-2:30	Disaster management and Preparedness	SPD
	2:30-2:50	Discussion	
	2:50-3:00	Planning for next day	
Day 2			
	10:00-10:15	<i>Tea</i>	
1 st	10:15-10:30	Recap of the Day 1 st	FAO Monitgor
2 nd	10:30-11:30	<ul style="list-style-type: none"> Disaster management Vulnerability reduction 	SPD
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 	Nar Gopal Rai (NGR)
	12:30-12:45	<i>Snacks</i>	
4 th	12:45-3:45	<ul style="list-style-type: none"> Participatory Vulnerability Analyses Identifying the hazards Analyses of loss and repetition Prioritizing hazards in VDCs Vulnerability analysis for the district Prioritization of hazards in the district 	NGR, SPD
5 th	3:45-4:00	Explanation of the field Tools	
6 th	4:00-4:30	Planning ahead	SP Dawadi 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
	4:45-5:00	<i>Tea and Disperse</i>	

Annex 4: Participants of PVA Exercise in Siraha District

Participant's Name List

SN	Name	Organization / Political Parties	Designation
01	Jeevan Thakur	Ko.Le.Bi.Ka	Ni.Pra.Ko.Ni
02	Brahmadev Choudhary	Ma.Bi.K. Lahan	Kendra Pramukh
03	Ramkrishna Choudhary	District Police Kar. Siraha	Prahari Nayab Nirishyak
04	Tarveshwor Thakur	VDC Kar.	VDC Sachib
05	Hansu Mukhiya	Drinking Water	Kha.Pa.Kha.
06	Jaleswor Mukhiya	Agriculture Development Bank, Siraha	May.Aie
07	Sitaram Mahato	Agriculture Development Bank, Siraha	Pra.Sa.
08	Saahid Hussien	Si.Bi.Ki.-04	Engineer
09	Chulhai Choudhary	District Agriculture Development Kar., Siraha	Kri.Pra.Aa
10	Ram Prakash Mahato	District Agriculture Development Kar., Siraha	Baa.Bi.Aa
11	Rajendra Prasad	Krishi Samparka Kendra	Pra.Sa.
12	Ram Bilash Shah	CPN UML	Upasachib
13	Krishna Dev Yadav	Ji. Swa. Ka.	Ja.Sa.Ni.Aa
14	Kishori Yadav	Madhesi Janaadhikaar Forum , Siraha	Ji.Chairperson
15	Shyam Sundar Yadav	Ji.Kri.Bi.Ka. Siraha	Kri.Pra.Aa
16	Genilal Yadav	Ji.Kri.Bi.Ka. Siraha	Baali. Bi.Aa
17	Kamal Prasad Yadav	Ji.Kri.Bi.Ka. Siraha	Matsya Bikash Adhikrit
18	Mo. Mustama	District pasu Sewa Ka. Siraha	Pa.Chi
19	JeevNarayan Yadav	Pasu Sewa Kendra Sukhipur	Pa.Se.Pra
20	Dipak Nayak	Lahan Udhyog Ba. Sangh	Member
21	RajKumar Mahara	Nepal Sadbhawana party	Member
22	Jibanda Gupta	Nepali Congress	
23	Bishnu Dev Yadav	Siraha Municipality	Ka.Jha.
24	Markande Prasad Jyalal	Ne.Khadya Sam.	Zone Pramukh
25	MahiNarayan Shah	Gharelu Karyalaya, Lahan	Ni.Da.Aa
26	Baliram Yadav	VDC Badhharamaal	VDC Sachib
27	Jagadev Yadav	Kharswor	VDC Sachib
28		Sparajor0	Ne.Sa.Pa
29	SuryaNarayan Yadav	Ne.Re.So.Siraha	UpaSabhapati
30	KrishnaDev Yadav	Ji.Bi.Sa.	Ka.Sa.
31	Ram Prakash Singh	Ji.Kri.Bi.Ka,Siraha	Baa.Sam.Aa.
32	Lal Bahadur Prasad Kurmi	Ji.Bhu.Sam.Ka.,Lahan	Ji.Bhu.Sa.Aa
33	DevNarayan Shah	Kantipur Daily	Sambadata
34	Tarani Prasad thoudhary	Ji.Ba.Ka.Siraha	Sa.Ba.Aa
35	IndraDev Yadav	Ji.Kri.Bi.Ka	Baa.Bi.Aa
36	IndraNarayan Shah	Ji.Kri.Bi.Ka,Siraha	Pra.Sa.
37	Rajlal Yadav	Ji.Kri.Bi.ka, Siraha	Ma.Bi.Aa
38	Umeshwor Jha	Ji.Kri.Bi.ka, Siraha	Pra.Sa.
39	Ramesh Yadav	Jana Jagaran Tatha	Sachib
40	JayaNarayan Yadav	Gramin Suchana Kendra	Samyojak
41	NaraGopal Rai	PAC	TL
42	Ji.Pra. Dawadi		

SN	Name	Organization / Political Parties	Designation
43	Jhalak Prasad Bhattarai	PAC	F.O.
44	Baidhyanath Prasad Choudhary		Ka.Pra.Samiti Lahan
45	Ram Prakash Shah	District Kri.Bi.Ka. Siraha	Ba.Kri.Bi.Aa

4.2 Sukhipur VDC exercise

Participant's Name List

SN	Name	Address	Contact No.
01	Bhola Ram Mahato	Sukhipur – 05	9842878373
02	Chetanath Mahato	Sukhipur – 06	9842827262
03	Hari Mahato	Sukhipur – 06	
04	RamShewak Sharma	Sukhipur – 06	
05	RamPukar Mahato	Sukhipur – 06	
06	Keshab Prasad Neupane	Sukhipur – 02	9842860750
07	Pra.Ha. Chhottelal Yadav	E.Pra.Ka. Sukhipur	9842867120
08	Pra.Ha.Aash Narayan Mahato	E.Pra.Ka. Sukhipur	9842841823
09	Tripit lal Mahato	Nepal Red Cross Society Uasakhha Sukhipur	9842848359
10	Arjun Yadav	Ji.Si.VDC E.Pra.Ka. Sukhipur-05	
11	Satam Ba.Mahato	Ji.Si.VDC E.Pra.Ka. Sukhipur-05	
12	JeevNarayan Yadav	Pasu Sewa Kendra Sukhipur	9848082725
13	Pasupal Yadav	Sukhipur - 04	9842875350
14	Devendra Prasad Mahato	Ram Jomartik Samuha, Sukhipur – 04	
15	Ram Janam Yadav	RPP Sukhipur-04	
16	Ram Lochan Mahato	VDC Sukhipur	9842825646
17	Jagadish Yadav	VDC Batahi - 08	9804763373
18	Indra Narayan Shah	Krishi Sewa Kendra Sukhipur (Pra.Sa.)	9842848342
19	Biltu Mandal	Sukhipur – 01	9804725966
20	Ramesh Kumar Yadav	MCMP -SM	9743023380
21	Raja Ram Yadav	Sukhipur – 05	
22	Gayatri Devi Mahato	Sukhipur – 04	
23	Rita Devi Mahato	Sukhipur – 04	
24	Pawan Choudhary	Nepali Congress Sukhipur – 05	
25	Ram Ashish Mahato	Sukhipur – 04	9842839065
26	Ram Naav Mandal	VDC Sukhipur	9842860762
27	Shree Dev Yadav	Sukhipur – 04	9743009916
28	Dipak Kumar Mahato	Sukhipur	9842827408
29	Gane Simkato	Sukhipur – 05	
30	Bipa Mahato	Sukhipur – 06	
31	Budhan Mahato	Sukhipur – 05	
32	ShreeRam Mahato	Sukhipur – 05	
33	Ram Ratan Mahato	Sukhipur – 06	
34	Rajesh Shah	FAO	9743019540
35	Nimesh Bhattarai	LalBandhi	9844034365

4.3 Badharamaal VDC exercise

Participant's Name List

SN	Name	Address	Contact No.
01	Kamala Khadka	Bandhipur	
02	Ganesh Bahadur Dahal	Bandhipur -02	
03	Baburam Thapa	Bandhipur -03	
04	Ram Bahadur Rayamajhi	Badharamaal -05	
05	Prem Bahadur Bhandari	Badharamaal -05	
06	Upendra Mahato	Badharamaal -03 Baan Samiti	
07	Suraj Lal Yadav	Badharamaal -02 Sadhbhawana	
08	RamBhakta Yadav	Badharamaal -03 Unified Maoist	
09	Rajendra Yadav	Badharamaal -02	
10	Ram Bilash Mahato	Badharamaal -02	
11	Sudarshan Kafle	Badharamaal -02	
12	Ganga Bahadur Thapa	Badharamaal -05	
13	Prem Bahadur Mahat	Badharamaal -02 Baan Samiti	
14	Ram Prakash Yadav	Badharamaal -02	
15	Tikaram Pahadi	Badharamaal -02	
16	Ishor Bahadur Bhatta	Badharamaal -02	
17	Bhola Prasad Pokhrel	Badharamaal -02	9842826152
18	Ganga Ram Yadav	Badharamaal -03	
19	Ramesh Kumar Yadav	Badharamaal -02	
20	Pra.Sa.Ni. Kulananda Choudhary	Prahari Chowki Bandhipur	9842123291
21	Anjani Kumar Dahal	Badharamaal -02 Bandhipur	9844099054
22	Rajan Karki	Traffic Pra.Post, Bandhipur	9842079736
23	Jaya Prakash Mandal	Range Post Bandhipur	9842859176
24	Baam bahadur Kunwar	CPN UML , Bandhipur	9744011504
25	Badri Baidhya	Nepali Congress Badharamaal -01	
26	Mahesh Kumar Rayaa	Pasu Sewa UpaKendra, Bhedia	9842865203
27	NirKumar Rai	Pra.Chowki, Bandhipur	
28	Niraj Timsina	Pra.Chowki, Bandhipur	
29	Dipendra Yadav	Pra.Chowki, Bandhipur	
30	Rajesh Shah	FAO	9743019540
31	Nimesh Bhattarai	Lalbandhi	

4.4 Saarswor VDC exercise

Participant's Name List

SN	Name	Address	Contact No.
01	Baidhyanath Shah	Saarswor - 04	9842827266
02	Darau Paswan	Saarswor - 02	
03	Ramprit Das	Saarswor - 06	
04	Shiva Mahato	Saarswor - 06	
05	Nandi Lal Mahato	Saarswor - 06	
06	Isuf Saafi	Saarswor - 08, Baam Morcha	
07	Bisheswor Das	Saarswor - 06	9845132270
08	Ped yadav	Saarswor	
09	Ram Sewak Mahato	Saarswor - 08, CPN UML	
10	Kameswor Pariharat	Saarswor Upa .Swa. Chowki	9842835819
11	Dular Chandra Paswan	Saarswor - 08	
12	RamKeny Mahato	Saarswor - 08	
13	Mo. Alaodin Dafali	Saarswor - 03, Tamalopa	9743009479
14	Mo. Keum Rayen	Saarswor - 08, Krishak	
15	Binod Kumar Mahato	Saarswor - 04	
16	Nanda Kishor Shah	Saarswor - 03	
17	Puran Shah	Saarswor - 04, Nepali Congress	
18	Mo. Mahamuud Rayen	Saarswor - 08, CPN UML, Ji. Ka. Member	

19	RamDuwal Yadav	Saarswor – 09	
20	Mukaswor Yadav	Saarswor – 09	
21	Manoj Kumar Gohit	VDC Ko.Ka, Saarswor	9743000852

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: Contact Lists of Service Institutions

6.1 District Disaster Relief Committee Members

As of February 2010

SN	Name , Surname	Post	Office	Phone no.
1.	Birendra Kumar Yadav	CDO	District Administration Office	033-520121
2.	Ram Prakash Shah	Office chief	District Agriculture Development Office	033-520049
3.	Mohammad Mustafa	Office chief	District Animal Development Office	033-520008
4.	Dr. Rajkumar Chaudary	Office chief	District Health Office	033-520064
5.	Bishnudeep Yadav	Office chief	Siraha municipality	
6.	Ramdev Yadav	President	Nepal Red cross society	033-520561
7.	Lal Bahadur Kurmi	President	Soil conservation Office	033-560337
8.	Ramananda P. Kurmi	Office chief	District Forest Office	033-560082/83
9.	Bishweshwor P. Shah	Office chief	Nepal Food Corporation	033-560150
10.	Ramesh Kumar Bhattarai	Office chief	District Police Office	033-520005
11.	Murari Nepal	Office chief	Lahan Municipality	033-560138
12.	Ashok Agrawal	Office chief	Federation of Commerce and industry	033-560205
13.	Lilamani Ojha	L.D.O	District Development Committee	033-520116
14.	Baidhanath P. Chaurasiya	Office chief	District Ground water development Committee	0331-520108
15.	Pashupati Chaudary	Office chief	A.D.B.	033-520173
16.	Shyam Kisor Shah		Town Development Office, Rajbiraj	033-520084
17.	Sugambar Yadav		Irrigation Division no. 4 Office , Rajbiraj	031-521124

6.2 DDNRC (Emergency Focal Respondents)

As of February 2010

SN	Name of Organization	Contact Persons' Name	Post	Office Phone	Mobile Number	Working area
1	District Forest Office	Ramananda Pd Kurmi	Office head	33570082		Throughout District
2	District Underground Water Development Committee	Baidyanath Pd. Chaurasiya	Office Head	33560108	9845059099	Throughout District
3	District Land Conservation Office	Lal Bahadur Kurmi	Office head	33560337		Throughout District
4	Agricultural Development Bank, Siraha	Pashupati Chaudhary		33550173		26 V.D.C. of district
5	Nepal Army	Sunil Raj Bista		33621132	9743020000	
6	District Agricultural Development Office	Ram Prakash Shah	Office Head	33520049		Throughout District
7	District Development Committee	Lila mani Ojha	office Head	33520116		106 V.D.C.s and 2 Municipalities
8	Drinking Water and Sanitation Division Office	Ganesh Yadav	Office Head	33560136		Throughout District
9	Food Office	Biseshwar Pd. Shah		33560150		Sagarmatha Zone
10	Janajagaran tatha Paryawaran Manch	Surya Narayan Yadav	President	33520225	9842835225	Throughout District
11	Udhyog tatha Banijya Sangh	Ashok Agrawal		33560205		Throughout District
12	District Administration Office	Birendra Kumar Yadav	CDO	33520121		Throughout District
13	District Police Office	Ramesh Kumar Bhattarai	Office Chief	33520005		Throughout District
14	Municipality Office	Murari Nepal	Office Chief	33560138		Lahan Municipality
15	District Hospital Siraha	Dr. Ramkumar Chaudhary	Office Chief	33520064		Throughout District
16	District Animal Service Office	Md. Mustafa	Office Chief	33520008		Throughout District
17	Nepal RedCross Society	Ramdev Yadav	Chairman	33520046	9842830023	Throughout District

6.3 District Chapter and sub-chapter officials

As of February 2010

SN	Chapter/Sub-Chapters of Siraha NRCS	Contact Person	Post	Contact Number
1.	Nepal redcross Society head Office Siraha	Ashok Yadav	Coordinator	033-520561
2.	NRS Sub-branch Inarwa	Badri narayan Yadav	Chairman	9743017509
3.	NRS Sub-branch, Mahadev Portaha	Ramdev Yadav	Secretary	033-520965
4.	NRS Sub-branch, Lahan	Hari Narayan Yadav	Chairman	033-560363
5.	NRS Sub-branch, Kachahari	Rajendra Pd. Yadav	DO Member	9842850374
6.	NRS Sub-branch, Tulsipur	Sitaram Mahato	Chairman	9804724705
7.	NRS Sub-branch, Sukhipur	Sanjay Kumar Mahato	Secretary	033-620984
8.	NRS Sub-branch, Gauripur	Kailash Chandra Yadav	Chairman	033-20359
9.	NRS Sub-branch, Pipra	Domi Yadav	Chairman	033-620485
10.	NRS Sub-branch, Itaharaa	Sitaram Sharma	Chairman	033-520441
11.	NRS Sub-branch, Krishnapur	Umakanta Mahato	Chairman	033-520225
12.	NRS Sub-branch, Hakpaadaa	Ramdev Yadav	Chairman	9842853030
13.	NRS Sub-branch, Betaunaa	Damodar Adhikari	Chairman	
14.	NRS Sub-branch, Lagadi Gadiyaani	Bhagirath Pd. Agrawal	Chairman	033-520335
15.	NRS Sub-branch, Siraha 2	Bisheshwar Yadav	Chairman	9743007996
16.	NRS Sub-branch, Siraha 3	Kaasindra Thakur	Chairman	9842842850
17.	NRS Sub-branch, Bacharwa	Yogendra Yadav	Chairman	
18.	NRS Sub-branch, Kalyanpur	Chandra Dev Yadav	Chairman	033-621018
19.	NRS Sub-branch, Rampur Birta	Bhola Shrestha	Chairman	9842824388
20.	NRS Sub-branch, Dhangadi	Yash Bd. Karki	Chairman	033-620184

6.4 Volunteers in the District

See District Disaster Contingency Plan Clusters (8.14) and 8.3

6.5 Female Health Volunteers (FHV)

N/A

6.6 Animal Health Service Centres

As of February 2010

Service Center/ Sub-center name	Location	V.D.C. of Scope
Animal Service Center, Lahan	Lahan	Lahan MP, Gaadha, Brahmangachhari, Sonmati, Majhaura, Sitapur Pra. Dha
Animal Service Subcenter, Gobindapur	Gobindapur	Gobindapur, Dhodanaa, Padaraiya Tharu Tole, Bhadaiwa, Bastipur
Animal Service Subcenter, Bhagwanpur	Bhagwanpur	Bhagwanpur, Itarwa, Bahararigaul, Bhagwatipur T. Su., Sothiaain, Mahadeva Portaha, Sakhuwanankarkatti, Inarwa
Animal Service Subcenter, Dhangadi	Dhangadi	Dhangadi, gobindapur, bishnupurkatti, muksaar
Animal Service Subcenter, Maheshpur	Maheshpur	Maheshpur, pipra Pra. Dha., Pokharbhinda, sishwaani, bhawanipur Pra. Dha, Kharukyahi, hanuman nagar Pra. Dha.
Animal Service Subcenter, Bariyarpatti	Bariyarpatti	Bariyarpatti, Laxmipur, Pataari, Tenuwaptti, Vidhyanagar, Kushahaa Laxminiyan, Mohanpur Kamalpur, Tulsipur
Animal Service Center, Nawarajpur	Nawarajpur	Nawarajpur, Jijhaura, Kachanaari, mauwahi, majhaura, Janakinagar
Animal Service Subcenter, Golbazar	Golbazar	Asanpur, Jamdaha, Lalpur, Durgapur, Ayodhyanagar, Fulkahaakatti, Betaunaa
Animal Service Center, Sukhipur	Sukhipur	Sukhipur, Itataar, Aurahi, Harkatti, Kawilaasi, Silorwa Pachawari, Balhi, Pipra pra. Pi.
Animal Service Subcenter, Arnaamaa	Arnaamaa	Arnaamaa, Hakwaada, Lagadimoth, Lagadi Modiyani, Sanhaitha, Krishnapur, Gauripur, mahanaur
Animal Service Subcenter, bishhupur	Bishhupur	Bishnupur Pra. Dha., Devipur, Laxmipur Pra. Ma., Aasopur Balkaawa, Chandra Ayodhyapur, Chandra Lalpur
Animal Service Subcenter, Narha	Narha	Narha, balkaawa, chandrodayapur, barchawaa, Rajpur, Thalha Katahaa, Belha
Animal Service Subcenter, Saaraswar	Saaraswar	Saaraswar, Malhaniya Gamhariya, Hanumannagar Pra.Ma., Maadar, Sukhchaina, Sirha MP
Animal Service center, Khirauna	Khirauna	Khirauna, laxminiyan, Sirha MP 1,3,7,8
Animal Service Subcenter, Mirchaiya	Mirchaiya	Ramnagar Mirchaiya, Ga. Maheshpur, Fulwariya, Karjanha, Sitapur Pra. Ra, Rampurbirta
Animal Service Subcenter, Bhediya	Bhediya	Bhediya, Badaharamaal, Kalyanpur Kaa. Wa, Gautaari, Malhaniyan Khori, Sikraun, Majhauliya, Radhopur
Animal Service Center, Kalyanpur	Kalyanpur	Kalyanpur jabdi, Bhokraha, Dumari, Bishnupur pra. Ra., Arnaama Pra. Ra., Chikanaa Itaaari Prasahi, Chatari

Note:

Due to changing staffs in the organization, phone numbers were not available and also the contact numbers were not available in the documents of the offices either.

6.7 Agriculture Service Centre

SN	Service Center	Service Area (VDC)
1	Agriculture Service Center, Lahan	1. Lahan Municipality
		2. Brahman Gorchari
		3. Sonmati, Majhaura
		4. Bhawanipur Ka. Ba.
		5. Gaadhaa
		6. Sitapur
2	Agriculture subcenter, Bhagwanpur	1. Mahadeva Portaha
		2. Sakhuwanankarkatti
		3. Itaharwa
		4. Sothiaain
		5. Bhagwatipur Ta. Su.
		6. Naraha Rigaul
		7. Bhagwanpur
		8. Inarwa
3	Agriculture subcenter, Tareganaa Gobindapur	1. Dhodhana
		2. Tareganaa Govindapur
		3. Bhadaiya
		4. Padariya Tharu Tole
		5. Bastipur
4	Agriculture Service Center, Nawarajpur	1. Jijhaua
		2. Kachanaari
		3. Mauwahi
		4. Nawarajpur
		5. Majhaura
		6. Janakinagar
5	Agriculture subcenter, Dhangadi	1. Dhangadi
		2. Gobindapur
		3. Bishnupurkatti
		4. Muksar
6	Agriculture subcenter, Maheshpur	1. Hanumannagar Pra. Dha.
		2. Bhawanipur
		3. Sishwani
		4. Pokhar Bhinda
		5. Pipra Pra. Dha.
		6. Maheshpur
		7. Kharukiyahi
7	Agriculture subcenter, Bariyarpatti	1. Mohanpur Kamalpur
		2. Kushaha Laxminiya
		3. Bidhyanagar
		4. Tulsipur
		5. Tenuwapatti
		6. Bariyarpatti
		7. Laxmipur Pataari

SN	Service Center	Service Area (VDC)
8	Agriculture Service center, Sukhipur	1. Itaataar
		2. Auraahi
		3. Harkatti
		4. Pipra Pra. Pi.
		5. Kabilaasi
		6. Silorba Pachhari
		7. Sukhipur
		8. Balhi
9	Agriculture subcenter, Golbazar	1. Fulkaahakatti
		2. Durgapur
		3. Betauni
		4. Ayodhyaanagar
		5. Asanpur
		6. Lalpur
		7. Jamdaha
10	Agriculture subcenter, Arnaama	1. Lagadi Gadiyani
		2. Lagadi Goth
		3. Sanhaitha
		4. Hakpaara
		5. Kishanpur
		6. Arnaama Pra. Pi.
		7. Gauripur
		8. Mahanaur
11	Agriculture Service center, Khirauna	1. Khirauna
		2. Laxminiyan
		3. Siraha
		4. Thengahi (Siraha MP 9)
		5. Hanuman Nagar Pra.Pi.
12	Agriculture subcenter, Saa. Bishnupur	1. Laxminiyan Pra.Ma.
		2. Bishnupur Pra.Ma.
		3. Devipur
		4. Balkawa
		5. Chandra Ayodhyapur
		6. Chandralalpur
13	Agriculture subcenter, Narha Balkaawaa	1. Belha
		2. Thalha Katahaa
		3. Rajpur
		4. Barcharwa
		5. Narhabalkaawa
		6. Chandroyapur
14	Agriculture subcenter, Saarswar	1. Sukhcheina
		2. Maadar
		3. Manpur (Siraha MP 5)
		4. Malhaniya Gamhariya
		5. Makhnaha (Siraha MP 3)
		6. Saarswar
		7. Basbitta (Siraha MP 6)

SN	Service Center	Service Area (VDC)
15	Agriculture Service center, Kalyanpur	1. Chatari
		2. Arnaama (Rampur)
		3. Itaari Prasaahi
		4. Chikanaa
		5. Bishnupur Pra. Ra
		6. Kalyanpur Jabdi
		7. Bhokraha
		8. Dumari
16	Agriculture subcenter, Mirchaiya	1. Sitapur Pra. Ra.
		2. Gamhariya Maheshpur
		3. Ramnagar Mirchaiya
		4. Fulbariya
		5. Rampur Birta
17	Agriculture subcenter, Bhediya	1. Badaharaamaal
		2. Kalyanpur Kaa. Ba.
		3. Gautaari
		4. Malhaniya Khori
		5. Bhediya
		6. Sikraun
		7. Radhopur
		8. Majhauriya

6.8 Emergency kits (First Aid Kits) stocks

N/A

6.9 Local Media (print and radio)

As of February 2010

Name of Media	Media		Contact Person	
	Media Type (Paper/FM)	Phone Nr.	Name	Mobile
Fulbaari FM	Radio	033-561015	Dr. Manjula Giri	9851002015
Salahesh FM	Radio	033-520888	Chandra Dev Chamali	9743002829
Samaadh FM	Radio	033-561521	Jiwach Chaudhary	9841376703
Nayaa Drishti Weekly	Weekly Paper	033-520888	Chandra Nabin Baral	9743002829
Purwa Weekly	Weekly Paper		Ramrifan Yadav	9852830679

6.10 Political Parties

As of February 2010

SN	Name	Name of Party	Contact Number	
			Residence	Office
1.	Shri Harinarayan Chaudhary	CPN Maoist	9743002672	9852830958
2.	Sita Devi Yadav	NC	520090	520229
3.	Lilanath Shrestha	CPN UML	9743005109	9852830291
4.	Kishori Yadav	MJForum, Nepal	9753005285	
5.	Rajendra Kumar Shah	TMLP	974300303	984114490
6.	Shambhu Pd. Yadav	RPP	9753005112	9842828033
7.	Gobinda BK	CPN ML	9743002916	9842825946
8.	Ranjit Pashwan	CPN United	9842825103	9842836101
9.	Shailendra Thakur	Sadbhawana Party	9842835041	521139
10.	Harinarayan Yadav	RPP	9743019388	520453
11.	Maheshlal Mahaseth	RJP	9842866815	
12.	Vijay Kumar Mahato	NMKP	9842828743	
13.	Kaari Prasad Yadav	CPN United	9743003018	
14.	Bharat Prasad Shah	Sadbhawana (Aa.)	9852830780	9842826100
15.	Chandralok Pratap Singh	Nepal Janatadal	9842827840	9743019203
16.	Ramananda Chaudhary	SL Rastriya manch	9743006049	
17.	Baleshwar Shah	Sa. Pra. Janta party Nepal	9743003009	
18.	Devnarayan Ram	Dalit janajaati Party	9804720476	
19.	Mahesh Bd. Raut	Chu. Rastriya Ekata Party Nepal	9842828569	
20.	Ram Charitra Pd. Shah	MJAFN (Democratic)		

6.11 Active NGO/INGO

As of February 2010

Name of NGOs	Address	President's Name	Contact Number	Main Tasks Accomplished
Aadarsha Mahila Sewa Kendra	Asanpur 6	Sashikala Chauhan		Saving and Credit, Skill Development and Income Generating
Adarsha Youth Club	Inarwa 5	Sanjiv Kumar Mahato		Awareness
Apanga Anath, Asahaya Saamudayik Bikas Kendra	Siraha 7	Parshuram Shah	520687	Awareness, Skill Development
Apanga Sangh	Siraha 7	Devnaath Shah	520330	Income Generating, Skill Development
Apanga Sewa Sangha	Mahadeva Portaha	Ram Bilas Yadav		Awareness, rights based
Apanga Sewa Sansthan	Fulwariya 3	Madan Pd Pokhrel		School
Araniko Youth Club	Pokharbhinda 3	Maheshwar Kaamait		Health and Sanitation
Baatabaran Tatha Grameen Bikas Samaj	Asanpur 6	Ananda Pd Shsh	540106	Women Empowerment
Baatabaran tatha Grameen Bikas Samaj	Asanpur 6	Prakash Shah	540106	Awareness, Skill Development
Bababala Chaudhary Sewa Samiti	Lahal 3	Indranarauan Chaudhary		Awareness, Literacy
Barchawa Saamudayik Bikas Manch	Siswani 8	Anil Kumar Chaudhary	560602	Awareness, Literacy, Health and Sanitation
Basmati Saamudayik Youth Club	Tenuwaptti 6	Sonai Thakur	560699	Saving and Credit
Bhanu Adarsha Pragatishil	Jijhaul 5	Shiv Narayan Yadav		Awareness, Skill Development
Bhanu Adarsha Pragatishil Bahumukhi youth Club	Jijhaua 5	Shiva Narayan Yadav		Education Related
Bhawani Ekikrit Bikas Kendra	Bhawanipur Pra. Dha.	Bindu Narayan Chaudhary	561789	Incomegenerating, Drinking water and Sanitation, Health, Savings and Credit
Bhootpurva Karmachaari Parishad	Asanpur 6	Laxmi Narayan Shah	540087	Income Generating Program
Bikas ra Sewa Kendra	Pokharbhinda 1	Jyoti Kumar Rai		Literacy, Health and Sanitation, Skill Development
Briddha Samaj Sudhar Kendra	Kusaha 3	Ramprit Das	561055	Education, Saving and Credit
Chandra Narayan Yadav Memorial Trust	Siraha MP 1	Mrs. Sita Deveii Yadav	520090	Health, Education, Awareness, Child Development
Dalit Janakalyan Youth Club	Lahan MP 10	Binod Kumar Bisukey	560613	Dalit, Women and Children Awareness
Dalit Nisahaya Jana Utthan Kendra	Narharigaul 5	Rabilal Paaswan		Awareness
Dalit Samaj Sewa Sangh	Lahan 1	Rajendra Mochi		Eduaction, Public Advocacy, Skill

				Development, Saving and Credit
Dalit Sewa Samudaaya	Siraha 1	Arun Kumar Paaswan	520638	Informal Education, Savings
Dalit Utpidit Janajaati Utthan Samiti	Siraha	Rajkumar Mahara	520330	Skill Development, Public Awareness, Health
Dhangadi Aapasi Bikas Manch	Dhangadi 2	Fulkumari Ram		Saving and Credit
Dihawar Youth Club	Hakpaada	Jichab Narayan Yadav		Income generating
Durga Aapasi Bikas Kendra	Maheshpur Patari 6	Surendra Pd. Yadav		Saving and Credit
Ekata Sewa Samuha	Lahan 10	Amba Raj Mishra		Awareness
Everest Memorial Youth Club	Badaharamaal 7	Maniklal Shah	550174	Health and Sanitation, Environment Related
Future Bright Youth Club	Siraha 8	Rajkumar Mukhiya	520662	Education, Health related
Gram Jyoti Bikas Kendra	Dhodana 2	Tej Narayan Chaudhary	561911	Literacy, Saving and Credit, Income Generating and Health
Grameen Aapasi Bikas Kendra	Asanpur 6	Sewal Krishna Gautam	540206	Saving and Credit
Grameen Bikas Sangh	Bhawanipur K.B.	Indra Ananda Chaudhary	561346	Skill Development
Grameen Kshetra Bikas Sahayog Sewa Kendra	Siraha 6	Radheshyam Rai	520374	Literacy, awareness
Grameen Mahila Ekikrit Bikas Kendra	Bastipur 6	Manjula Giri	560571	Income Generating
Grameen Mahila Kalyan Sewa Kendra	Dhangadi 2	Bal Kumari Raut		Skill Development, Income Generating, Women Empowerment
Grameen Saamudayik Bikas Sansthan	M. Kamalpur 6	Ram Autar Yadav		Literacy, income generating, Health, Drinking Water, Sanitation
Gramsewi Group	Padariya 4	Surya Narayan Chaudhary	560613	Child Development, Capacity Building, Income Generating, Skill Development, Irrigation
Gyanjyoti Bikas Kendra	Bhadaiya 9	Bindeshwar Charudhary		Awareness
Himalaya Youth Club	Muksar 7	Ram Rijhan Mahato		Awareness
Himchuli Saamudaayik Bikas Kendra	Karjanha 6	Rajkumar Mahato	550174	Health and Sanitation, Education
Human Rights and Development Center	Fulwariya 7	Jichab Shah	550044	Income generating, Skill Development and Health
Humanity Message Movement	Silorwa 4	Harun Rain		Awareness
Indreni Sewa Samaj	Jamdaha 7	Surya kumar Lama	540015	Education, reproductive health, public

				awareness, irrigation and sanitation
Jagaran Pravidhik Sahayog Kendra	Mirchaiya 4	Bishun Dayal Rai		Forest and Environment
Jagruti Community Development Center	Asanpur 6	Gobinda Raj Bista	540010	Health and Sanitation
Jahapragatishil Youth club	Balhi 8	Parsuram Yadav		Awareness, Literacy
Jajasewa Youth Club	Hakpada 5	Premnath Yadav		Awareness
Janahit Youth Club	Sothiaain 1	Baleshwar Pd Yadav		Awareness
Janajagruti Youth Club	Sukhipur	Arun Kumar Shah		Awareness
Janajyoti Sewa Samudaaya	Chandralalpur 6	Dhaneshwar Yadav	540037	Education, Health and Sanitation, Income Generating
Janajyoti Youth Club	Jijhyaul 5	Upendra Pd Yadav		Education, Sanitation
Janakalyan Youth Club	Siraha 3	Salim Rain	520174	Adult Literacy Program
Janautthan Youth Club	Chandra Ayodhyapur	Lukman Ansari	540077	Literacy, Health and Sanitation
Kudkha Aadibaasi Urao Sewa Samit	Mahanaur 1	Harinarayan Urao		Skill Development, public awareness
Laxmi Thapa Memorial Trust	Golbazar 7	Bhaktaram Thapa		Health and Sports
Laxminiya Devi Samaj Kalyan Youth Club	Thalhakataha 3	Jiban Pd Yadav		Public Awareness Program
Maa Durga Sewa Samiti	Inarwa 8	Kamal Narayan Chaudhary Karn	560392	Health and Skill Development
Maa Durgta Bhawani Club	Lahan 1	Naini Lal Ram		Awareness, Skill Development and Income Generating
Mahadev Youth Club	Mahadev Portaha	Bhupnarayan Yadav		Awareness
Mahila Bikas Shilpakala Kendra	Asanpur 7	Sushila Shah	540100	Women Micro-credit, skill development and Income Generating
Mahila Tatha Balbaalika Hit Kendra	Mirchaiya	Dukhi Paaswan	550028	Health education, awareness, income generating
Mahila Uddhar Sewa Kendra	Asanpur 6	Rita Dahal	540159	Income Generating, Awareness, Saving and Credit
Meheswar Kalju Sanskritik tatha Baatabaran Sanrakchan Nepal	Bhadaiya 3	Umesh Nandan Chaudhary	561656	Savings and Credit, Health Education and Sanitation, Income Generating and Skill Development
Milan Samaj Sewa Kendra	Siraha	Shyam Kumar Yadav	520687	Literacy, Health and Sanitation
Nagarik Jagaran tatha Bikas Samaj	Siraha 2	Vijay Kumar Karn		Literacy, awareness

Nepal Apanga, Anaath, Asahaya, Baal Sangh Sanstha	Lahan	Harinath Yadav	561402	Skill Development, Health,
Nepal Baatabaran tatha Krishi Bikas Kendra	Lahan	Manoj Kumar Thakur		Health and Environment, Literacy
Nepal Basobaas Basti Samrachan Samaj	Bastipur 8	Ramlal Ram	561016	Land Reform Related
Nepal Dalit Jagaran Kendra	Asanpur 5	Rampratap Mahara		Literacy, Public Awareness
Nepal Dalit Pidit Utthan Kendra	Bastipur 4	Ram Bilas Mandal		Awareness, rights based
Nepal Kalyankaari Samaj	Lahan	Kamal Yadav	560811	Public Awareness and Rights
Nepal Mahila Kalyan Samiti	Lahan 1	Mina Chaudhary		Health and Sanitation, Awareness
Nepal Manav Adhikar tatha Baatabaran Bikas Manch	Gobindapur 4	Gyanu Raut		Awareness, Skill Development
Nepal Rajak Janakalyan Samiti	Siraha 7	Ram Jatan Saafi		Awareness
Nepal Rishikul Sadaaya Kalyan Samaj	Asanpur	Devilal Sada	540251	Literacy, Public Awareness
Nepal Saamudayik Bikas Kendra	Mirchaiya	Manoj Kumar Shrestha		Awareness, Skill Development
Nepal Samaj Bikas Samuha	Lahan	Umesh Kumar Kayastha	561330	Education, Awareness, Skill Development
Nepal Samaj Sewa Samiti	Siraha 3	Suresh Kumar Mandal	520459	Public awareness
Nepal Samajik Bikas Sachetana Kendra	Lahan 6	Sunil Koirala		Awareness
New Star Youth Club	Mauwahi 5	Shyam Sundar Singh		Health Camps and Drama exhibition
Nine Star Youth Club	Bhawanipur 7	Shambhu Pd Chaudhary	561714	Skill Development and Income Generating
Nisahaya Sahayog Samiti	Naraha Rigaul 6	Bijali Pd. Shah		Drinking Water, Health and Sanitation
Pachawati Bikas Kendra	Fulkahakatti 9	Ram Gobinda Mahato		Awareness
Pragati Aapasi Bikas Kendra	M. Kamalpur 2	Jai Narayan Chaudhary		Saving and Credit
Pragatishil Youth Club	Balhi 8	Ramkumar Mahato		Education related
Pragishil Yuwa Samaj	Badaharamal 9	Saroj Shah	550275	Awareness, Health and Sanitation
Prayas Nepal	Dhangadi 2	Chandra Kumar Rai		Awareness
Public Welfare Youth Club	Devipur	Matilal CHaudhary	9933300005	Health Education Program
Raja awam M.B. Smriti Pratisthan	Bhawanipur 6	Nathuni Mochi	561789	Sanitation and Environment
Ram Jana Sahayog Youth Club	Janakinagar 3	Mahendra Das		Awareness
Rising Star Youth Club	Dhangadi 1	Chitranjan Sharma	560442	Saving and Credit
Saamudaayik Bikas Manch	Lahan	Binod Kumar Chaudhary	561864	Sexual Health, Sanitation, Safe Motherhood, against Girls Trafficking

				and AIDS control
Saamudayik Bikas Kendra	Lahan 4	Pramod Kumar Mahato		Income Generating and Skill Development
Saamudayik Bikas Nepal	Lahan	Gobinda Chaudhary	560559	Public Awareness, Skill Development
Saamudayik Bikas Samiti	Pokharbhinda 6	Rajesh Thakur		Health Related
Saamudayik Bikas Samiti	Lahan 3	Rajlal Yadav		Awareness
Saamudayik Sewa Manch	Lahan 1	Bishwanath Mahato		Literacy, Awareness
Saamudayik tatha Niji Ban Bikas Kendra	Lahan	Om Prakash Gupta		Forest and Environment, Skill Development
Sagarmatha Corner Club	Badaharamaal 2	Narendra Kumar Majhi	550183	Health and Environment related
Sagarmatha Samaj Bikas Karyakram	Rajpur 1	Asheshwar Yadav		Health Related
Sagarmatha Shrot Bikas Kendra	Lahan	Bindeshwar Pd Yadav		Awareness, Skill Development
Sahid Yagya Bahadur Thapa Smtiti Kendra	Mirchaiya 5	Pradip Giri	550228/254	Ambulance Service
Sajha Thakur Bikas Pratisthan	Siraha 1	Bhogendra Thakur		Environment Related
Samaghra Bikas Sewa Kendra, Branch Office, Siraha	Lahan 4	Durga Pd. Mahato	560576	Income Generating, Saving and Credit, Rights
Samagrha Janautthan Kendra	Lahan MP 6	Sunil Kumar Shah	561585	Awareness and Human Rights Conservation
Samaj Baatabaran Bikas Kendra	Dhodana	Chandeshwar Pd. Chaudhary		Income Generating Program
Samaj Batabaran Bikas Kendra	Dhodana 1	Ram Pukar Chaudhary		Awareness, Literacy
Samaj Kalyan Samiti	Madar 6	Kishori Yadav	520383	Women micro-credit, Skill development and income generating
Samaj Kalyan Youth Club	Belha 7	Kulananda Singh	520135	Health and Sanitation an Awareness
Samaj Sewa Samiti	Belha 4	Akhtar Ali	520135	Health and Sanitation
Samaj Sewa Samiti	Dhodana	Raudi Chaudhary	560581	Literacy, Income Generating, Skill Development
Samaj Sewa Yuwa Bikas Club	Aurahi 7	Mahendra Mahato		Awareness
Samaj Sewi Youth Club	Durgapur 3	Nanda Kumar Mahato		Awareness
Samaj Utthan Youth Club	Brahman Gorchari 9	Gopilal Chaudhary		Literacy, Awareness and Sanitation
Samajsewi Youth Club	Durgapur 3	Ram Parishan Singh	540060	Skill Development an Health Related
Samghra Bikas Samaj	Lahan 7	Shakar Giri		Awareness, Literacy
Samghra Jana Utthan Kendra	Lahan 6	Bhairav Pd Gelal		Awareness, Skill Development

Samudayik Ban Tatha Samaj Bikas Kendra	Lahan 8	Netra Prasad Regmi	560412	Forest Management
Sanjhomai Sewa Samiti	Sanhaitha 6	Upendra Pd Yadav		Awareness, Skill Development and Income Generating
Sanket Naatya Samuha	Golbazar	Madan Chaaaraaney	540122	Awareness
Sarwodaya Janasewa Kendra	Siraha 7	Nabin Kumar Yadav	520020	Skill Development, Health and Sanitation
Setogurans Child Development Service	Siraha MP 7	Nila Joshi	520377/546	Child Development, Awareness
Sewa Foundation	Padariya	Muktilal Chaudhary		Health and Sanitation, income generating
Shahid Prem Pd Dahal Memorial Trust	Dhangadi 2	Ramhari Dahal	560143	Literacy and Health
Shanti Youth Club	Mirchaiya	Bikas Kumar Mahato	550151	Awareness
Shiva Shakti Janasewa Yuwa Bikas Club	Harkatti 4	Pramod Kumar Singh		Awareness, Skill Development and Income Generating
Shiva Shakti Youth Club	Gautaadi	Prakash Adhikari Danuwar	550017	Public Awareness, Income Generating, Education, Health and Sanitation
Shivashakti Janasewa Yuwa Bikas Club	Harkatti 4	Pramod Kumar Singh		Health Camps
Shree Balan Youth Club	Gobindapur 8	Prathamlal Chaudhary		Skill Development
Shree Shaardey Youth Club	Gauripur 3	Indrajeet Mahato		Health related
Shri Daamodaranda Brahamachari Baba Pratisthan	Mirchaiya	Fulgen Mahaseth	550010	Education
Shri Jai Hanuman Sewa Samiti Club	Saarswar 3	Jeewan Gupta	520661	Skill Development, Awareness, Health
Shri Janajagaran tatha Baatabaran Bachau Samiti	Siraha 7	Surya Narayan Yadav	520225	Skill Development, Health Related
Shri Radha Krishna Youth Club	Siraha 1	Hridaya Narayan Thakur	520409	Sports
Shri Ram Youth Club	Rajpur 1	Gopal Narayan Shrestha		Health and Environment related
Shri Ramnawani Youth Club	Sukhipur 6	Ram Gulam Mahato		Health Awareness
Shri Tapasi Bajrang Youth Club	Sukhchaina	SHiv Charan Yadav	520374	Literacy, Awareness
Siraha Bahira Sangh	Siraha	Gangaram Yadav		Hospital, School for Deaf
Siraha Youth Club	Siraha	Arun Kumar Shah	520420	Sports
Srijana Community Development Center	Chandralalpur 2	Lilanath Shrestha	540133	Child Development, Microfinance, Poverly Reduction, Health and

				Sanitation, Education
Srijana Samaj Siraha	Siraha 1	Indra Dev Narayan Yada	520330	Skill Development, Public Awareness and Health
Srijana Youth Club	Padariya	Magain Kamait	561279	Awareness, Literacy, Income Generating
Star Youth Club	Arnaama P.P. 4	Ram Charitra Yadav		Literacy, awareness, reproductive health
The New Janajyoti Youth Club	Siraha 2	Dev Kumar Yadav	520652	Literacy, Health
Uday Youth Club	Chandralalpur 6	Narayan Yadav	540103	Awareness and Sanitation
Utpidit Sarokar Manch Nepal	Asanpur 7	Tularam Moktan		Awareness
Uttarbaahii Yuwa Club	Badaharaamal 1	Haridey Kumar Danuwar		Awareness
Yaduwanshi Janakalyan Youth Club	Thalhakataha 1	Babunath Yadav		Awareness, Sanitation
Yuwa Ekata Club	Arnaama P.P. 4	Narendra Kumar Singh		Literacy, Awareness, Health

6.12 Health Service Providers

As of February 2010

SN	Type of Health Center	Location	Phone Number	Contact person
1.	Primary Health Care	Aurhi	9743000859	Upendra Yadav
		Nawrajpur	9743019044	Dorim Dhamali
		Bhagwanpur	98047	KrishnaYadav
		Sichaiya	033550206	Suresh Singh
2.	Health Posts	Valuwahi	9842825113	Ramsewak Ray
		Khirauna	9841823979	Dipnarayan Shah
		Kalyanpur	9842838028	Ramnath
		Mulhaniya	9842820904	Saroj
		Nainpur	9743015135	Tawan Yadav
		Shalbazar		
		Sakhipur	9842825892	Rajdev Yadav
		Anika	9743000790	Vinod Pradhan
		Wariparipatti	9842827610	Rambilas Thakur
		Laghan	9842827065	Ramkisor Chaudary
		Gol Bazaar		
		Charapatti	9842834028	Jagdish Mandal
3.	Sub-Health post – 93 (no data)			

6.13 Nepal Army and Police

(As of February 2010)

Nepal Army

1. Nepal Army Camp (Ran Singh Dal Gana), Choharva
2. Suraksha Base camp, Bandipur
3. Suraksha Base camp, Siraha
4. National Research District Office Siraha

Nepal Police Force

S.No.	Name of Nepal Police Unit and Location	S.No.	Name of Nepal Police Unit and Location
1.	District Police Office, Siraha	14.	Police Post, Bandipur
2.	Ward Police Office, Lahan	15.	Ward Police Office, Bishnupur Pra. Ma.
3.	Ilaaka Police Office, Dhangadi	16.	Asthayi Nagar Police
4.	Ilaaka Police Office, Golbazar	17.	Karagaar Surakchya Guard
5.	Ilaaka Police Office, Mirchaiya	18.	District police Officer Guard
6.	Ilaaka Police Office, Kalyanpur	19.	Police Post, Auraahi
7.	Ilaaka Police Office, Sukhipur	20.	District Traffic Police Office, Lahan
8.	Ilaaka Police Office, Maheshwaari	21.	Traffic Police Office, Siraha
9.	Ilaaka Police Office, Maheshpur Patari	22.	Traffic Police Post, Golbazar
10.	Police Post, Thadi	23.	Traffic Police Post, Mirchaiya
11.	Police Post, Jhajipatti	24.	Security Basecamp, Silorwapachawari
12.	Police Post, Bariyarpatti	25.	Security Basecamp, Bishnupurkatti
13.	Police Post, Maadar	26.	Police Post, Sitapur

Armed Police Force

S.No.	Name of Armed Police Unit and Location	S,No,	Name of Armed Police Unit and Location
1.	Border Security Office, Siraha	8.	Security Basecamp, Mirchaiya
2.	Security Basecamp, Lahan	9.	Security Post, Bariyarpatti
3.	Armed Police Force Basecamp, Thadi	10.	Security Post, Itaataar
4.	Security Basecamp, Jhajhpatti	11.	Security Post, Lagdigadiyani
5.	Security Basecamp, Sukhipur	12.	Security Basecamp, Golbazar
6.	Security Basecamp, Maadar	13.	Security Basecamp, Chikanaa
7.	Security Basecamp, Kalyanpur		

6.14 District Disaster Contingency Plan Cluster Contacts and Status

1. Area (Cluster) : Searching Co-ordination and Rescue

Cluster Leads: Chief District Office, Siraha

List of Cluster Members:

S.N.	Cluster Partners Name	Contact Person	Telephone, e-mail, Address
1.	District Administration Office, Siraha	C.D.O.	033-520121,9852830108
2.	Nepal Police		033-520005
3.	Armed Police Force		033-520897
4.	Nepal Army		033-621132,9743020000
5.	Nepal Red-Cross Society		033-520095,520719,9852830023
6.	Kantipur	Representative	
7.	Rural Communication Centre	Representative	9842846863
8.	Nepal Television	Representative	
9.	Republica Daily	Representative	
10.		Representative	

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient	Remarks
Rafts, Roadway, rubber boat	2		2	
Life Jacket	200		200	
Ambulance	2	3		Red-Cross
Rope	50	20	30	Security Agency
Stretcher	10	2	8	Red-Cross
Hook	100		100	
Helmet				Sufficient Security Agency
Travel	10	10		In Co-ordination of District Disaster Rescue Committee
Kodalo(Spade)	240	90	150	Security Agency
Tyre tube	17	7	10	Security Agency
Gaiti	150	30	120	Security Agency
Sapaal	90	15	75	Security Agency
Well trained Workers	1200	1180	20	1100 Security Agency and 80 Red-Cross
Primary Care	300	80	220	Red-Cross
Emergency co-operatives Fund				District Disaster Rescue Committee in need.
Helicopter	2		2	Point out by the Government

2. Cluster:
Cluster Leads: Nepal Red-Cross Society, Siraha

Cluster Member's Name List :

Cluster Partners Name	Contact Person	Telephone, e-mail, Address
Nepal Red-Cross Society,Siraha	Chairman	033-520095, 520719, 9852830023
Disaster Rescue Committee	C.D.O.	033-520121, 852830108
International Red-Cross Federation	Representative	
Save the Children	Representative	9858022906
UNICEF	Representative	9852050050
Urban Development and Buildings Construction	Representative	031-520084, 842834017
District Education Office	District Education Officer	033-520004, 842825153
Federation Of Nepalese Chambers of Commerce and Industry, Lahan	Representative	
Business Committee, Siraha	Representative	
District Forest Office	Representative	
Other NGO's Organizations	Representative	

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient	Remarks
Gair Food Materials set	10,000	500	9,500	Red-Cross
Emergency Tent	5,000		5,000	
Materials for Rehabilitation	1,000 Family		1,000 Family	

3. Cluster: Health and Diet
Cluster Leads: District Health Office, Siraha

Cluster Member's Name List :

Cluster Partners Name	Contact Person	Telephone, e-mail, Address
District Health Office, Siraha	District Health Chief	033-520281,9842824064,9844026267
World Health Organization	Representative	
UNISEF	Representative	9852050050
Save the Children	Representative	9858022906
Nepal Red-Cross Society	Representative	033-520561,520719,9852830023
Nepal Family Health Program	Representative	9842825315
Bhawani Unified Community Development Centre	Representative	9842841462
Indreni Service Society	Representative	9842827510

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient	Remarks
I.V. Fluid	8,000			Sufficient District Health Office
ORS Metron				
Paracetamol				
Ciprofloxacin	14,000		14,000	
Chloramphenicol	25,000		25,000	
Antiallergic Tablet	10,000		10,000	
Primaguine	2,500		2,500	
Chloroquine	5,000		5,000	
Jeevan Jaal				Sufficient District Health Office
Human Resource				Sufficient District Health Office
Needed Materials for Health Education				Sufficient District Health Office
Tetracycline	50,000		50,000	
Doxycycline	15,000		15,000	
Pamphlets (Prachaar Prasaar)	Rs 25,000		Rs 25,000	
Iron				Sufficient District Health Office
Vitamin A				Sufficient District Health Office
Albendazole				Sufficient District Health Office

4. Cluster: Education

Cluster Leads: District Education Office, Siraha

Cluster Member's Name List :

Cluster Partners Name	Contact Person	Telephone, e-mail, Address
District Education Office	District Education Officer	033520004
UNICEF	Representative	9852050050
Save the Children	Representative	9858022906
World Education	Representative	
Nepal Red-Cross Society	Representative	033520561,520719,9852830023
Teacher's Union	Representative	
Bhawani Unified Development Centre	Representative	9842841462
Indreni Service Society	Representative	9842827510
Srijana Community Development Centre	Representative	033540133

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient
Students Education Materials	10,000		10,000
Running Alternative School	200		200
Schools Education Materials	50		50
Repairing of School Buildings	50		50
Repairing of Childhood Development Centre	200		200
Education Help for Childhood Development Centre	200		200
Helping Student's Uniform	50		50

5. Cluster: Conservation

Cluster Leads: District Women's Development Office

Cluster Member's Name List:

Cluster Partners Name	Contact Person	Telephone, e-mail, Address
Women's Development Office	Chief Officer	033520210
UNICEF	Representative	9852050050
Save the Children	Representative	9858022906
Nepal Red-Cross Society	Chairman	033 520561,520719,9852830023
INSEC	Representative	9852830570
Nepal Army		033-621132,9743020000
Nepal Police	Deputy Superintendent of Police	033-520005
Nepal Armed Police Force	Deputy Superintendent of Police	033-520897
Nepal Federation of Journalism	Representative	9852830867

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient
Establishment of Pregnant Care Centre	50		50
Pregnant Materials Distribution	2,000		2,000
Counseling Service	50		50
Forming Observation Group	50		50
Pregnant Women's Care Service	50		50

6. Cluster: Drinking Water and Environmental sanitation
Cluster Leads: Drinking Water Sanitation Division Office

Cluster Member's Name List:

Cluster Partners Name	Contact Person	Telephone, e-mail, Address
Drinking Water and Sanitation Division Office	Chief Office	033560136,560519,9842827897
District Development Committee	Local Development Officer	033-520116
UNICEF	Representative	9852050050
Save the Children	Representative	9858022906
Nepal Red-Cross Society	Representative	033 520561, 520719,9852830023
Bhawani Unified Development Centre	Representative	9842841462
Indreni Service Society	Representative	9842827510

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient	Estimated Budget
Including Tube well fitting	100		100	20,00,000.00
Arsenic Test	100		100	1,00,00.00
Toilet Construction	100		100	15,00,000.00
Hygienic Materials	2,000		2,000	40,00,000.00
Tube Well repairing	1,000		1,000	10,00,000.00
Disposal	500		500	

7. Cluster: Food

District Cluster Leads: District Disaster Rescue Committee, Siraha

Cluster Member's Name List:

Cluster Partners Name	Contact Person	Telephone, e-mail, Address
District Disaster Rescue Committee	Chief District Officer	033-520121,9852830108
Nepal Red-Cross Society	Chairman	033-520561,520719,9852830023
District Development Committee	Local Development Officer	033-520116
UNICEF	Representative	9852050050
Save the Children	Representative	9858022906
Federation Of Nepalese Chambers of Commerce and Industry	Representative	
Business Committee	Representative	
Nepal food Corporation	Representative	
Salt Trading Corporation	Representative	
V.D.C./Municipality	Representative	

Cluster Partner's Capacity Plan and Help

Required Materials	Required Number	Rest in Partner's Organization	Insufficient	Estimated Budget	Remarks
Noodles	28,000 Cartoon		28,000 Cartoon		
Bitten Rice	2,100 Quintal		2,100 Quintal		
Sugar	420 Quintal		420 Quintal		
Biscuits	17,500 Cartoon		17,500 Cartoon		
Dalmoth	420 Quintal		420 Quintal		
Bhuja	1,500 Quintal		1,500 Quintal		
Corn Flour	25 Quintal		25 Quintal		
Rice	3,150 Quintal		3,150 Quintal		
Pulses	420 Quintal		420 Quintal		
Potato	1,260 Quintal		1,260 Quintal		
Salt	420 Quintal		420 Quintal		
Cooking Oil	42,000 Liter		42,000 Liter		
Candle	50,000 Piece		50,000 Piece		
Matches	10,000 Piece		10,000 Piece		
Kerosene	50,000 Liter		50,000 Liter		
Firewood	50,000 Quintal		50,000 Quintal		
Paper Plate	10,00,000 Piece		10,00,000 Piece		
Plastic glass	10,00,000 Piece		10,00,000 Piece		
Ghee					
Jwaano					

Co-ordination Management:

Area Contact Centre

Area No.1 Lahan

Area No.2 Itaharwa (Maheswori)

Area No.3 Wariyarpatti

Area No.4 Siraha

Area No.5 Sukhipur

Area No.6 Mirchaiya

Area No.7 Kalyanpur Jabdi

Contact Officer

-Chief of Ward Police Office, Lahan

-Chief Area Police Office, Maheswori

-Chief Area Police Office, Wariyarpatti

-Minister, Nepal Red-Cross Society, Siraha

-Chief Area Police Office, Sukhipur

-Chief Area Police Office, Mirchaiya

-Chief Area Police Office, Kalyanpur

Capacity Analysis of District Level:

1. District Administration Office, Siraha

Chief Contact Person: Gehanath Bhandari (C.D.O.)

Contact No. 033520121,9852830108

- Human Resource
- Vehicles management as per required.
- Emergency fund management.
- Coordinating with different agencies as per required.

2. Nepal Army

Chief Contact Person: Sunil Raj Bista

Contact No. : 033621132,9743020000

- Rescue team mobilization
- Mobilization of human resource for rehabilitation and re-construction.
- Support in collecting data(s).
- Helicopter support in critical situation.

- As per required mobilization of human resource if in demand.

3. Nepal Police

Chief Contact Person: Suraj K.C.

Contact No. : 033-520005

- Helping in collecting data(s).
- Helping in relief and rescue.
- Providing security.

4. Armed Police Force

Chief Contact Person: Dil Bahadur Thapa

Contact No. : 033-520897

- Three in Highway, four in inner road and six in boarder in total thirteen units from one section to one platoon for rescue Human resource in prepared position.
- Supporting different types of available rescue materials/equipments for affected area victims property protection and person to protected area.
- Supporting to fill stone into net and making wall for dam, if net, stone is provided from the concern agency to protect flood cutting side.
- Managing strong security in disaster affected area.
- To alert the people by distributing information through Miking in order to protect the possible disaster risk in each armed police force base area.

Name of Nodal Officer	Post	Unit	Contact Number
Rabindra Shrestha	Armed Police Inspector	Armed Police Force Base, Golbazaar	9843020235
Ram Bahadur Somray	Armed Police nayab Inspector	Armed Police Force Base, Lahan	9804748728
Ranjit Kumar Singh		Armed Police Force Base, Sukhipur	9743019733
Dilli Ram Choudhary		Armed Police Force Base, Kalyanpur	9804355026
Surya Prakash Choudhary	Armed Police Sub Inspector	Armed Police Force Base, Jhahhapatti	9743013654
Som Kumar Raya		Armed Police Force Base, Madar	9741127833
Rajendra Sahani		Armed Police Force Base, Mirchaiya	9804774601
Kamal Rai		Armed Police Force Base, Thadi	9742004461
Tej Bahadur Thapa		Armed Police Force Base, Chikana	9842692493
Narayan Rai		Armed Police Force Boarder Security Post, Bariyapati	9842631462
Sambhu Kumar Shah		Armed Police Force Boarder Security Post, Lagadigadiyani	9743015030
Shyam Shrestha		Armed Police Force Boarder Security Post, Itataar	9842263608

5. Nepal Red Cross-Society District Branch, Siraha

Chief Contact Person: Raj Dev Yadav

Contact No. : 033-520561, 520719,9852830023

- In the case of Disaster, the following contacts number has been listed in order to get the information about disaster.

Nepal Red-Cross Society District Branch, Siraha 033520095

Raj Dev Yadav (Chairman) 033520719, 9852830023

Rajdev Thakur (Mantri) 033520160, 9842835866

Ashok Kumar Yadav (Karyakram Samyojak) 9842825178, 9741096415

- Forming Disaster preparedness Committee and immediately providing relief materials and rescue.

Contact Person's Name	Address	Contact Number
Ananda Yadav	Siraha, Municipality	9842835062
Mahindra Yadav	Madar	9743006934
Satya Narayn Mahato	Lagadi gadiyani	9842827904
Ram Binaya Singh	Itataar	9743016334
Ram Dev Singh	Aaurahi	033620418
Sitaram Yadav	Bhediya	9842826198, 033620885
Upendra Shah	Majhauliya	9744005550

- Division of works in every Sub-branch and informing to the District branch if disaster related accident occurs and managing for relief and rescue.

Contact Person's Name	Post	Address	Number
Badri Narayan yadav	Chairman	Nepal Red Cross Society, Inaarwa	9743017509
Raj Dev Yadav	Secretary	Nepal Red Cross Society Sub -Branch, Mahadeva Portaha	033520965
Hari Narayan Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Lahan	033560363
Rajendra Prasad Yadav	District Office, Member	Nepal Red Cross Society Sub -Branch, Kachanari	9842850374
Sitaram Mahato	Chairman	Nepal Red Cross Society Sub -Branch, Tulsipur	9804724705
Sanjay Kumar Mahato	Secretary	Nepal Red Cross Society Sub -Branch, Sukhipur	033620984, 9804010995
Kailash Chandra Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Gauripur	033620359
Domi Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Pipra (Pra.Pi)	033620485
Siyaram Sharma	Chairman	Nepal Red Cross Society Sub -Branch, Itataar	033520411
Umakanta Mahato	Chairman	Nepal Red Cross Society Sub -Branch, Krishnapur	033520225
Ram Dev Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Hakpaada	9842853030
Damodar Adhikari	Chairman	Nepal Red Cross Society Sub -Branch, Betauna	
Bhagirath Prasad Agrawal	Chairman	Nepal Red Cross Society Sub -Branch, Lagadigadiyaani	033520335
Bisheswor Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Siraha 2	9743007996
Kasindra Thakur	Chairman	Nepal Red Cross Society Sub -Branch, Siraha 3	9842842850
Yogendra Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Barchhawa	974112744

Chandra Dev Yadav	Chairman	Nepal Red Cross Society Sub -Branch, Kalyanpur	033621018, 9743020025
Bhola Shrestha	Chairman	Nepal Red Cross Society Sub -Branch, Rampur Birta	9842824388

Annex 7: 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				
MOHP Rep	Cluster Lead			
Lead Organization	MoHP	MoHP(EDC)	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	MOHP Rep	Cluster Lead		
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, 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			

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 Management (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 8: Name list of District Implementation Task Group (DTITG)

Under the umbrella of District Natural Disaster Relief Committee (DNDRC) a sub- committee is formed as DTITG. The members of the DTITG Name list are as the following:

SN	Organization	Name of representative and their organizations	Designation
1	District Agriculture Development Office, Siraha	Om Prakash Karna, Senior agriculture development officer	President
2		Indra Dev Yadav, Horticulture Development Officer	Member
3		Ram Prakash Mahto, Crops Development Officer	Member
4		Geni Lal Yadav	Member
5		Chulhai Chaudary, Agriculture Officer	Member
6		Shyam Sudha Yadav	Member
7		Fishery Development Officer, Raj Lal Yadav	Member
8		Phlugaan Yadav	Member
9		Crops Protection Officer, Awadhesh Kumar Singh	Member
10	District Administration Office, Siraha	Representative	Member
11	District Development Office, Siraha	Representative	Member
12	District Forest Office, Lahan, Siraha	Representative	Member
13	District Soil Conservation Office Lahan, Siraha	Representative	Member
14	District Livestock Services Office, Siraha	Representative	Member
15	Division Irrigation Office	Representative	Member
16	Water improvement Program	Representative	Member
17	Fishery Development Office	Representative	Member
18	Agriculture Service Center (3)	Head Officer(3)	Member
19	District Livestock Services Office (3)	Head Officer (3)	Member
20	Farmer's Group	Representative	Member
21	Women Development Officer	Representative	Member
22	FAO	Awadh Kishor Deo, Representative	Member



Disaster Risk Management Plan for Siraha District

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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
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Tel: +977-1-5523239
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Email: FAO-NP@fao.org
Website: www.fao.org/world/nepal

Climate, Energy and Tenure Division (NRC)
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