# **Needs Assessment**

## **Disaster Risk Management** In four Municipalities of Kailali district, Sudurpashchim Province







January 2022

### List of acronyms

CRO	Community Based Organization
СЬС	Core Humanitarian Standard
CID	Civil Society Organization
CSD	Cornerate Social Despensibility
	Conscious Society for Sociel Development
C33D	District Coordination Committee
	District Coordination Committee
	District Disaster Management Committee
DEUC	District Emergency Operation Centre
	Disaster Information Management System
DP	Disaster Preparedness
DPO	Disabled People's Organization
DPRP	District Preparedness and Response Plan
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
EWS	Early Warning System
FGD	Focus Group Discussion
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
GESI	Gender and Social Inclusion
GO	Government Organization
IRA	Initial Rapid Assessment
LDMC	Local Disaster Management Committee
LDCRP	Local Disasters and Climate Resilient Plan
LDRMP	Local Disasters Risk Management Plan
LGOA	LG Operation Act
MCT	Main Central Thrust
MoIAL	Ministry of Internal Affairs and Law
NFI	Non-Food Item
NRCS	Nepal Red Cross Society
NDRRMA	National Disaster Risk Reduction and Management Authority
PEOC	Provincial Emergency Operation Centre
PPE	Personal Protective Equipment
PwDs	Persons with Disabilities
SAR	Search and Rescue
SOP	Standard Operating Procedure
SRSP	Shock Responsive Social Protection
TLO	Tole Lane Organization
ToR	Terms of Reference
VCA	Vulnerability and Capacity Analysis
VSO	Voluntary Service Overseas
WASH	Water Sanitation and Hygiene
WACT	Welfare Association for Children, Tikapur
WVI	World Vision International

## **Table of Contents**

List of acronyms	2
List of Tables	5 5
Acknowledgement	
1. Introduction	7
1.1. The Context	7
1.1.1 Tikapur Municipality	8
1.1.2 Chure Rural Municipality	9
1.1.3 Joshipur Rural Municipality	9
1.1.4. Bhajani Municipality	9
1.2 Objective of the Need Assessment	10
1.3.1 Selection of locations	<b>11</b> 11
1.3.2. Approach and methods	11
1.3.2.1. Desk review of policies and secondary data	11
1.3.2.2 Fieldwork	12
1.3.2.3 Data tabulation, synthesis, and analysis	13
2. Key findings	15
2.1 Types, magnitude, and impact of disasters in proposed location/Municipality	15
2.1.1 Current situation, challenges and major gaps [Part of the Problem Analysis]	15
2.1.2 Risk analysis	16
2.1.3 Emerging needs/proposed actions as part of the needs analysis	17
2.2 Institutional governance	17
2.2.1 Current situation, challenges, and major gaps:	18
2.2.2 Risk analysis	19
2.2.3 Emerging needs/proposed actions	20
2.3 Disaster risk management governance/governments initiatives for DRR response system, focusing on flood and landslides	20
2.3.1 Current situation, challenges, and major gaps	21
2.3.2 Risk analysis	21
2.3.3 Emerging needs/proposed actions	22
2.4 Risk-based preparedness and anticipatory action, focusing on flood and landslides	22
2.4.1 Current situation, challenges, and major gaps	22
2 4 2 Risk analysis	23
2.4.3 Emerging needs/proposed actions	20
2.5 Actors in disaster risk management	
2.5.1 Current situation challenges and major gaps	24
2.5.2 Current Struction, chancinges, and major gaps	27 25
2.5.2 Risk analysis managements and proposed actions	2J 25
2.3.5 בוחכו בוחב הככם מות או סאספר מכנוסוז	ZJ

2.6 Resource management for DRRM	25
2.6.1 Current situation, challenges, and major gaps	25
2.6.2 Risk analysis	
2.6.3 Emerging needs/proposed actions	26
2.7 Existing legal instruments (the frameworks on DRR)	26
2.7.1 Current situation, challenges, and major gaps	27
2.7.2 Risk analysis	
2.7.3 Emerging needs/proposed actions	
2.8 Risk, Needs and Perspectives of Vulnerable Groups- Reaching the unreached	
2.8.1 Current situation, challenges, and major gaps	
2.8.2 Risk analysis	
2.8.3 Emerging needs/proposed actions	
2.9 Sustainability of DRRM initiatives	
2.9.1 Current situation, challenges, and major gaps	
2.9.2 Risk analysis	
2.9.3 Emerging needs/proposed actions	
2.10 Impacts on disaster risk management in Nepal	
2.10.1 Current situation, challenges, and major gaps	
2.10.2 Risk analysis	
2.10.3 Emerging needs/proposed actions	
3. The Stakeholder analysis	35
4. Learning from the Past Projects	
Annexes	
Annex-1: Details of survey respondents	41
Annex-2: Hazards and its' impact in the study area	41
Annex-3: Socio-economic data of studied municipalities	42
Annex-4: Details of study area	44
Annex-5: List of people consulted during the assessment	
Annex-6: Policy review of Disability	56
Annex-7: GESI provisioned in Municipal DRRM Act	
Annex 8: Assessment questionnaire	57

## **List of Tables**

Table 1: Main features of surveyed municipalities	. 10
Table 2: Disaster loss at Chure Rural Municipality	. 15
Table 3: Disaster loss at Tikapur Municipality	. 16
Table 4: Disaster loss at Bhajani Municipality	. 16
Table 5: Disaster loss at Joshipur Rural Municipality	. 16
Table 6: Capacity of LG on DRRM	.27
Table 7: Key concerns of at-risk populations	.31

## List of Figure

Figure 1. Municipalities of Need A	ssessment Kailali district	8
i igure 1. i i unicipanties of Recur	ssessment, Runan alstrict.	

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## **Needs Assessment**

### **Disaster Risk Management**

In four Municipalities

of Kailali district, Sudurpashchim Province

### **1. Introduction**

Nepal is vulnerable to recurring geo-hydrometeorological disaster risks and is aggravated during the rainy season, where excessive precipitation causes heavy rainfall, inducing wet landslides, floods, debris flow, and inundation. Such disasters are damaging in the Terai lowlands, where rainfall and accumulated water flow through rivers from the hills, causing massive floods and inundation. The unconstrained and excessive exploitation of local natural resources and infrastructure development irrespective of disaster risks and environment protection are escalating Nepal's vulnerability.

In order to strengthen the on-going efforts to address the socioeconomic risks and vulnerabilities of the most vulnerable children (MVC), families, individuals and communities, World Vision International Nepal (WVI Nepal) strives to contribute towards an ongoing strategy of the National government and efforts of the national and international humanitarian and development agencies in the landscape.

With the above background, WVI Nepal aims to reinvigorate efforts in strengthening inclusive approach to address the gaps and challenges facing at-risk communities located in the landslide and flood-prone regions. In addition, this effort will include stimulating complementarity between risk-informed and anticipatory actions as well as shock responsive social protection (SRSP) provision of Nepal government.

This needs assessment report is a preliminary groundwork carried out to identify the possible opportunities, gaps, and the way forward. The results of this assessment intend to document opportunities, challenges, and good practices of Local Government (LG) on Disaster Risk Reduction and Management (DRRM); and inform appropriate risk-informed project strategy

and approaches for the multi-hazard disaster preparedness and response of the mostvulnerable communities of the landslide and flood-prone regions of Nepal.

#### 1.1. The Context

The newly formed local governments (LGs) are provided with the primary responsibility for the delivery of inclusive and disaster-resilient development at the local level. However, they lack technical and financial capacities to fulfil this mandate. As a result, local communities, including the most vulnerable children (MVC) their families, women and youth, persons with disabilities (PWD), senior citizens, including other minority groups and individuals facing

## Box-1: Nepal's policy initiatives for disaster risk management

The Government has taken a few policy initiatives for disaster risk management. Key mandates of each of the policy initiative is given hereunder:

- Disaster Risk Reduction and Management Act, 2017
- LG Operational Act, 2017
- Nepal Government (Work Division) Regulations, 2017
- National Policy on Disaster Risk Reduction, 2018
- Public Health Act, 2018
- Disaster Risk Reduction National Strategic Plan of Action (2018/30)
- Guidelines for the Relocation and Rehabilitation of High Risked Settlement, 2018 AD

recurring hazards, have exhausted their coping capacities.

The DRRM Act 2017 is taken as a breakthrough in Nepal. The DRRM Act 2017 governs and guides the establishment of institutional structures and mechanisms at the federal, provincial, and local levels for effective disaster risk management. While such acts, policies and associated legislation are in place at the federal level, they have not been realised at the provincial and local levels. This delay has further widened the gap in different fragmented institutional sectors, which are struggling to address capacity and coordination gaps within the federal, provincial, and LGs (refer box 1).

The DRRM Act 2017 has enabled LGs to enhance their DRRM capacity and effectiveness to ensure safety through the risk-informed development activities by adhering to the assigned roles and responsibilities for managing disasters. DRRM at the LG level is understood as a relief distribution, and hence there exists a huge gap that needs to be addressed in conceptualising and socialising DRRM at the LGs.

The following is the background of the locations selected for this needs assessment.



Figure 1: Municipalities of Need Assessment, Kailali District

Source: Government of Nepal, Survey Department

#### 1.1.1 Tikapur Municipality

The municipality is a high-risk area in terms of natural hazards. The Municipality is in the western part of Nepal, towards the south of the East-West highway (Fig 1). Due to the location and topographical features, the Municipality is exposed to recurring floods, inundation, and erosion due to the river flowing within the area. The five major recurring hazards that this Municipality is exposed to are: 1) floods, 2) wind storm, 3) fires, 4) cold waves, and 5) wild animal threats. Apart from this, the rapid increase in urbanization and run-away construction without building codes, the community is rapidly pushing itself towards future risks associated with earthquakes.

#### 1.1.2 Chure Rural Municipality

Chure Rural Municipality is prone to a high frequency of water-related disasters and the related human toll remains high. The District Response and Preparedness Plan (DPRP) 2078 (2020) indicated that landslides, floods, epidemics, hailstones, forest fire and wild animal attacks are the most recurrent disaster events in the Rural Municipality. The at-risk vulnerable HHs are in wards 3 and 5 respectively. A total number of 365 HHs in this Municipality are at risk from landslides, bank cutting by the river, and steep slopes. As these settlements are in very steep places, the sensitivity to disaster risk is increasing.

#### 1.1.3 Joshipur Rural Municipality

Joshipur Rural Municipality is another disaster-prone areas within Kailali district. Due to the location and topography, it is a high-risk area, which is exposed to five major recurring hazards, as indicated by hazard mapping are earthquake, flood, wildlife threats, fires and cold waves. A total number of 1950 HHs in this Rural Municipality are vulnerable to different disaster. The HHs in this Rural Municipality directly affected by torrential rain and recurring floods are in ward no. 1 (vulnerable HHs=650), ward no. 2 (vulnerable HHs=820), and ward no. 5 (vulnerable HHs=500).

#### 1.1.4. Bhajani Municipality

Bhajani lies in the south part of the Kailali district and is an adjoining Municipality to Tikapur and Joshipur rural Municipality. Because of its topographical features and location, it is also a high risk area for a natural hazards. The top five most common recurring hazards in Bhajanai Municipality as highlighted in hazard mapping are earthquakes, floods, wild life threats, fires and cold waves. A total of 3150 HHs are at most risk to natural hazards especially to flood in this municipality. The most vulnerable and at-risk HHs in the in this municipality are located in ward no. 3 (vulnerable HHs=950), ward no. 5 (vulnerable HHs=750), ward no. 7 (vulnerable HHs=900) and ward no. 8 (vulnerable HHs=550).

Before identifying this Municipalities, the WVI-VSO consortium held interaction meetings with its partner NGOs engaged in the respective municipalities to develop a better understanding of the overall situation in the proposed areas. It also held a series of consultation meetings with the local disaster management committees (LDMC) of each Municipality and other humanitarian agencies (Nepal Red Cross Society Kailai, CSSD Kailai, WAC Tikapur and FAYA-Nepal, Kailai) working at the district and Municipality level. At the province level, officials at the Ministry of Internal Affairs and Law (MoIAL) were also consulted and their issues and concerns were also incorporated.

Following the selection of the municipalities, wards within those municipalities were further identified and selected based on the standard criteria: (i) the recurrence and frequency of disaster events, (ii) the magnitude of loss and damage during past disaster events (historical trends), (iii) gaps in institutional support from the government organizations (GOs), NGOs and private sector for disaster preparedness initiatives, and (iv) the scale of poverty, marginalization, and deprivation of the most-at-risk populations and communities. As a result, wards such as 2, 5, 6, 7 and 8 in Tikapur Municipality were found to be extremely vulnerable. Out of the total vulnerable HHs, 29% HHs (1570 HHs) were found at extreme high risks followed by 38% (2087 HHs) at high risk. Likewise, ward such as 3, 5, 7 and 8 are more vulnerable in Bhajani Municipality and wards 2, 3, & 5 are more prone to natural hazards in Joshipur rural Municipality. (Ref. Annex 2, 3 and 4).

In summary, review of secondary data from both study areas revealed that out of the total HHs in surveyed municipalities, 45% HHs are from the Tharu caste/ethnic groups followed by Brahmin/Chhetri-37%, Dalits 16% and others (Magar and Janajati) is 5%. A total of 3247 people are person with disabilities (PwDs), in which 43% are physical disability followed by visual impairment (16%) and hearing impairment (12%) according to Municipality profile 2019. Out of the total 14720 vulnerable HHs, 49% are landless, followed by 31% Single Women Headed HHs and 20% HHs with PwDs. The main features of studied areas are summarized in the below table 1.

SN	Main features	Tikapur	Chure	Bhajani	Joshipur
1	Area (sq.km.)	118.33	493.18	176.25	65.6
2	Elevation (m)	145-161 (14 km from South Mahendra Highway and 14 km North from India)	380-1950	140-205	148-162
3	Coordinates	28*31" north and 81*07.47" east	28*59.684" to 29*2.748 north and 80*36.298" to 80*41.166" east	Latitude. 28.4919° or 28° 29' 30.8" north. Longitude. 81.0237° or 81° 1' 25.2" east	28.5674° N, 81.0147° E
4	Population density/sq.km	682	46	300	560
5	Literacy rate	73% (age 5+)	74.25% (age 5+)	60.3	54
6	Human Development index (HDI)	0.409 approx.	NA	NA	NA
7	Per Capita Income	725 \$ Approx.	NA	NA	NA
8	Five major disasters	1. Flood, 2. Hurricane, 3. Fire, 4. Cold wave, 5. Wild animal's threats	1. Earthquake, 2. Landslides, 3. Flood, 4. Pandemic (COVID-19), 5. Snake bite	1. Earthquake, 2. Flood, 3. Wildlife threats, 4. Fire and 5. Cold waves	<ol> <li>Earthquake, 2.</li> <li>Floods, 3.</li> <li>Wildlife threats,</li> <li>4. Fire and 5.</li> <li>Cold waves</li> </ol>

#### Table 1: Main features of surveyed municipalities

#### **1.2 Objective of the Need Assessment**

The objective of this needs assessment is to identify the possible opportunities, gaps, and the way forward to contribute to enhance the DP of local institutions embedding risk-informed approaches in Nepal with focus on landslide and flood. Therefore, the results of the assessment will include the following:

- i. Documentation of opportunities, challenges, lessons learned and good practices of LG on DRRM; and
- ii. Informing appropriate risk-informed strategy and approaches for the preparedness and response to natural hazards.

In addition, this needs assessment will target the following priorities:

- 1. Strengthening local DRRM governance ownership to increase risk-informed preparedness and anticipatory action for the landslide and flood-prone regions of Nepal.
- 2. Supporting the LGs on risk-informed approaches to better prepare for natural hazards and ensure the inclusion of disadvantaged and marginalized populations in the process.

## 1.3 Methodology

#### 1.3.1 Selection of locations

The municipalities of Tikapur Municipality, Joshipur Rural Municipality, Bhajani Municipality and Chure rural Municipality of Kailali District were selected due to (i) the focus on Sudurpashchim in the HIP call, (ii) the severe problems there related to floods and landslides and (iii) the earlier footprint of WVI Nepal in the area. As such, these municipalities/rural municipalities of Kailali District, Sudurpashchim Province, were identified based on (a) *exposure* to recurrent hazard events, (b) socioeconomic vulnerabilities, and (b) the commitment and cooperation by the municipalities, and other relevant stakeholders.

The selection of these four municipalities, Tikapur, Joshipur, Bhajani and Chure, is also the outcome of consultations with the primary and secondary stakeholders, the review of secondary data as well as consultation of WVI and VSO with the local implementing partner, CSSD. Furthermore, the selection was based on the following factors:

- (i) Frequency and recurrence of floods (in Tikapur, Joshipur and Bhajani Municipality) and frequency of landslides in Chure (Kailai DPRP, 2078),
- (ii) Damage assessment of these municipalities from the recent floods and landslides (Red Cross, Flood Assessment Report 2021, Kailali)
- (iii) Weak disaster risk governance, as informed at district-level stakeholder meetings held in 26-27<sup>th</sup> December 2021
- (iv) Long-term and on-going partnership of WVI and VSO Consortium and their local implementing partners with the local district and Municipality government agencies, including district disaster management committees (DDMCs) and the district coordination committees (DCCs) of the municipalities.
- (v) Past and on-going context specific project experience of WVI and VSO in Sudurpashchim Province and in these municipalities.

#### 1.3.2. Approach and methods

This assessment used qualitative methods supplemented by a detailed review of policies (Box-2) and secondary quantitative data from different reliable sources like the ministry of home affairs, UN OCHA, and Relief Web. Qualitative data was collected using Focus Group Discussions (FGDs), Key Informants Interview (KIIs) as well as observational methods. Separate FGD and KII guidelines have been developed for different target groups (Ref: Annex-8 tools for the needs assessment).

#### 1.3.2.1. Desk review of policies and secondary data

The preparatory phase of this needs assessment started with meetings between consortium members i.e., WVI Nepal and VSO, followed by detailed review of other secondary literatures including past disaster projects in Nepal, as well as the preparation and finalization of checklists, tools, and methodological approaches.

The assessment team carried out a desk review of relevant documents. Materials reviewed included an online review of documents of Nepal's government and humanitarian agencies. Further Nepal's legislation, policies, and institutional frameworks related to DRRM, and the humanitarian response were critically reviewed to collect secondary data/information. Based on this assessment of secondary data and considering assessment objectives, checklists and questionnaires (Annex 8) were developed and finalized before the start of the fieldwork.

#### **Box 2: Reviewed Policies**

Federal level:

- Constitution of Nepal 2015
- Disaster Risk Reduction and Management Act first amendment 2019
- National Disaster Response Framework 2019
- National policy for Disaster Risk Reduction 2018
- Disaster Risk Reduction and management Regulation 2019
- National-Disaster-Risk-Financing-Strategy 2020
- Social Security Act 2018
- Disaster Assessment Guideline (Initial Rapid Assessment) (first amendment) 2021
- Monsoon Preparedness and Response National Action Plan 2021
- Disaster Victim Rescue and Relief Standard (Seventh Amendment 2021)
- Risk settlement relocation Procedures 2019
- Disaster Risk Reduction National Strategic Action Plan 2018-2030

#### **Provincial level:**

- Provincial Disaster Risk Reduction and Management Act 2075 Sudurpashchim Province
- Provincial Disaster Management and Relief Distribution Guideline 2076 Sudurpashchim Province
- Provincial Disaster Management Plan 2077 Sudurpashchim Province

#### **District and Local Level**

- Disaster Preparedness and Response Plan of Kailali District 2078
- Municipal Disaster Risk Reduction and Management Act 2075 Tikapur
- Climate change local adaptation plan 2075 Tikapur
- Disaster Preparedness and Response Planning Directive 2067 (amendment 2077)
- Local Disaster Risk Reduction and Management Act 2075, Chure
- LG Operation Act 2074
- Local Disaster and Climate Resilient Plan, 2075 Tikapur
- Local Disaster Management Fund Operation Guideline 2075 Tikapur
- Municipal Profile 2075 Tikapur
- Municipal Profile 2075 Chure

#### 1.3.2.2 Fieldwork

The needs assessment was conducted in Tikapur, Joshipur, Bhajani and Chure municipalities respectively from 26-31 December 2021. The team visited and interacted with District Disaster Management Committee (DDMCs), LDMCs at four municipal levels. The team interacted with vulnerable population groups such as women's groups, children clubs, people with disabilities (PwD), and youth groups. The team also interacted with district chapters of Nepal Red Cross Society (NRCS), the district emergency operation centres (DEOCs), humanitarian actors, municipal officials, the private sector, and members of the Federation of Nepalese Chambers of Commerce and Industry (FNCCI). Secondary data was collected through DDMCs and relevant government departments. Agencies consulted at federal and provincial level included:

• **Provincial Government:** MoIAL and Provincial Emergency Operation Centre (PEOC)

- Local Governments (LGs): Mayor, Deputy Mayor, Ward Chairpersons, Ward members, Chief Administrative Officer, DRRM Focal Persons, Social Development/Protection Focal Person, Firefighters, and other staff at fire stations
- **Private Sector:** FNCCI (Federation of Nepalese Chambers of Commerce and Industry), representatives of Small and Medium Entrepreneurs (SMEs),
- **Community-based organizations (CBOs): Disabled people's organizations (**DPOs), Tole Lane Organizations (TLOs<sup>1</sup>), Child networks, persons with disabilities (PwD) networks, elderly groups, youth networks, women's groups (including Single women groups), and people living at slumps/informal settlements.
- **Communities:** settlements (Annex-1 for the list of people consulted during need assessment)

The assessment team held consultation meetings with elected representatives of the municipalities, gathered information on the current situation, gaps and emerging needs, as well as mapping out relevant actors working in the DRRM sector through stakeholder analysis. To do so, the assessment team used mapping approaches, transect-walks, KIIs and FGDs to collect and analyse information.

A total of 16 KIIs were held with elected LG officials, ward chairpersons, municipal mayors and deputy mayors, teachers, representatives of political parties, aid partners at municipal level, representatives of DEOC, and officials of NRCS to identify the causes and effects of key hazards as well as used mitigation measures.

A total of 8 FGDs including 2 FGDs with HHs affected by flood and or landslides were carried out in these municipalities with (i) representatives of Community based organizations (CBOs), particularly the LDMCs of the most vulnerable of wards, and women's groups; (ii) members of community LDMCs; and (iii) flooding and landslide affected communities; and collected information to explore the key opportunities, challenges and problem facing poor and marginalized community and factors related to the marginalization.

Out of the total respondents (68), by position, majorities of respondents from LG representatives followed by women group representatives and flood affected families. By age groups, majorities of the respondents were from 31-40 followed by 41-50. Further, about 40% of respondents in this need assessment were female and about 65% are engaged in subsistence farming followed by 9.2% people engaged in daily wages in different industries

Transect walks were carried out to assess and understand the overall impact of the 2021 flood and landslides. This contributed to assessing the loss and damage in terms of life and property. Photographs were taken to document the loss and damage caused by these disasters.

In all consultations, the assessment team attempted to equitably represent various genders, ethnicities, and ages to incorporate perspectives of disaster-affected populations and communities from the most vulnerable sections of the society. Towards the end of the fieldwork, in each Municipality, key observations were shared, and the information collected from multiple sources were validated by the municipal authorities.

#### 1.3.2.3 Data tabulation, synthesis, and analysis

The data collected from primary and secondary sources was then analysed to inform the assessment of the needs and appropriate interventions. Following the field visits, the team

<sup>&</sup>lt;sup>1</sup> Tole Lane Organizations (TLOs) are settlement level organizations that are responsible for development activities at the settlement level

triangulated and consolidated both the available qualitative and quantitative data to present it in the form of major findings. (Ref. to Annex 5).

## 2. Key findings

## 2.1 Types, magnitude, and impact of disasters in proposed location/Municipality

#### 2.1.1 Current situation, challenges and major gaps [Part of the Problem Analysis]

These assessed municipalities (Tikapur, Joshipur, Bhajani and Chure) are exposed to recurrent floods and landslides, which take a severe toll in terms of lives and properties as revealed by the assessment. The total number of deaths from all types of disaster incidents in the year 426 2021 throughout the country, including water induced disaster is (www.bipad<sup>2</sup>portal.gov.np). This year's unseasonally heavy rains since October 2021 brought floods and landslides across the country, killed over 100 people and damaged rice paddy crops US\$50 million (OCHA October 2021, worth more than accessed from https://reliefweb.int/sites/reliefweb.int). Further, over 4,440 families were reported to be displaced as the result of the damage on their private houses due to floods and landslides where about 39% (1712) of families were from Kailali district. Likewise, over 63,610 hector agriculture land has been affected by flood and landslides resulting to about NRs. 4.6 billion losses in Kailali district (AIN 2021). It was found that about 1570 HHs from five wards (2, 5, 6, 7, and 8) are extremely high risk to flood followed by 2087 HHs at high risk from wards 3 and 9 in Tikapur. Likewise, respondents in the need assessment estimate that about 365 HHs are extremely risk to landslides in Chure rural municipality. Furthermore, it was found that 533 HHs in Joshipur rural Municipality and 914 HHs in Bhajani Municipality are extremely high risk to flood according to Nepal Red Cross Flood Assessment Report 2020 (Nepal Red Cross 2020).

As per the civil society organisations (CSOs), women, children, elderly persons, PwDs, ethnic minorities, and people from the low socio-economic groups are the most exposed and affected during and in the aftermath of disasters. This is because of their marginalization and lack of access to resources, assets, services, freedom of choice, and their participation in development. The impacts are differential and vary from one location to another. As these groups are not aware of their statutory rights and the causes of their vulnerability, they are not able to clearly express their issues, concerns, needs, and demands during the planning process and meetings with Municipality authorities.

It was found that fire was the most frequent event that occurred in Chure Municipality followed by Floods/heavy rainfall in last decade but there is no even a single fire truck. Further, it was reported one death and two missing from floods/heavy rainfall in last ten years as shown in Table 2. Likewise, as in Chure Municipality, fire was the most common adverse event in Tikapur followed by flood/landslides, which affected 186 households with two deaths, one missing and 6 damaged houses as shown in Table 3. Only one fire truck is available for Tikapur Municipality. Please refer to the Table 4 and Table 5 for more details on disaster incidents in Bhajani Municipality and Joshipur Rural Municipality.

SN	Incident	# of Incident	Affected Family	Total Death	Missing People	Injured	Houses Damaged	Estimated Loss in (NPR)
	Flood/Heavy							
1	Rainfall	6	9	1	2	0	0	0
2	Landslide	1	1	0	0	1	0	0

#### Table 2: Disaster loss at Chure Rural Municipality

<sup>2</sup> BIPAD stand for Building Information Platform Against Disaster

3	Earthquake	1	0	0	0	1	9	0
4	Fire	10	10	0	0	0	1	1590000
5	Thunderbolt	1	0	0	0	1	0	0

Source: DRR portal, Year 2011 to 2021

#### Table 3: Disaster loss at Tikapur Municipality

SN	Incident	# of Incident	Affected Family	Total Death	Missing People	Injured	Houses Damaged	Estimated Loss in (NPR)
	Flood/Heavy							
1	Rainfall	5	186	2	1	1	6	0
2	Animal Incidents	2	2	0	0	2	0	0
3	Fire	28	12	3	0	3	13	58815000
4	Thunderbolt	2	1	1	0	2	0	0
5	Windstorm	1	1	1	0	0	0	0

Source: DRR portal, Year 2011 to 2021

#### Table 4: Disaster loss at Bhajani Municipality

SN	Incident	# of Incident	Affected Family	Total Death	Missing People	Injured	Houses Damaged	Estimated Loss in (NPR)
	Flood/Heavy							
1	Rainfall	4	82	0	0	0	82	0
2	Animal Incidents	3	3	0	0	3	0	0
3	Fire	8	18	0	0	0	3	151500
4	Thunderbolt	1	1	0	0	1	0	0
5	Windstorm	1	2	0	0	0	2	0

Source: DRR portal, Year 2011 to 2021

#### Table 5: Disaster loss at Joshipur Rural Municipality

SN	Incident	# of Incident	Affected Family	Total Death	Missing People	Injured	Houses Damaged	Estimated Loss in (NPR)
	Flood/Heavy							
1	Rainfall	1	1	0	0	0	1	0
2	Animal Incidents	0	0	0	0	0	0	0
3	Fire	3	4	0	0	0	3	0
4	Thunderbolt	0	0	0	0	0	0	0
5	Windstorm	1	1	0	0	0	1	0

Source: DRR portal, Year 2011 to 2021

Municipal authorities lacks a thorough understanding of the issues of vulnerable groups; hence the issues arenot adequately addressed through the development plans and the DRRM schemes. As a result, the issues and needs of vulnerable and at-risk populations are not sufficiently addressed in the existing DRRM policy, provisions and mechanisms. FGDs with these people revealed that their specific needs are not adequately assessed nor addressed during the responses to previous disasters where they were only supported to survive through a blanket approach covering the entire population.

#### 2.1.2 Risk analysis

FGDs with community members and vulnerable groups revealed that the risk of floods and landslides are high in and around their settlements because of lowlands and fragile, sloppy foothills.

They also added that erosion and siltation have increased threats to their settlement. It was found that approximately 50 "We were informed about the possible floods in October, through our community leaders, but we did not take it seriously despite the observed river level and focused more on harvesting our paddy. We had not experienced such type of unseasonal flooding since a very long time as narrated by our parents. When the flood struck it was already too late for us to reach the safe area"  $\rightarrow$  Flood Affected Respondent in Tikapur percent of respondents did not have the knowledge, skills and capacity related to disaster risk reduction and management; 40 percent only have general knowledge and only 10 percent have adequate and specific knowledge, skills, and capacity as per the discussions with respondents during the assessment. While comparing between the four municipalities that were assessed as part of the needs assessment, it was found that the knowledge, skills and capacity of Tikapur, and Bhajani Muncipality in disaster risk reduction and management was better than that of Chure and Joshipur rural Municipality. Further, it was found that a local emergency operation committee (LEOC) had not been established in Chure and Joshipur rural Municipality. Also, DRR guideline has been drafted, LDMC and CDMC were formed in Joshipur rural Municipality. However, the LEOC in Tikapur and Bhajani Muncipality has no proper information management system in the absence of dedicated human resources. The representatives from all four municipalities agreed that they have inadequately trained DRRM human resources and therefore do not have localized DRRM policies and acts on DRRM. Further, it was found that at best most elected municipal representatives and staff have just received a general orientation on DRRM by some development actors.

Despite their exposure to recurrent hazards, no awareness programs, drill/simulation exercises, or trainings had been conducted in these communities. Therefore, they are relying on others due to their limited access to information and knowledge on disaster risk management. Vulnerable groups and their networks were also unable to play a key role in promoting gender and inclusion in DRRM as they lack the adequate knowledge, understanding and skills necessary to advocate for their issues to ensure their safety, security, and responsibility through the LG. The municipal disaster preparedness and response plans have not yet been incorporated with SRSP mechanisms for these populations. Gender equality and social inclusion is a concern too as it contributes to heightening the disaster vulnerability and marginalization of the most at-risk populations.

Emerging Needs	Proposed Actions
Enhance institutional capacity on Disaster Management Information Systems (DMIS) at the Municipality level.	Introduce and improve the disaggregated information system, along with pre/post disaster assessments encompassing: (a) disaggregated quantitative disaster impact data e.g., the number of single women-headed, child-headed, and other marginalised individual headed households respectively, (b) qualitative insights into differential impact e.g., children, and (c) context-specific data on inequalities.
Ensure meaningful participation in decision-making and planning processes to ensure that women, boys, girls, PwDs, and other vulnerable groups' needs are adequately reflected in disaster preparedness and response plan.	<ul> <li>Build capacity and mobilize CSOs (TLOs, women groups, child clubs, youth networks) on disaster preparedness and response</li> <li>Organize training on humanitarian principles and standards and develop customized standards for relief materials.</li> <li>Train municipal authorities, task force, and security forces inclusive disaster management to address the concerns and special needs of PwD, adolescent girls, female, and elderly population and other vulnerable groups including the ethnic minority in disaster management.</li> </ul>

#### 2.1.3 Emerging needs/proposed actions as part of the needs analysis

#### 2.2 Institutional governance

[LDMC and its compositions, mechanism to engage vulnerable groups in LDMC's decision-making process, level of DRRM awareness among LDMC members, understanding of SSRP, anticipatory action, and other social protection-related mechanisms]

#### 2.2.1 Current situation, challenges, and major gaps:

The DRRM Act 2017 assigns the responsibility of DRRM to disaster management committees (DMCs) at different levels of the government. However, the assessed municipalities do have LDMCs at the Municipality level while the ward-level LDMCs previously formed DMCs are dysfunctional and have not been formally handed over to the LG after its project completion phase. The LDMC formation process with respect to the inclusion of vulnerable groups is more symbolic than participatory. These groups also lack understanding of their roles and responsibility in such committees. A big gap in gender empowerment and social inclusion (GESI) understanding amongst officials and authorities was noted as they were more concerned in fulfilling the necessary ratio requirements than promoting the inclusion of the appropriate representation. Contingency plans and emergency preparedness and response plans have also not yet been formulated at the municipal level.

The poor coordination and lack of synchronization amongst the functioning DDMC at district level and LDMCs at municipal level is further creating complexity among local development partners and stakeholders as to who is leading the actual action in terms of preparedness or response. At times, it gives the impression that both levels are acting on their own and undermining the presence, role, and responsibility of each other as a result of which the impacted populations suffer. None of the assessed Municipalities had specific plans for flood and landslide preparedness and response, rather relying on provincial and federal support. During the disaster response, local actors and stakeholders' roles have been very much limited to relief distribution management, as search and rescue work is predominantly being carried out by federal government agencies.

Discussions with government officials revealed that provincial and municipal officials have a limited understanding of DRRM and disaster preparedness in particular, that their knowledge on hazards and disasters is basic and that they lack opportunity to participate in regular trainings on DRR/M. They perceive risk as more on what they see in front them rather than as cause and effect. Municipal officials and communities understand vulnerability as exposure to hazards and do not consider the capacity to cope with disaster when developing plans and programs. They are not considering the risks embedded within or the complexities associated with risks. There are large gaps in terms of capacity with respect to knowledge, skill and resources of the local municipalities and their disaster management systems to address present and future risks.

The involvement of the private sector is predominantly in response activities (relief distribution) but not in disaster preparedness or risk reduction initiatives. Though this may be an encouraging sign, their reluctance to invest in DRRM is concerning as municipalities are also ignoring this. A lack of understanding and knowledge of the essentials of DRRM in the private sector is a key drawback and makes it necessary to create an environment in which the

private sector can work collaboratively with municipalities on DRRM.

The assessed municipalities have been implementing the federal government's social protection policy, particularly by providing social security allowances to various categories of vulnerable groups. Municipal authorities do not, however, have a clear understanding of how to assess and address specific social protection needs of these groups (Box 4).

"In terms of institutional governance, our

## Box-4: Specific needs of target groups

In 2017 and 2021 floods and landslides, local level government officials did not have adequate prior information about the disaster affected high-risk and vulnerable populations, their special needs, and international standards; as a result, relief materials were distributed using a blanket coverage approach instead of targeting specific groups and their needs. Municipality is still far behind. LDMC is formed at Palika level and Ward Disaster Management Committees (WDMCs) are formed at ward level, but we need to make them more socially inclusive including people from diverse sub groups. We are surrounded by multiple disasters. Our capacity is still at the nascent stage. There is a need of organizing training to LDMC members for inclusive planning and budgeting keeping all the disaster events at the centre. Developing policy initiatives is another core area to be improved from our end. Considering annual evacuation during the monsoon, there is a need of developing guidelines and directives to establish warehouses and manage stockpiling for emergencies. Unless we get the external supports from the agencies, it is near to impossible to manage these things to make our Palikas resilient from disasters." - Municipal Representative in Chure, Kailali.

#### 2.2.2 Risk analysis

The poor technical capacities at the level of municipal government increased the risks of disasters that pose the main threat to poor and vulnerable communities. In all the assessed municipalities, the local disaster and climate resilient plan (LDCRP) was found to be either non-functional or not prepared due to lack of ownership, technical know-how or implementation capacity of the Municipality. The preparation of such plans, supported by the development actors, are used by municipalities to advance their LG Institutional Self-Assessment (LISA) grading rather than developing ownership

#### Box-5: Learning on Early Warning System

The municipal representatives said that there were two key learnings from the recent October rainfall and flood in the district with regard to early warning forecast. The first key learning is that the state i.e. all three level of government though released and relayed the message related with forecast and impact but were not seen prepared for response. While, the second learning is that community did not take it seriously either because of mistrust on the forecast or whether appropriate means and medium not being used to disseminate the message and continued their harvesting, which leads to huge economic impact. (Municipal Representatives in Tikapur)

and accountability over their situation. The LG Institutional Self- Assessment (LISA) is a tool to identify capacity development needs of Municipalities that will contribute to institutionalise and sustainably manage the recovery benefits by strengthening the planning process besides other aspects of governance. As a result, DRRM activities are not prioritized and budgeted for in the regular municipal development plans and planning process. Lack of skilled and knowledgeable human resources in the Municipality which is a key drawback leading to the lack of DRRM mainstreaming. On the other hand, the current level of knowledge, understanding, and operational capacity of the municipalities concerning DRRM and GESI is inadequate to confront the recurring disasters such as floods and landslides.

As a result, responsible authorities are observed to be more active in the relief and response phase in the aftermath, instead of focusing and engaging in the preparedness and disaster risk reduction activities. Likewise, the affected and at risk communities show more concerns during the relief and response phase rather than for preparedness and disaster risk reduction activities.

The reality of effective disaster management pivots on information and time. These are crucial aspects to saving the lives and property of at-risk communities. The Disaster Management Information System (DMIS) in all assessed municipalities is structured but not properly functioning due to the lack of trained human resource, proper coordination, and adequate technological supports. The Early Warning System (EWS) has played its part, but enforcement, internalization, and monitoring are still missing on all fronts.

#### 2.2.3 Emerging needs/proposed actions

Emerging Needs	Proposed Actions
Ensure the needs of vulnerable and marginalized groups are adequately addressed with respect to disaster preparedness /response plans and program.	• Organize periodic training and orientation for Municipality officials to strengthen their capacity in inclusive planning/budgeting, DRRM mainstreaming and disaster preparedness and response.
Development and implementation of DRRM policies, strategies, guidelines, and plans	• Support to capacitate the Municipality to prepare and implement necessary DRRM policies, strategies, guidelines, and plans in collaboration with the Municipality.
Improve the DMIS system with systematic disaggregated data system	<ul> <li>Support and train Municipality on SRSP</li> <li>Develop and mobilize skilled human resources for data management, risk mapping, and information dissemination for public awareness through ward offices/Tole Lane Organizations/CBOs.</li> </ul>
Establish DRRM structures (LDMC/Community disaster management committee (CDMC)/task forces)	• Support Municipality to functionalize necessary DRRM structures and with adequate capacity building for effective planning and performance. Develop guidelines and directives to establish warehouses, promote stockpiling and control the market during emergencies.
Promote a conducive environment for the private sector and their network to collaboratively invest in DRR rather than only the response- centric focus.	• Support Municipalities to prepare guidelines, organize dialogue, and sensitize and encourage the private sector and its network to collaboratively invest in DRRM, rather limiting itself to response actions.
Promote HH-level disaster preparedness to reduce the impacts of disaster	<ul> <li>Set up and train community-level task forces to initiate HH-level preparedness and improve coordination i.e., between HH-level, LDMC and municipal disaster management committees for effective and timely emergency responses.</li> <li>Support and promote local youth volunteers/responders to engage in preparedness/response efforts and management planning.</li> <li>Support to build the capacity of local disaster management committees, local youths/club members, and task forces at the ward and community level through training, orientations, and drills as well as arranging basic safety tools and equipment.</li> <li>Ensure flood-based early warning information are disseminated in a locally friendly manner and monitor, coordinate the corresponding actions for the response.</li> </ul>

# 2.3 Disaster risk management governance/governments initiatives for DRR response system, focusing on flood and landslides

[Ongoing initiatives for DRR response system; Possible stakeholders including private sectors for disaster preparedness and response]

#### 2.3.1 Current situation, challenges, and major gaps

Lack of guidelines, policies and provisions on safety, emergency, or contingency plans as part of disaster preparedness (flood and landslide) activities were found as the key gaps at the local level. Tikapur, Bhajani and Joshipur Municipalities have drafted some (LDCRP/DPRP, Municipality DRRM Act/Policies) but these still need to be operationalized, while in Chure Municipality, these legislations have not been prepared as they lack the support and skills to do so.

Both government and private-sector agencies are more ignorant about policy provisions for disaster preparedness along with their roles and responsibilities. Staff members have limited skills, and knowledge with respect to conducting risks assessments, Initial Rapid Assessment/Multi-sectoral Initial Rapid Assessment, (IRA/MIRA) Disaster management and planning, as they lack opportunities in capacity building initiative, periodic or refresher training. As a result, there is a need to improve the overall planning, preparedness and response mechanisms in a timely manner and appropriately address the people's rights and entitlements during pre, during and post disaster situation.

Likewise, it was found that at-risk and vulnerable communities, being the first to be impacted and being the first responders, are more reliant on municipal authorities than improving their own preparedness. Their engagement and inclusion in the preparation of disaster preparedness plans is limited due to weaker understanding and necessary knowledge, attitude and practices. As a result, children, women, adolescent girls, elderly population and PwDs are often unable to share their issues and concerns related to safety and protection against disaster.

#### 2.3.2 Risk analysis

The inadequacy of managerial capacities with respect to understanding DRR and GESI, lack of adequate skills, and lack of commitment at municipal level is not supportive in reducing the risk of the at-risk and vulnerable populations through their regular plans and program. Weak

in terms of disaster capacity preparedness and response management in the municipalities means that related policy provisions are poorly understood and translated into actions. Limited capacity in terms of equipment, training, skills, ability to prepare and respond to the needs of affected populations, and support systems poor is further weakening the disaster management system. The LGs' poor performance and

"This year's October floods came as a surprise for us and was above our coping capacity. The Municipality was not prepared and did not have the capacity to respond as necessary. The floods just broke in through the embankment, rampaged through the paddy field and settlements, and left us to wait for external support to responds. Heavy rains weaken embankment, and our inadequate preparedness were the causes that lead to high scale of damage."  $\rightarrow$  Mayor Tikapur Municipality

ownership also minimizes the scope of collaboration and assistance from other stakeholders; and increases the complexity of responding to emergencies. Lack of established DIMS means that specific identification of disaster-prone locations and settlements and its actual at-risk population is not archived along with the reference/historical data. This deficiency often results in inappropriate disaster resilient approaches as well as integration of developmental activities with disaster risk reduction in landslide, flood, and other disaster-prone areas.

#### 2.3.3 Emerging needs/proposed actions

Emerging Needs	Proposed Actions
Capacity enhancement necessary for municipal staff, municipal police, and disaster focal persons, elected members and other Staff at ward levels on disaster management/disaster risk reduction planning.	<ul> <li>Provide first-time and refresher training, including drills and simulation in areas such as emergency, risk assessment, search and rescue, first aid, firefighting, evacuation, and crowd control during the slack season for municipal staff, municipal police, and disaster focal persons.</li> <li>Support and promote municipalities in the preparation of Local Disasters and Climate Resilient Plan/District Preparedness and Response Plan (LDCRP/DPRP), contingency, and emergency plans for each ward and Municipality through participatory and collaborated approaches</li> <li>Organize trainings on the roles of the media, CSOs, and the private sector in mitigating risks, practising DRRM, addressing flood and landslide hazards</li> </ul>
Develop a conducive environment for smooth coordination with stakeholder and district/province level line agencies	<ul> <li>Support municipalities to organize periodic coordination and interaction meetings among security forces, and district/province level line agencies share and explore their efforts in preparedness and mitigation, emerging challenges, and ways forward for further collaboration.</li> <li>Support to promote and regularize joint, drills, and simulations with respect to emergency management, risk assessment and search and rescue in collaboration and coordination with district &amp; province agencies/at risk communities.</li> </ul>

# 2.4 Risk-based preparedness and anticipatory action, focusing on flood and landslides

(risk-informed approach to preparing for natural-hazard induced disasters): [i. Status of early action interventions at the local level, ii. Status of shock responsive social protection (SRSP) intervention, iii. Other risk-informed approaches]

# 2.4.1 Current situation, challenges, and major gaps

It was found that none of the municipalities has drafted a risksensitive land use plan and none has mapped open spaces and safe zones to use in case a large population needs to be relocated. Furthermore, neither of these activities is a priority in the assessed municipalities.

Changes in land-use and other natural causes have resulted in a change in river course in the southern region of Nepal, which has aggravated the unprecedented consequences due to floods (Gautam, 2008). Authorities in Bhajani and Joshipur Tikapur, Municipalities lack sufficient

#### Box-6: Forecast-Based Financing/Forecast-Based Anticipatory Action in Nepal

Forecast-based financing (FbF) is an approach to minimizing losses and damage due to disasters based on the fact that early financing can make disaster response more effective and efficient and enable early recovery. It utilizes scientific weather forecasts and enhances disaster response efficiency through timely financing for response and relief. Various agencies (e.g. WFP, Danish Red Cross, NRCS, Mercy Corps) have initiated the establishment of FbF by supporting the strengthening of EWSs and forecast-based preparedness. FbF was first piloted in Nepal in 2018 with a project for 80 households near the Babai River in Bardiya District.

The current humanitarian response practices are usually triggered only after an onset of disaster. It was noticed that all tiers of governments in Nepal have very limited efforts and priority to strengthen the country's early warning system in terms of wider geographical coverage, including multiple disasters, improving forecast accuracy and increasing lead-time, which result in low trust and action among community on FbF and anticipatory action. knowledge about risk-sensitive riverbank protection and river training. The high rate of soil erosion in the upstream areas of Churia Hills, causes much silt to be deposited in riverbeds in downstream areas. As a result, the river easily overflows its banks, spilling into adjacent settlements. There is a pertinent need to work in upstream-downstream linkages. The Kailashpur dam of India is another challenge as this dam on the Indian side reverse the flow of water, which inundates Nepal.

The municipalities have been implementing the federal government's social protection policy, particularly by providing social security allowances to elderly people, single women, people with disability, local ethnic minority categorized vulnerable groups. Municipal authorities have not developed a clear understanding of how to address the specific social protection needs of these groups with respect to disaster preparedness and response. Understanding and awareness are inadequate among newly elected representatives and staff more specifically on disability and inclusive DRR. The lack of proper databased information on at-risk and vulnerable households/settlements/populations in the Municipality is evident and needs improvement to better prepare for and respond to disasters. However, there is an opportunity to respond during emergencies using the present social registry system<sup>3</sup> for cash transfer modality. Likewise, with the improved data system, opportunities to expand the number of social registry beneficiaries in the disaster-prone settlements, including floods. A shock-responsive social protection approach can be piloted in selected wards/communities.

"We are managing community resource centres as safe shelters to temporarily shelter disaster affected people during disasters. Likewise, we tried to introduce a scheme to provide social protection allowances in advance to most at risk and vulnerable communities, but this scheme was not supported by bureaucrats who did not want to take undue risk in the process."  $\rightarrow$  Ward Representative Tikapur, Kailali

"There is no DRR act and plan in the Municipality, however, palika has considered flood as one of the prime natural hazards and identified villages prone to flood in Joshipur rural Municipality."  $\rightarrow$  Ward Representative in Joshipur, Kailali

#### 2.4.2 Risk analysis

A lack of understanding related to disaster preparedness within municipal teams results in a gap in localisation of disaster preparedness initiatives and policy measures. Besides, the technical team of the Municipality, bureaucrats show tendency to be reluctant on the risks of introducing new actions, programs, and mitigation measures for disaster preparedness and response in particular, as they feel comfortable to be confined within the prescribed laws/guidelines and do not tend to take any undue risk to exercise flexibility. Lack of risk-sensitive land use planning, especially in Chure Municipality, and lack of risk-sensitive riverbank protection measures and river training in Tikapur, Bhajani and Joshipur Municipality is increasing the risk and vulnerability of the local at-risk population.

<sup>&</sup>lt;sup>3</sup> This is the government system through which various social groups are registered to access social protection schemes under the federal social security act (2018). Presently social protection allowances are provided through banking services.

#### 2.4.3 Emerging needs/proposed actions

Emerging Needs	Proposed Actions
Enhance the capacity of municipalities on risk-sensitive land use planning (Chure Municipality) and risk sensitive river training/protection (Tikapur, Joshipur and Bhajani Municipality)	<ul> <li>Train municipal authorities and staff on impacts of environmental consequences and mitigation of geo/hydro hazards at household, community, and ward-level.</li> <li>Train govt officials and municipalities on Risk Sensitive Land Use Planning/ Risk Sensitive River Training and support them to develop corresponding plans.</li> </ul>
Improve the data-based information system on high risk and vulnerable households/settlement/ in the Municipality.	• Support and train municipalities in identifying and mapping high risk and vulnerable households/settlement in the Municipality.
Enhance the present SRSP system to expand the outreach to disasters prone settlements, during flood and landslide response.	<ul> <li>Support and train the Municipality staffs and officials to build their capacity on GESI mainstreaming, strengthening, and linking SRSP during disaster response and recovery.</li> <li>Pilot a shock-responsive social protection approach in selected wards/communities.</li> </ul>

#### 2.5 Actors in disaster risk management

[i. Past or existing initiatives or projects in the target areas, implementing and funding agencies, ii. Effectiveness of such supports in preparedness/responding to disasters]

#### 2.5.1 Current situation, challenges, and major gaps

During the discussions with Municipal staffs, they shared that disaster risk management is taken as an added responsibility by a newly formed LG. Their present capacities are inadequate in terms of knowledge and human resource to respond to local disasters. Likewise, they also felt that knowledge and skill transfer through previous DRRM projects are not institutionalized with the municipalities. This limitation has ceased its ability to build on, improve and own the previous investment on disaster preparedness by development agencies and local organizations. On the other hand, lack of regular project coordination, reporting and local ownership with the respective municipalities can also be taken as a major lapse. Another factor is also the alignment of project initiatives with the annual plans of the respective Municipality and for which a detailed and regular coordination is necessary from both parties. During interactions with local organisations and municipal authorities in Tikapur Municipality, it was noted that various organisations (WVI/VSO/DCA/Care Nepal/Practical Action) through the local implementing partners, such as CSSD Kailali, FAYA-Nepal, WACT, and Nepal Red Cross have supported awareness programs, disaster preparedness and early warning system, and DRRM training in coordination with the Municipality. It was understood that these initiatives have not been sustained by local stakeholders. These organizations are engaged in building capacity of masons and some awareness programs on disaster preparedness at the community level. Likewise, others organizations like CARE Nepal, Mercy Corps, LWF through their PNGOs are working in the field of health emergencies, economic recovery and education in Bhajani Municipality. Furthermore, Nepal Red Cross Society has been supporting the LG in responding to any sorts of disaster in all four assessed Municipality.

There is a network of private-sector agencies in Tikapur and Bhajani Municipalities. Umbrella organizations and individual business enterprises that work within the municipalities are active during emergency response but are reluctant to participate in preparedness on the

grounds of the absence of a clear roadmap for partnership in disaster preparedness. There is a need to create an environment in which the private sector can work in coordination with municipalities in DRRM.

"Actors working in the disaster risk reduction and management are very minimal here in Chure Palika hence we are not able to contribute in DRRM sector much. We have limited budget to allocate for DRRM-led activities. The DRRM related actions implemented by few NGOs in the past were not very effective. We really need to develop public-private partnerships with agencies working in disaster preparedness and emergency response sector. We are ready to create a conducive environment to work at our Palika to make better results. After-all, making disaster resilient communities is everybody's response."  $\rightarrow$ Vice-chairperson, Chure Rural Municipality, Kailali

"There are some organizations like CARE and LWF working in the field of Health emergencies (COVID-19) and economic recovery while Nepal Red Cross works on disaster especially during the time of response. There are no any other actors in this Municipality that truly works in DRR."  $\rightarrow$  Mayor, Bhajani Municipality

#### 2.5.2 Risk analysis

The present capacities in terms of knowledge and skilled human resource, and a lack of institutional memory within the municipalities have limited their abilities to build on, improve and own the previous investment on disaster preparedness. On the other hand, lack of regular project coordination, alignment of project initiatives with the annual plans with the respective Municipality has limited their commitment and investment in DRRM initiatives. Likewise, the reluctance from the private sector to participate in preparedness is also a bottleneck in local resource mobilization in DRRM.

Emerging Needs	Proposed Actions
Develop public-private partnerships framework in disaster preparedness	<ul> <li>Support and train the private sector organization to build their capacities in DRRM.</li> <li>Support the Municipality to develop a conducive environment (guidelines/directives) to promote public private partnership in DRRM.</li> </ul>
Develop a conducive environment for smooth coordination with development partners, private sector at district/province level	• Organize periodic coordination and interaction meetings with the Federal of Nepalese Chamber of Commerce and Industry (FNCCI) and development partners to share and explore collaborative efforts in preparedness and mitigation.

#### 2.5.3 Emerging needs and proposed actions

#### 2.6 Resource management for DRRM

[i. Use of resources from the provincial and federal government in managing and consolidating preparedness and response plans, ii. Manage and allocate the resources within the municipality for DRRM]

#### 2.6.1 Current situation, challenges, and major gaps

The existing policy spells out that a local disaster management fund should be established for the disaster management at all levels within the municipalities. The guidelines have been drafted and have not been operationalized in three of four assessed Municipality viz. Tikapur, Bhajani and Joshipur municipalities, whereas in Chure rural Municipality, the guidelines have not been developed. A big coordination gap exists amongst federal/provincial/local authorities to mobilize funds and contribute in strengthening the disaster management capacities of the LG. In terms of resource mobilization, the private sector does not provide financial support as part of its Corporate Social Responsibility (CSR) and municipal authorities lack mechanism to mobilise funds.

Interaction with local stakeholders suggested the lack of dialogue between the LG and the private sector about improving support in local preparedness and response systems and exploring innovative financing mechanisms. In addition to CSR, there are other possibilities through which the private sector could extend its support for building preparedness and response as similar to formulation of LDCRP and Disaster Preparedness and Response Plan (DPRP) at Municipality level.

"Resource management is one of the key factors for DRRM. We have not received adequate resources from the provincial and federal government in managing and consolidating preparedness and response related actions. There is a need of supporting the Municipality like us to develop guidelines/directives to promote private sector engagement in DRRM and facilitating municipalities in leveraging financial resources from private sectors. We are keen to make functional partnership with private sector like FNCCI and other likeminded actors for DRRM led activities." →Mayor, Tikapur Municipality, Kailali

"Disaster management fund guideline has only been drafted in Joshipur rural municipality, which yet need to be operationalized because of which the regular developmental programme funds has been diverted to the COVID-19 respond."  $\rightarrow$  Chairperson in Joshipur Rural Municipality, Kailali

#### 2.6.2 Risk analysis

With limited resources and inadequate budget, the municipal preparedness and responses are under-budgeted as DRRM is not a priority for the Municipality and not able to perform with their limited capacity. Municipal authorities are limited in the utilization of the annual budget and are less inclined in mobilizing local available resources. The key risk to this is the inability of the Municipality to prioritize and practice disaster preparedness initiatives at the local level.

0.0	
Emerging Needs	Proposed Actions
Promote an environment and mechanisms for coordination and collaboration with other agencies with public private partnership	<ul> <li>Support the Municipality to develop a conducive environment (guidelines/directives) to promote private sector engagement in DRRM.</li> <li>Facilitate municipalities in leveraging financial resources from private sectors and like to implement District DPRPs as well as LDCRPs through the private sector, civil society, and humanitarian agencies. based on the spirit of Sendai Framework for DRRM's priority.</li> </ul>

#### 2.6.3 Emerging needs/proposed actions

#### 2.7 Existing legal instruments (the frameworks on DRR)

[i. Existing legal instruments (the frameworks on DRR), already approved by the council and in the process of formulation, ii. Implementation status]

#### 2.7.1 Current situation, challenges, and major gaps

Understanding of disaster vulnerability and inclusive disaster management is a fairly new topic for newly formed LGs, established during the federalization process. This is because of their limited exposure, staff retainment, prioritization, and commitments to understand and address the multiple causes and consequences of disaster. With these limitations, it was observed that Tikapur and Bhajani municipalities have an approved DRRM Act, while policies and strategies on DRRM have not been drafted by these municipalities. Likewise, they have drafted the LDCRP/DPRP and Disaster Fund Mobilization Guidelines which is pending for approval by municipal council/municipal executive committee. In Chure Rural Municipality, they have an approved DRRM Act but policies, strategies and other relevant guidelines and plans on DRRM have not been drafted yet. Further with regard to Joshipur Rural Municipality, DRRM act has been approved, DRRM management guideline has been prepared but has not be endorsed. The detail on capacity of LG on disaster risk reduction management is highlighted in Table-4.

SN	Questions	Tikapur	Chure	Bhajani	Joshipur	Remarks
5.1	Is a training on DRRM forward level disaster preparedness and response committee or community level conducted?	Yes	No	No	No	Tikapur
5.2	Are there any plans or strategies to establish new or increase the existing Disaster Management fund at the ward level and municipal?	Yes	No	Yes	Yes	Guideline has been developed in three Municipality but yet need to be operationalized.
5.3	Is there a LEOC?	Yes	No	Yes	No	Just established in Tikapur and Bhajani but not smoothly functional
5.4	Have any municipal officials taken any previous training on DRRM or Climate Change Adaptation If yes, please specify the number (M/F)	No	No	No	No	Only taken general orientation on DRRM
5.5	Have any municipal officials taken any previous training on DRRM policy, strategy, and act? If yes, please specify the number (M/F)	Yes	No	No	No	2 male and one 1 female taken a LDCRP preparation training
5.6	Have any municipal officials taken any previous training on Disaster Risk Assessment? If yes, please specify the number (M/F)	No	No	No	No	
5.7	Have any municipal officials taken any previous training on Disaster Risk Reduction? If yes, please specify the number (M/F)	No	No	No	No	
5.8	Have any municipal officials taken any previous training on Post Disaster Needs Assessment? If yes, please specify the number (M/F)	Yes	No	No	No	In Tikapur there are 7 trained persons on IRA at NRCS.
5.9	Does the Municipality have any trained/skilled human resources on search and rescue (SAR)/First Aid? If yes, please specify the number (M/F)	No	No	No	No	Mostly depend upon federal government and Nepal Army for it.
5.10	Have any municipal officials taken	No	No	No	No	

#### Table 6: Capacity of Local Government on DRRM

	any previous training on Humanitarian Standards? If yes, please specify the number (M/F)					
5.11	Does the Municipality have the practice of Warehousing?	No	No	No	No	
5.12	Has the Municipality prepared its LDCRP? If No, please specify the reasons	Yes	No	Yes	No	LDRCP is in endorsement process in Tikapur and Bhajani and are preparation process in Chure and Joshi rural municipalities.
5.13	Has the Municipality prepared its DPRP? If No, please specify the reasons	Yes	No	Yes	No	DPRP is in endorsement process in Tikapur and Bhajani
5.14	Has the Municipality prepared its DRRM Act/Policy, Relief Standard/Building By-Laws, etc.? If yes, please specify If No, please specify the reasons	Yes	Yes	Yes	Yes	DRR act formed and operationalized in Bhajani.
5.15	Is there culture or practice to conduct comprehensive drill exercises?	No	No	No	No	
5.16	Is there any form of DRRM education (formal and informal) to promote a culture of safety?	No	No	No	No	
5.17	Are there any practices of Risk Transfer mechanism or system (insurance)	No	No	No	No	
5.18	Have municipal officials taken any other relevant training on DRRM	No	No	No	No	

Considering the crucial role of ward secretaries on disaster preparedness, there is a need to build their capacities on disaster preparedness with respect to flood and landslides. LDMC members have some understanding of how to execute disaster management plans. While they do have cluster-based contingency plans that, in theory, will promote response work, these plans were not effectively implemented.

#### 2.7.2 Risk analysis

Lack of understanding of a 'resilient framework' among the municipal authorities results in the risk of creating or aggravating exposure to additional hazards and threats. Senior municipal leaders like mayors and deputy mayors are not well trained in managing disasters; hence, they are unaware of impending disasters. Their disinterest creates a risk of under-investment in disaster preparedness related initiatives. As disaster preparedness is a long-term investment and time-consuming effort, this sector has limited charm for political leaders and bureaucrats.

#### 2.7.3 Emerging needs/proposed actions

Emerging Needs	Proposed Actions
Enhance capacity to initiate disaster risk reduction, mitigation, and response activities.	• Run continuous advocacy, coordination, and cooperation among the disaster management actors to reduce the risks.
Facilitate to support municipalities in developing LDCRP/DPRPs as provided for in the DRRM Act and the LG Operational Act (LGOA)	• Build the capacity of municipal authorities and humanitarian agencies for (i) integrating disaster risk information into planning/resilience, and (ii) how to mainstream and institutionalize DRRM in different sectors through GESI lens.
Support the institutionalization of clusters within municipalities as called for in the new federal structure and, to linkages with disaster preparedness and response, build their capacity to carry out their roles and to uplink with federal-level clusters.	• Run advocacy campaigns urging the private sector, government, and civil society to practice resource management and begin to stockpile emergency supplies, update response systems, develop command systems, and implement LDCRP/DPRPs properly.

# 2.8 Risk, Needs and Perspectives of Vulnerable Groups- Reaching the unreached

[i. A mechanism in reaching out to poor and marginalized households for disaster preparedness and response, ii. Mechanisms to reach every household, iii. Protection and safeguarding of people at risk with GESI and GADI<sup>\*4</sup> lenses]

#### 2.8.1 Current situation, challenges, and major gaps

Consultations with child clubs and women groups revealed that they are the most vulnerable

and most affected during and aftermath of disasters. Populations from all socioeconomic backgrounds, across all ages, religions, and cultures suffer violence, exploitation, and abuse during these situations. Child protection concerns identified in municipalities assessed were violent discipline, child marriage, child labour, trafficking, violence against women and girls, and insufficient access to child-friendly and gender sensitive-justice.

## Box-8: Impact of Disaster on Vulnerable Population

Women, children, PwD, elder citizen, pregnant women and lactating mothers were the mostly affected and neglected groups of people during any disasters in Nepal. It was noticed during the recent heavy rainfall and flood in Kailali district that these groups are highly affected by the flood where elderly citizen and PwD were left on the drown home. They spent their three nights on the roof of their house with one noodle. Similarly, families affected by landslides in Chure rural municipality are still living on the tents along the road. The respondents reflect that the adolescent girls, women, pregnant and lactating women are facing problem with WASH facilities and the issues related with protection.

The women, particularly the mothers of adolescent daughters, are constantly worried about future disasters due to poor disaster preparedness mechanisms and lack of protection mechanisms, such as separate bathing spaces and toilets for women and adolescent girls, and lack of safety and security to reduce the risk of violence against women, adolescents and children. Safe spaces for children, women and adolescents are also not available. It was also found that the capacities of women, children, and other marginalized groups are different and

<sup>&</sup>lt;sup>4</sup> Gender, Age, Disability, and Inclusion

so are impacts of disasters on them. There is a gap and a need for well-rounded insight into these differential impacts, for which three types of data are lacking (i) disaggregated quantitative data on disaster impact e.g., number of single women-headed households, (ii) qualitative insights into differential impact e.g. children, and (iii) context-specific data on inequalities. The shortcoming of these data also undermines effective disaster preparedness initiatives targeting most-at-risk population including children, women, PwDs, elderly and so forth.

The assessed municipalities encompass various CSOs, disabled people's organizations (DPOs), child club networks, adolescent group networks, single women networks, older people networks, PwD networks. These groups are generally the most-at-risk populations and not aware of their statutory rights or the scale of their vulnerability. Likewise, they are not able to clearly express their issues, concerns, needs, and demands to municipal authorities. Their participation in municipal meetings is poor. Municipal authorities do not have a clear road map for addressing the specific needs and issues of these groups during risk reduction planning efforts. FGDs with these people revealed that their needs were not adequately addressed during the responses to previous disasters.

Further, the evidence shows that vulnerability and poverty are closely aligned with gender inequality; and women, therefore, are more frequent victims of natural disasters than men. According to analysis conducted by UN Women, it was found that out of 1.07 million total number of affected people in ten most disaster affected districts in Nepal, half of them are women and girls (541,102) and about 10,736 are people with disabilities including 6,656 women with disabilities. Further, it also estimated that 18% of affected household are femaleheaded household (Government of Nepal, UN Women 2017).

However, on the positive side, mainstreaming gender into DRR/M and education contributes significantly to reducing disaster impacts and improving sustainable development. In many cases, women have limited access to formal disaster management mechanisms for disaster preparedness and prevention. Furthermore, their skills, experiences, and capabilities in times of natural catastrophes are often not adequately identified, recognized, and promoted, as their participation in DRRM decision-making processes throughout the world are low. Hence, an effective gender sensitive DRRM strategy should take into better account women's vulnerabilities in specific cultures without forgetting to highlight their potential and capabilities to prepare, confront, respond and recover from disasters (UNESCO 2021).

#### Box-9: Policy review on Disability and DRR

Articles 18, 24, 31, 39, 42, 43, and 51 of the Constitution of Nepal, as well as Schedule-8, have established the rights of persons with disabilities against human rights, equality, social justice, education, and discrimination. To implement these rights, legal and institutional provisions have been made in the Rights of Persons with Disabilities Act, 2074 BS, and the Rules made under it, 2077 BS.

Clause (d) of Rule 37 of the DRR Regulation enables persons with disabilities to participate in disaster management activities at the local level and to conduct necessary training and orientation programs to ensure the access, preparedness, search, rescue, relief, and access of persons with disabilities in the post-disaster situation. It has been mentioned that it will be done. In addition, in section (e), there is a rule to decide for the storage of such items by making a separate list of such items keeping in view the needs of persons with disabilities.

Disaster management in Nepal is done at the behest of the Ministry of Home Affairs and its subordinates. Due to the lack of adequate awareness and commitment in this institutional system to raise awareness and commitment on the proper treatment of the helpless and the disabled, the existing laws and regulations have not been implemented.

The Government of Nepal provides free treatment for the injured in the disaster rescue and relief criteria. However, the Disaster Management Act and rules do not make it mandatory for persons with disabilities to make necessary arrangements to reduce the risk of disasters. Even the national disaster response framework does not include disability-friendly strategies and measures.

These issues are included in the guidelines for disaster preparedness and response planning. But are not put into practice during the planning process. The Disaster Risk Reduction and Management Authority has been preparing pre-monsoon preparations since 2077 BS. However, these plans do not address the issue of disability.

#### Box-10: Finding of FGD and KII with PWD

Focus group discussions with persons with disabilities and KII found the following issues. People with disabilities do not have access to preparedness information to be safe from hazardous events. People with disabilities have less access to relief materials during disasters response and are left out with humanitarian aid.

Some people with physical or mental disabilities may not be able to easily tell what is happening or what help is needed. It is challenging for others to understand their needs and help them. LG, aid workers, and other service providers do not have special training to take special care of people with disabilities during disasters and to assist them promptly. In addition, there is a lack of resources.

Disability is a condition in which one has to depend on others to lead a normal life. People with disabilities have to depend on relatives and other helpers to be safe from disasters. Individuals or groups with disabilities are not given priority in disaster management planning and implementation.

LG, disaster relief agencies, or community volunteer groups must give priority to rescuing people with disabilities. The disaster management plan developed by the LG must include preparedness and supportive activities, including appropriate training, rescue equipment, and drills to rescue people with disabilities.

To save persons with disabilities from disasters, persons with normal disabilities and volunteers should be trained and drills for rescue. The LG should formulate and implement procedures to evacuate people with disabilities, the elderly, children, sick people, pregnant, and lactating mothers to safer places after the news of a disaster reaches a place where there is an early warning system. Adequate knowledge and skills should be provided to family members, disaster rescuers, LG staff, and shelter assistants to assist or assist those with disabilities. Procedures designed to protect people with disabilities need to be regularly tested and improved as needed.

People with disabilities are at risk of further insecurity in the event of a disaster. Special skill and technology transfer and financial investment are needed to facilitate the livelihood of people with disabilities in the postdisaster response, relief, and rehabilitation phase. It is important to make all humanitarian assistance and social security systems disability-friendly to cope with disasters.

Key Risk Population	Key concerns during disasters (why and how they are vulnerable)
Children	Participation, Education (learning materials, school closure), Health (food, diarrhoea, diet etc.), Protection (child labour, child marriage, etc.)
Adolescent girls	Participation, Education, Access to School, Harassment, Right to Privacy, Hygiene, gender-based violence
PwD	Participation, Education, Access and Mobility, stigma, and discrimination, Right and entitlement, Health and Hygiene
Elderly Population	Participation, Access and Mobility, stigma, and discrimination, Right and entitlement, Health and Hygiene, Care, and support
Dalit	Participation, Access, stigma, and discrimination, Right and entitlement, Health and Hygiene
Local Ethnic Minority	Participation, Access, discrimination, Right and entitlement

#### Table 7: Key concerns of at-risk populations

#### 2.8.2 Risk analysis

Municipalities have many vulnerable groups of people, who are forced to reside in hazardprone locations exposed to floods, landslides, windstorms, and seasonal diseases. These people, however, are not fully covered and protected in numbers by the existing policy landscape and are missed out in current social protection mechanisms. They also do not fall under the beneficiaries count for SRSP/relief support as they lack official recognition/identity. The municipal disaster preparedness and response plans have not yet been incorporated in the SRSP mechanism to address these fluid populations. GESI is also an unaddressed issue that poses the risk of multiple marginalization of the most-at-risk population.

Emerging Needs	Proposed Actions
Improve response capacities to respond the localised disaster.	• Train first responders (LG, emergency workers, CSOs, security personnel, etc.) to consider social protection and differential impacts on women, children, and other marginalized groups in disaster preparedness/ on GESI sensitive planning process.
Address social protection and rights of the disaster affected population	• Develop children, women, PwD and youth disaster preparedness champions and empower them to meaningfully participate in decision-making and planning processes to ensure that women, boys, girls, PwD, and other vulnerable groups needs are adequately reflected in disaster preparedness and response.
Strengthen the functional capacity of Local Humanitarian / CBOs for DRRM Localization	• Build capacity and mobilize CSOs (TLOs, women groups, child clubs, youth networks) on disaster preparedness and response

#### 2.8.3 Emerging needs/proposed actions

#### 2.9 Sustainability of DRRM initiatives

[i. The current mechanism of LG coordinate with provincial/federal government for DRRM, ii. Use of technological innovations for disaster preparedness and responses, iii. The institutional and legislative mechanism required for sustainability]

#### 2.9.1 Current situation, challenges, and major gaps

The DRRM Act assigns the responsibility of DRRR to DMCs at different levels of the government. There are many misperceptions over the roles of previously formed DMCs and task forces in the new federal structure. Contingency plans and emergency preparedness and response plans have not yet been formulated at the municipal level. Simultaneous presence and functioning of DDMCs under the chairpersonship of Chief District Officer at the district level and LDMCs under the leadership of Mayor/chairperson at the municipal level is also creating some confusion among the local partners and stakeholders.

The DRRM Act lays out connections among federal, provincial, and local entities but supportive strategies, policies, and plans that translate policy to implementation have yet to be formulated. There is no clarity regarding the implementation of these policy provisions. Implementation is also impeded by the fact that executive bodies are limited in capacity and resource constraints are many. Assessed municipalities are developing their regulations for DM Plan, LDMCs, and standard operating procedures (SOPs) for disaster management fund but the progress is very slow. Since there are no sectoral plans, neither disaster preparedness nor humanitarian response is systematized. Because coordination is so feeble, it has been difficult to implement the policies. The frequent transfer of government staff has impeded the development of institutional memory.

All municipalities have earmarked budget for disaster emergency funds and have allocated funds to reduce the risks of various disasters, but the amount of money allocated is inadequate and officials are not certain about how and where to use this fund. Till now, budget allocation is largely done on an ad-hoc and equality basis. None of the surveyed municipalities has drafted a risk-sensitive land use plan and none has mapped open spaces and safe zones to use in case a large population needs to be relocated. Furthermore, neither of these activities is a priority.

"It has been challenging to sustain DRRM initiatives that we have initiated recently in the absence of technical, human and financial resources. The current mechanism to coordinate with provincial/federal government for DRRM is only ad-hoc basis. We are almost failing to use technological innovations for disaster preparedness and responses. As a result, our actions are only 'business as usual'. There is a need of institutionalizing LEOC by managing "Information Management Officer" and necessary tools, equipment, and apparatus. If LEOC is strong, it can contribute in mainstreaming DRRM in the development planning process. We are committed to make our action disaster resilient in collaboration with development partners and humanitarian agencies."  $\rightarrow$  DRR Focal person, Tikapur Municipality, Kailali

#### 2.9.2 Risk analysis

A weak understanding of disaster preparedness within municipal teams results in poor ownership of disaster preparedness initiatives and policy measures. Besides, the technical team of the Municipality also tends to be reluctant about introducing new actions, programs, and mitigation measures for water induced disaster preparedness in general and flood and landslides.

Emerging Needs	Proposed Actions
Institutionalize the Emergency Operation Centres (EOC) at the Municipal Level	• Support and train Municipality to establish and improve the LEOC and DMIS to sustain the localization process.
Mainstream DRRM in the development Planning process of the Municipalities	<ul> <li>Support Municipality authorities including elected members to develop ownership and understanding in disaster management.</li> <li>Support Municipality and communities to be accountable and fulfil their roles and responsibilities.</li> </ul>

#### 2.9.3 Emerging needs/proposed actions

#### 2.10 Impacts on disaster risk management in Nepal

[i. Impacts of COVID-19 in disaster risk management and their mitigation approach, ii. Impacts of federalism disaster risk management in Nepal and their mitigation approach]

#### 2.10.1 Current situation, challenges, and major gaps

In Nepal, disaster governance, legislation, institutions, and procedures are evolving. At the national level, paradigms of governance have changed from an emphasis on response and recovery to more attention to DRRM. However, at the local level the responsible municipal institutions have focused primarily on disaster response and recovery, especially in Far West Nepal. The dominance of a 'response and recovery' paradigm is partly due to the limited presence of NGOs and INGOs in the far-western region.

Moreover, due to the recent federalization processes in Nepal, the LGs have not had sufficient time to design and implement disaster governance plans and strategies as a result of a lack of clarity among local governance functionaries, political and bureaucratic struggles. It's mainly because of political reasons, leaders are more concerned about individual benefits than community development work. While LGs have access to emergency funds, there are no standard operating procedures on how to mobilize these funds.

Furthermore, despite the existence of a disaster management committee - a committee formed under the chairmanship of the municipal mayor and ward heads after the introduction of the Nepal Disaster Risk and Management Act 2017- few of its members are trained in DRRM-related issues. Consequently, there is a lack of clarity on roles and responsibilities during disaster situations. The disaster response from the LG is viewed as too slow, and risk reduction measures are extremely limited. Another identified governance gap was the failure of the government to include local, traditional knowledge in its management practices.

For instance, locally observed early warning signs for landslides, such as changes in land subsidence, drying up of water sources, or changes in the orientation of rocks, are reportedly not included in landslide monitoring. Such knowledge could be particularly useful for citizen science approaches<sup>5</sup> attempting to fill information gaps. This reinforces the previously highlighted sense of dissociation between risk experienced at the local household level and the policy decisions taken at the institutional level. As Sudurpashchim province and Kailali are transit points to India, peoples', vulnerability has been increased due influx of COVID-19. Kailali and Kanchanpur are the two districts in Sudurpashim province with more than 500 active cases until 9th Feb 2022 (MoHP, SitRip, 9th Feb 2022). COVID-19 seems to have multisectoral impact. A study conducted by WVI Nepal in 2021 highlight the reduction in family income by two-thirds and increased severely food insecure HHs by double during second surge of COVID-19 in Nepal. In addition, nearly three quarter (72%) do not have recommended minimum food diversity, 69% do not have access to financial institutions, and more than one-fifth (21%) of pregnant women and children missed their health appointment due to COVID-19. Further, one-third children reported feeling unsafe and insecure during COVID-19 and 4.6% reported impacted by cyberbullying during COVID-19 context in Nepal.<sup>6</sup>

"Impacts of COVID-19 is huge in general and DRRM sector in particular. Because of the pandemic, we are not able to build the capacities of municipal authorities and institutionalizing EWS. There is a need to support further refinement in community-based flood/landslide EWS by assessing existing gaps and mitigate those gaps through developing simple easy to understand IEC materials targeting to end-users. There is also need of institutionalizing Initial Rapid Assessment (IRA) team and strengthening of DEOC/LEOC to reduce the disaster impacts of poor, deprived and marginalized sections living with multiple risks by increasing lead time."  $\rightarrow$  Representatives DEOC, Kailali

<sup>&</sup>lt;sup>5</sup> process in which communities and individuals are involved in designing a research question and performing scientific

experiments with minimum involvement of professional scientists (Eitzel et al., 2017).

<sup>&</sup>lt;sup>6</sup> WVI Nepal, Multi-sectoral Impact of COVID-19 Second Wave in Nepal

#### 2.10.2 Risk analysis

In the recent federalization processes, the LGs have not prioritized DRR sufficiently to develop and implement disaster plans and strategies. Lack of clarity amongst the three-level of federal governance functionaries, political and bureaucratic struggles is noted as the key setback to the least prioritization of DRRM initiatives. The necessary disaster management structures and systems are yet not properly established or functioning due to a lack of understanding, information, and policy frameworks to run them effectively. The capacities and facilities to run EOCs at the municipal level are limited as a result of limited use of Disaster Information Management System (DIMS) (an important aspect of disaster preparedness) due to poor planning, monitoring, and implementation of disaster preparedness initiatives. The lack of a well-running DIMS poses a high risk to decision-making, coordination, and linkage with other stakeholders. The horizontal and vertical exchange of information and knowledge is also limited because the DIMS is weak and so are resource mobilization and collaborative efforts.

Emerging Needs	Proposed Actions		
Enhance capacity of LG authorities	• Train relevant staff at ward/Municipality and DEOCs, municipal police, DRR focal person at the Municipality, and NRCS district-chapter officials in data management, in particular the periodic updating of DIMS and the use of disaster data in planning.		
Institutional Strengthening of LG	<ul> <li>Support municipalities in improving the physical facilities of warehouses and stockpiling at strategic locations like the DEOCs and the offices of the NRCS as well as the Armed Police Force and Nepal Army offices.</li> <li>Support to develop model logistic provisions, supply chain management, and cash transfer mechanism in response to a disaster in collaboration with municipalities, private sectors, humanitarian agencies, and financial institutions.</li> </ul>		
Improve technical and functional capacities of LG	• Support the modification of community-based flood/landslide EWS by identifying the existing gaps, describing the system in understandable language (without technical jargon), and incorporating people's indigenous knowledge.		
Build capacity of the Municipal Human Resources	Develop a standard training package (manuals and facilitators guide) for training (both first-time and refresher) on the effectiveness of IRA, strengthening of LEOCs/DEOCs based on the learning of different project cycles implemented in the project's districts. Run relevant training to LDMC members to engage in mobile phone- based IRA data collection and GIS training to DRRM stakeholders. GIS offers a wide scope for data analysis, modelling, and dissemination of disaster information.		

### 3. Stakeholder Analysis

The engagement of disaster management actors is important if they are to realize the importance of disaster preparedness to reduce loss and damage. Disaster preparedness is a dimension of disaster risk management efforts in Nepal with the National Strategy for Disaster

Risk Management was formulated. It created several avenues for actors, including UN agencies, I/NGOs/humanitarian agencies, and NGOs, to engage in piloting DRR initiatives.

National Disaster Risk Reduction and Management Authority and thematic ministries: At the federal level, the National Disaster Risk Reduction and Management Authority (NDRRMA) in coalition with the Ministry of Home Affairs, Ministry of Federal Affairs and General Administration, Ministry of Urban Development, and Ministry of Forest and Environment are highly engaged in disaster governance and infrastructure development, thereby ensuring that environmental assessment and disaster risk reduction are implemented at the Municipality level. These ministries facilitate and guide disaster preparedness with key policy support and directives that adhere to national and global frameworks for DRR, sustainable development, and climate change. The NDRRMA provides incident command functions by mobilizing the National Emergency Operation Centre (NEOC) and drawing on the DIMS and early warning systems, implementing response mechanisms, and backstopping province and local levels for disaster preparedness and response needs in a strategic way.

**Key ministries at the Provincial level:** MoIAL is the primary ministry for policy formulation, implementation, and coordination with regards to disaster management across the Province level. It will ensure coordination with other sectoral Ministries with the particular Province.

**Disaster Management Committees** at both district and local levels have been provisioned in the leadership of the Chief District Officer and Municipality Mayor or Palika Chair respectively. These committees are responsible to manage disasters and implement Disaster Risk Reduction and Management (DRRM) related policies and programs within their jurisdiction area in coordination with private sectors and civil societies. These committees will be housed within District Administration Office at the district level and Mayor's/Palika Chair's office at the local level.

Academic and business institutions: Some academic and business institutions provide knowledge and resources. Universities build knowledge through empirical research, and pilot projects build up a wealth of knowledge and experience that needs to be capitalized upon to promote disaster preparedness. Potential collaboration and engagement with these institutions may strengthen disaster preparedness/DRRM in the country.

**Consortium program/projects:** There is a strong presence of DRR champions in the country and they can offer to learn from different projects. Some of them include the Tayar Nepal-Improved Disaster Risk Management led by USAID, BHAKHARI of Mercy Corps, Danish red Cross/NRCS, and several small initiatives at the local level run by NGOs and humanitarian agencies. Overall, these initiatives have been resourceful in their efforts to replicate and scale up their models in new project areas. Summary of the projects implemented by WVI and consortium on DRR has been highlighted on the Table below:

Project Name	Implementing Organizations	Key activities	Geographical Coverage	Donor
Nepal Disaster Risk Reduction Project	World Vision	Support to form and strengthen the LDCRC and develop LDCRP. Further project equipped LEOC on disaster management and their roles and responsibilities. This project	Tikapur, Kailali	World Vision USA
		has already established LEOC, supported prepositional materials and support in setting up early warning system in Tikapur Municipality of Kailali district.		
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ECHO-HIP	World Vision and Consortium partners	Support on Comprehensive School Safety Framework	Doti, Kailali	ECHO
Nepal Disaster Preparedness project	World Vision	Establishment of LEOC, supporting prepositioning items, flood response simulation and drills in Ghodaghodi and Tikapur Municipality	Ghodaghodi and Tikapur Municipality of Kailali district	ADH (Action Deutschland Hilft)
HH disaster preparedness project	World Vision	Preparation of multi-hazard HH level disaster plan, formulation and operationalization of CDMCs; flood simulations and drills	Lamkichuha Municipality, Kalali district	USAID

There are several projects in country implemented by different development partners. Improved Disaster Risk Management (TAYAR Nepal) - a USAID project has been implemented at federal level whose prime activities are to strengthen the capacity of Nepal's DRM and preparedness institutions. Further, the project supports national agencies, and also supported the newly created National Disaster and Risk Reduction Management Agency (NDRRMA) to conduct national disaster simulations, improve disaster response technologies. At local level, it works with urban municipalities to develop risk-sensitive land use plans and provides technical assistance activities such as slope stabilization, humanitarian open spaces, and building retrofitting to reduce disaster risk. Further, Mercy Corps consortium has been implementing BHAKARI project funded by USAID in six districts of Karnali Province (five districts) and Sudurpashim Province (one district). The key activities under BHAKARI project include establish short-term cash support through both the activity's and government system. While linking with longer-term resilience to agriculture, water, financial inclusion, disaster risk reduction and community capacity strengthening. BHAKARI have three purposes- I) increase HH level food availability and access, II) Improve aces to sustainable water sources for productive purposes and III) Reduce the impact of natural disasters. In addition, the Danish Red Cross and Nepal Red Cross society is also implementing the Forecast Based Action and Shock Responsive Social Protection Protection in Lumbini and Sudurpaschim Province (5 municipalities including Tikapur and Janaki of Kailali district) focusing on integrating shock responsiveness and anticipatory action in social security allowance program of Nepal. Further, they are working on inclusive standard operating procedure for anticipatory action related to flood and cold waves, developed and piloted in two districts.

Furthermore, WVI Nepal has its long-term development programme in Kailali district targeting most vulnerable children through its three technical programmes (Nutritional Resilient Livelihood (NRL), Inclusive Quality Education (IQE) and Protection and Community Engagement Sponsorship Programme (P-CESP). These programmes consider DRR and GESI as cross cutting issue. These programmes were developed jointly with consultation with key community stakeholders, LG including beneficiaries.

Based on learning and experience, the key areas of engagement include (i) enhancing requirement for safeguarding the development gains; (ii) ensuring the protection of public safety; (iii) improving institutional capacity in risk governance, and (iv) increasing resilience to disaster and climate change. One takeaway learning from these key interventions is to develop a road map for institutionalizing disaster preparedness and risk management. That map should have the following core characteristics: (i) comprehensive - considering and taking into account all hazards, all phases, all stakeholders and all impacts relevant to disasters; (ii) progressiveanticipating future disasters and taking preventive and preparatory measures to build disaster-resistance and disaster-resilient communities; (iii) risk-driven- using sound risk management principles (hazard identification, risk analysis and impact analysis) to assign priorities and resources; (iv) integrated - ensuring unity of effort at all levels of government and among all elements of a community; (v) collaborative- creating and sustaining broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication; (vi) coordinated - synchronizing the activities of all relevant stakeholders to achieve a common purpose; (vii) *flexible* - using creative and innovative approaches to solve disaster challenges; and (viii) professionalismvalue a science- and knowledge-based approach based on education, training, experience, ethical practice, public stewardship, and continuous improvement.

# 4. Learning from the Past Projects

Project Name	Key Project Summary	Key Learnings
USAID TAYAR HDPP Project	Explore the HH level disaster vulnerability in Lamkichuha Municipality and support in preparation of multi-hazard HH level disaster management plan; formulation and operationalization of CDMCs and conduct simulation and drills on flood.	<ul> <li>Link HH level disaster management plan with local level disaster management committee and municipal level disaster management committee</li> <li>Strengthen technical capacity of LG in disaster management and use of EWS</li> <li>Support LG to localize DRR acts and policies for effective implementation</li> </ul>
Community Centered DRR Project (2017- 18) funded by ECHO	This was a consortium project which focus was on strengthening the LG capacity, DRRM institutionalization, support in preparation and roll out of LEDRP, DPRP and advocate for fund allocation for disaster management and conduct DRR	<ul> <li>Need to engage LG periodically during critical stages of project phase (planning, designing, monitoring and handover)</li> <li>Programmes/interventions need to be aligned with the priority of all tiers of government.</li> <li>Sharing the programme during LG planning process would support in</li> </ul>

There are several projects implemented by different development agencies on DRR in Nepal. Some of the key projects and their learning has been documented in Table below

	awareness in project location	effective implementation.
Nepal Disaster Preparedness Project (2017)	Sensitizing and capacity building of local disaster management committee members, elected representatives and key stakeholders for improving the readiness for disaster preparedness	<ul> <li>Making linkage of LDMC with LG will better help in managing the disaster.</li> <li>LDMC should be inclusive, incorporate the members from sub groups meaningfully, where their needs should be considered while designing any DRR related interventions.</li> </ul>
Disaster Risk Management Programme (2018-20)	This project envisaged that communities are able to cope with disaster shocks and stresses. 905 children including 502 youths were better prepared to cope with disaster shocks and they (youths) worked as watchdogs on DRM in community in Kailali	<ul> <li>Consider the needs of different sub-groups (PwD, children, elderly people, adolescent girls etc.) while preparing youths and children for responding to disaster</li> <li>Recognizing the community capacities and leverage it while developing/designing/implementi ng programmes/interventions.</li> </ul>
PRAGATII	Consortium project funded by ECHO and implemented by DCA, ADRA and VSO. This project key activities include encourage localization in disaster preparedness and risk management; enhance understanding disaster risk, Disaster Information Management Platform, capacitating CBO's, private sector engagement	<ul> <li>Engaging private sectors on disaster management, not only in response</li> <li>Youth and volunteer mobilization as they are the first responders to any disasters in community</li> <li>Establishment and use of disaster information management system</li> </ul>
Forecast based Action and shock responsive social protection in Lumbini Province and Sudhurpashchim	This is an ECHO funded project implemented in five municipalities in two river basins. This project aims to integrate shock responsiveness and anticipatory action into Nepal's social security allowance programme to inform the development of more responsive and anticipatory social protection and early warning systems that protect the most vulnerable before, during, and aftershocks.	<ul> <li>Locally managed information was very limited and does not capture adequate information on vulnerable population. This reflect the need of robust data information and monitoring system in LG and at community level to respond to most vulnerable to reach out for anticipatory actions and post disaster.</li> <li>Requires strong collaboration and capacity building of LG and LDMCs to respond to any disaster.</li> </ul>

Among six projects listed above, top four projects were implemented by WVI Nepal either in consortium or stand alone. These learning are captured based on the interaction/discussion with key stakeholders as part of data collection.

# 5. Summary and Recommendations

Based on the field observation; interactions with the local communities, government officials; municipal authorities, representatives of humanitarian and development agencies LG and review of available secondary information revealed the selected municipalities to be a right choice fit for the intervention. It was because these municipalities are at high risk and exposed of different hazards including flooding and landslides. Unplanned settlements, population growth, weak public service provision and infrastructure, inadequate regulatory standards, and low awareness of DRRM function, rights and entitlements among the community, officials and stakeholders have cumulatively added the exposure to disaster risks.

The understanding of DRRM and capacity to uphold the duties and function of the LG is weak against the legal mandates by the constitution, law and regulations outlined in DRRM at the federal level due to several gaps persist in operationalising the system for DRRM at different tiers of governments. Therefore, technical capacity and strong coordination at all levels need to be strengthened to deliver the enhanced functioning and institutionalisation of DRRM to better prepare for and respond to early crises of disaster.

More specifically, enhancing and strengthening the capacity of local institutions for risk informed and anticipatory approaches is required to disaster preparedness and response at LGs' officials, planner, and decision makers (elected representatives) level in improving social protection of vulnerable/disaster suffering households through addressing the issue of GESI, risk informed and anticipatory actions and SRSP.

Furthermore, there is plenty of scope for DRR capacity building and strengthening the institutional capabilities on DRRM in all the surveyed municipalities. Some of the few but crucial actions are hereunder:

- Provide Training and Skills, knowledge transfer to operationalize the DRRM function by the LG, CBOs, and the Community/Target population.
- Building capacity on DMIS, M&E System
- Institutionalize DRRM, support Municipalities in developing the policy, plan, guidelines for DRRM addressing all the pillars, pre, during and post disaster phases.
- Equipping with adequate hardware and software needs for the effective Preparedness and Response Mechanism at local level.
- Piloting and addressing the application for FbA, risk informed approach and anticipatory action (RIAA) and SRSP with the targeted population.

# Annexes

# Annex-1: Details of survey respondents

# 1. Respondent Detail







# Annex-2: Hazards and its' impact in the study area

The discussions held in Tikapur Municipality and Chure Municipality have shown the following:

# Tikapur

# Details of vulnerable wards and households by flood in Tikapur

Description		Extremely high risk	High risk	Medium risk	Low risk
Vulnerable wards		2, 5, 6, 7, 8	3, 9	1, 4	
Vulnerable	household	1570	2087	1829	
number					

# Chure

# Details of vulnerable wards and households by Landslide in Chure

Ward #	Vulnerable places by Landslide	# of Household
1	Chokte, Paladi Sen, Ritthe Khola, Shahil Bhasu and JhalJhale Bhir	62
2	Khairala, Chhad Khola, Haldani and BudiBhid	44
3	Markhebh and Thuligad Area	65
4	Rani Bhukada and Gajaari	35
5	Jaljala, Salleri, Patreni, Guni, Raji Gau and Thula Gau	105

6	Titare Gojana, Nunedanda and Chitra Bisaune	54
Total		365

### Details of Most Vulnerable HHs in Bhajani and Joshipur Municipality

Municipality	Descriptions	High Risk
Bhajani	Vulnerable wards	3, 5, 7 & 8
	Vulnerable HHs Number	3150
Joshipur	Vulnerable wards	1,3&5
	Vulnerable HHs Number	1970

Municipality	Affected population	Priority Population	Priority HHs	Under-5 children	Pregnant and lactating women
Joshipur Rural Muncipaity	8,576	3,037	533	271	78
Bhajani Municipality	12,323	5,390	914	530	139

Source: Flood Assessment Report 2020

# Annex-3: Socio-economic data of studied municipalities

Table 1: Municipality wise number of households and population

Municipalities	Total HHs	Men	Women	Total Population
Tikapur	19081	43394	46761	90115
Chure	4015	10809	10628	21437
Bhajani	10701	25802	27993	53795
Joshipur	7630	17788	19379	37167

Source: Preliminary Findings, CBS 2021

#### Table 2: Caste/ethnicity wise population by municipalities

Municipalities	Number of households	Brahmin/Chhetri	Tharu	Dalits	Magar and other Janjati	Total
Tikapur	18620	34,370	33,199	10,582	2,539	80,690
Chure	3789	13361	0	5505	3454	22320
Joshipur	6392	4223	29949	1406	856	36434
Bhajani	10708	19316	23478	6504	2546	51845
Total	39509	71270	86626	23997	9395	191289
%		37	45	13	5	100

Source: Municipality profile, 2019

#### Table 3: People with disabilities by municipalities

Municipalities	Physical disability	Visual impairment	Hearing/ Visual impaired	Hearing Impairme nt	Vocal disability	Mental disability	Intellectual disability	Multiple disability
Tikapur	588	122	47	91	98	137	22	25
Chure	203	39	18	48	20	31	20	

Bhajani	467	269	31	205	100	77	29	98
Joshipur	139	96	10	58	64	27	16	52
Total	1397	526	106	402	282	272	87	175

Source: Municipality profile, 2019

#### Table 4: Salient features of studies municipalities

Municipality	Area (sq.km.)	Elevation (m)	Coordinates	Population density/sq.km	Literacy rate
Tikapur	118.33	145-161	28*31" north and 81*07.47" east	682	73% (age 5+)
Chure	493.18	380-1950	28*59.684" to 29*2.748 north and 80*36.298" to 80*41.166" east	46	74.25% (age 5+)
Bhajani	176.25	205	Latitude. 28.4919° or 28° 29' 30.8" north. Longitude. 81.0237° or 81° 1' 25.2" east	300	60.28% (age 5+)
Joshipur	65.6	148-162	28.5674° N, 81.0147° E	560	54.06%

Source: Municipality profile, 2019

### Table 5: List of media in study's municipalities

Municipality	Media
Tikapur	5: Community RadioTikapur FM (101 MHz), Shanti Nepal Community FM (107 MHz),
	Radio Namaste FM (96.5 MHz), Gochali FM (90.0 MHz), and Kites FM (91.8 MHz)
Chure	NA
Bhajani	Trisakti FM Bhajani (94.7 MHz)
Joshipur	NA

Source: Municipality profile, 2019

#### Table 6: Age-wise population by municipalities

Municipalities	0-5 yrs		6-:	6-15 yrs		16-60 yrs		+60 yrs	
	F	М	F	М	F	М	F	М	
Tikapur	2,761	3,227	8,308	9,194	28,365	21,011	4347	3477	
Chure	1769	1706	2644	2649	6122	6409	503	518	
Joshipur	1602	1745	3874	4189	12198	9698	1715	1413	
Bhajani	2280	2483	5512	5961	17357	13801	2441	2011	
Total	8,412	9,161	20,338	21,992	64,042	50,919	9,006	7,419	

Source: Municipality profile, 2019

#### Table 7: Highly vulnerable households (HHs) by municipalities

Municipalities	Landless HHs	HHs with PwD	HHs with Single women
Tikapur	4430	1130	2213
Chure	242	379	416
Joshipur	965	514	731

Bhajani 1616 860 1224
-----------------------

Source: Municipality profile, 2019

#### Table 8: Number of registered CBOs by municipalities

Municipalities	# of Single women groups	# of TLOs	# of Youth Groups or Clubs	# of Women and Mother Groups	# of CFUGs	# of PwDs group	# of child club or Network	# of elderly groups	# of Dalit groups	# of groups at slumps area
Tikapur	1	109	2	149	11	NA	17	NA	NA	NA
Chure	NA	134	7	47	52	NA	31	NA	NA	NA
Joshipur	1	NA	7	40	4	NA	7	1	1	NA
Bhajani	1	NA	9	98	3	NA	9	1	1	NA

Source: Municipality profile, 2019

#### Table 9: Hazard wise vulnerable wards by municipalities

Municipalities	Flood	Landslide	Fire	Inundation	EQ	Wildlife conflict
Tikapur	5 (2,5,6,7,8)	NA	1 (8)	7 (2,5,6,7,8)	9 (all)	4 (2,3,5,9)
Chure	4 (3,4,5,6)	6 (all)	3 (4,5,6	NA	6 (all)	NA
Joshipur	3 (1, 3 & 5)	0	4 (2, 3, 5 &	3 (2, 3, & 5)	All 7	3 (2, 3 & 6)
			6)		wards	
Bhajani	4 (3, 5, 7, &	0	1(7)	4 (3, 5, 7 &	All 9	4 (4, 5, 7 & 9)
	8)			8)	wards	
Total wards	16	6	9	14	31	11

Source: Municipality profile, 2019; LDCRP, 2021

#### Table 10: Number of fire engines and functional engines by municipalities

Municipalities	Total fire engines	Functional fire engine
Tikapur	1	1
Chure	0	0
Joshipur	0	0
Bhajani	1	1

Source: Municipality profile, 2019

### Annex-4: Details of study area

### 1. The Context

### 1.1. Tikapur Municipality

Tikapur Municipality is green and clean City lies in Kailali district of Sudurpashchim Province, Seti zone situated at 14 km From South Mahendra Highway and 14 km North From India. It is Surrounded by Karnali river in East, Janaki Rural Municipality in North, India in South and Bhajani Municipality in West. It Covers 122.12 sq.km. According to Population Census 2068 B.S. (2011 A.D), total Population of This Municipality is 76,114(36,245 Male and 39,869 Female).The most of People engaged on Agriculture, Some are on Trade and Few people on Service. The Human Development index (HDI) of this Municipality is 0.409 approx. (UNDP, 2009).The Per Capita Income of this Municipality is approx. \$725.

Tharu, Chhetri, Brahmin Dalit and Magar are Major Caste of This Municipality. They have Different Culture and Tradition like Maghi, Dashin, Tihar, Holi, Christmas etc. They Follows Different Religions like Hinduism, Christian, Buddhists, Islam etc.

### **Geographical and Political Condition**

**Establishment:** On 30 January 1997 (2053 B.S Magh 17) for the first time, after federal system Narayanpur and Dhansinpur VDC are merged into Tikapur Municipality On 10 March 2017 (2073 Falgun 27) By Ministry Decision.

**Location:** Lies on Sudurpaschim Province, Seti Zone, Kailali District. This Municipality centre is lies 14 km Southern from Mahendra Highway and 14 km Northern from India Border,

Latitude: 28°31'30" North and Longitude: 81°07'15" East

**Area:** 122.12 sq.km. This Municipality Consist of 9 Wards.

**Boundary of Tikapur Municipality:** East- Karnali River, Bardiya district, South -India border, Mohana River, North-Janaki Rural Municipality and West-Bhajani Municipality.

### Population and Annual income of Tikapur Municipality: Population:

**Total Population:** 76,114 People (Male: 36,245 People and Female: 39,869 People), According To Census 2011 A.D. (2068 B.S)

Main Castes: Janajati: 45.31%, Brahmin/Chhetri :33.10%, Dalit:18.51% Other:3.08%According To Census 2011 A.D. (2068 B.S)

# **Economy Activates:**

The most People engaged on Agriculture, Some are on Trade and Few people on Service. Human Development index (HDI) of this Municipality is 0.409 approx. (UNDP,2009). The Per Capita Income of this Municipality 725 \$ Approx.

**Major Festival and Religion:** Festival Maghi, Dashain, Tihar, Holi and Christmas Religion are Hinduism, Christian, Buddhists, and Islam

# Road and Infrastructure Status within Municipality

Blacktop Road – 29 Km Gravel Road – 135 Km Culvert – 75 Piece Brick Paving – 400 meters Block paving – 348 meters Two Bus Terminal Main Transportation means are Auto Rickshaw, Bus, Tempo etc

# 1.2. Chure Rural Municipality

Chure Rural Municipality is a historically, naturally, and culturally important area. The Chure rural Municipality was formed by merging the former Sahajpur, Khairala, and Nigali VDCs in 2073 BS. The entire VDCs of Sahajpur, Khairala, and Nigali of existing VDCs included in it are surrounded by Chure mountains, hence the name Chure village Municipality. The Chure Rural Municipality is situated in the hilly region of the Kailali district. According to the Ministry of

Federal Affairs and General Administration, 2075, the Chure Rural Municipality is situated at an altitude of 380 m to 1950 m above sea level and has spread latitude 28° 59.684" to 29° 2.748" north and longitude 80° 36.298" to 80° 41.166" east. It is bounded on the east by Mohanyal rural municipality, on the west by Godavari Municipality and some part of Dadeldhura district, on the north by Doti district, and on the south by Godavari and Gauringa Municipalities.

The Rural Municipality has a total area of 493.18 sq. Km. According to household survey 2075, the total population of this village municipality is 22,320. Out of which male number is 11,282 and the female number is 11,038.

According to a geographical structure, the entire area of this Municipality is within the hilly area, so it is not very fertile. Due to the temperate climate, the maximum temperature of this village is 32 degrees, and the minimum temperature is 17 degrees Celsius. Paddy and wheat are cultivated especially in the valleys along the river and wheat and maize are cultivated in the sloping lands. Due to lack of fertile soil for food, lack of irrigation facilities, etc., this village is facing a food crisis. Due to the abundance of forests, most of the people seem to have earned their livelihood from goat raring. The people of this Rural Municipality have earned a good income from orange farming under fruit farming. Similarly, it is seen that income has been earned from commercial vegetable farming. Food items have not been able to produce enough food throughout the year. Most of the food, pulses, oilseeds are imported from the Terai region and there is good potential for commercial vegetable farming, animal husbandry, and fruit farming.

# 1.3. Joshipur Rural Municipality

Joshipur Rural Municipality belongs to Kailali district area No. 1 under Sudurpaschim province. In this Rural Municipality, two former VDCs i.e. Joshipur and Baunia were merged and there are currently seven wards in this Rural Municipality. It is located in the southern part of Kailali district, it has Lamki Chuha and Tikapur Municipalities and Janaki municipality in the east and Ghodaghodi Municipality and Bhajani Municipality in the west south. Similarly, it is connected to Bardagoria Rural Municipality in the north and Bhajani Municipality in the south. The total area of this village municipality is 65.57 sq. Km. and has been 100 km from the district headquarters. This remote Rural Municipality is one of the best Rural Municipality in Kailali district for the production of grain and paddy crops. With a minimum of 148 meters above sea level and a maximum of 162 meters above sea level, about half of the land area of this Rural Municipality is covered with forest area and saplings. According to the preliminary result of National Census 2078, the total population of this rural Municipality is 37167 where 19379 are females and 17788 are males. The main castes are Tharu, Kshetri, Brahmins and Dalits.

According to 2018 Economic Census, there are total 817 establishments in Joshipur Rural Municipality that are involved in various economic activities. In those establishments, total 2,535 persons are engaged for the economic activities, as a self-employed or an employee, with total male engagement of 1,837 and female engagement of 698 persons. In every business, there were an average of 3.10 people engaged with average males are 2.25 and females are 0.85. The ratio of male to female engagement in the establishments are 2.63, which means as many as 2.63 males are engagement in the economic activities per female.

# 1.4. Bhajani Municipality

Bhajani Municipality situated on Tikapur Municipality in East and Joshipur Rural Municipality to the east north, Kailari Kailali Rural Municipality to the west, Ghodaghodi Municipality and Joshipur Rural Municipality to the north. And to the south are the neighbouring Allied Powers of the Indian state of Uttar Pradesh, Tikuniya, Belaraya. The former Bhajani Trishakti Municipality and Thapapur VDC were merged and this Municipality (Bhajani Municipality) has been formed. The centre of this Bhajani Municipality, which was announced on 2073-11-27, is the office of the former Bhajani Trishakti Municipality. Divided into 9 wards, the total area of the Municipality is 176.25 sq. Km. and population is 53795 (27993 females and 25802 males) as per preliminary result of National Census 2078 (2021).

Mohana river in the south, Kandra flowing in the middle of the Municipality, Kanda river and Patharaiya river flowing in the east are the sorrows and possibilities of this Municipality. The world's most endangered aquatic animal, the dolphin. The Mohana River in the southern part can be developed as a tourist area. Hundreds of Bigha of crops are damaged every year due to floods, erosion, flooding in Kailali district and food shortages and settlements are at risk.

According to 2018 Economic Census, there are total 767 establishments in Bhajani Municipality that are involved in various economic activities. In those establishments, total 1,863 persons are engaged for the economic activities, as a self-employed or an employee, with total male engagement of 1,240 and female engagement of 623 persons. In every business, there were an average of 2.43 people engaged with average males are 1.62 and females are 0.81. The ratio of male to female engagement in the establishments are 1.99, which means as many as 1.99 males are enagement in the economic activities per female.

# 2. Disaster Risk and Vulnerability

# 2.1. Tikapur Municipality

Tikapur Municipality is a high-risk Municipality in terms of hazards and disasters. The geographical location and topography of this Municipality are the main causes of the disaster. There is a risk of flood, inundation, and erosion every year due to the river flowing within the Municipality.

The five major disasters of this Municipality are 1. flood, 2. hurricane, 3. fire, 4. cold wave, and 5. wild animal's threats. Apart from this, due to increasing urbanization and physical infrastructure being constructed without full compliance with the building code, the earthquake is also moving ahead as a terrible disaster for this Municipality.

The following are the wards and settlements affected by the floods in this Municipality:

Ward no	Total number of households	Rivers that can affect	Settlements that may be affected
1.	9823	Rani Kula, Jamra Kula	Block No. BD, 13, 14
2.	1651	Ranikula and Karnali rivers	Bijaynagar, Rajipur, Sitapur, Bikaspur, Kotharpur, Bindpur
3.	983	Jamra Kula	Ghiya, Puchrari, Katanpur, Shankarpur
4.	995	Ranikula, Jamarakula, Arabaruwa, Bhede, Bankula, Gabhuva	Baghmara Indraiya, Maurania

# Municipality flood prone vulnerability situation

5.	1049	Rani Kula, Karnali river	Shahipur, Basanta, Simreni
6.	1067	Patharaiya river, Karnali river,	Srireni, Laxinapur, Bhartapur, Bhagwanpur,
		Rani Kula, Jamarakula	Narayanpur, Praseni, Belwabozhi, Milanpur
7.	1315	Karnali River, Ranikula,	Satti, Baidi, Dhunganatol, Kunti Toll, Ramjanki
		Patharaiya, Jamra Kula, Garinala	Toll, Dhami Toll,
8.	994	Karnali River, Mohana River,	Sri Lanka, Bangaun, Batanpur, Chaugaddi,
		Branch of Ranikula	Kalimati, Arnava, Fanta, Ramdanda,
			Karmidanda
9.	743	Mohana River, Branch of	Khakraula, Payalgaon
		Ranikula	

# Vulnerable ward and household details are as follows-

Description	Extremely high risk	High risk	Medium risk	Low risk
Vulnerable wards	2, 5, 6, 7, 8	3, 9	1,4	
Vulnerable household number	1570	2087	1829	

### Disaster Timeline, Hazard Calendar and Hazard Ranking:

Highlight the key disasters that occurred in the last 10 years and document the impact of these disasters.

Year	Disaster and # of events	Location	Causality	Economic Impact (property events)
Up to 2011	Flood (14) Wildlife Terror (3)	Ward 1, Ward 2 Vijayanagar, Shibir and Munuwa, Ward 3, Ward 4 Indraiya and Maurania, Ward 5 Nuklipur and Karmidanda, Ward 5 Narayanpur, Ward 6 Narayanpur, Ward 7, Ward 8 and Ward 7, Uhunga, Baunia, Khairipur and Tanda Ward 3 Ghiya, Puchhari, Katanpur and Shankpur Ward 5 Ward 5 Nuklipur and Karmidanda	32 death, 93 injured, 2 disabled One person death Two- person injured (one from tiger and one from rhino attack)	<ul> <li>About 3,110 houses were submerged and destroyed,</li> <li>Flooded the 50 wooden bridges, 10 concrete bridges, and 18 culverts.</li> <li>Swept away the Two schools, Two dams, and Two Shiva temples.</li> <li>Ramdanda Chaupurti village has been fallen into the Karnali river by land erosion.</li> <li>6 km road was demolished, and the Rani Kula dam burst and flooded all over the village.</li> <li>Destroyed Karnali river dam.</li> <li>About 1700 cattle, 897 goats, sheep, and pigs, 355 chickens were destroyed by flood.</li> <li>Loss of Rs. 2 crores and 63 lakh including Jewellery and valuable documents.</li> <li>Damaged the stored crops 1050 quintals.</li> <li>Destroyed 75 quintals of mustard.</li> <li>Hundred <i>Bigahas</i> of land damaged including crops due to flood.</li> <li>Eroded 230 Bighas of cultivable land by the flood.</li> <li>Inundated 505 Bighas of land.</li> <li>Flooded 25 Bighas of and.</li> <li>Elephant destroyed 8 houses.</li> <li>5 million financial losses.</li> </ul>
2012	Wildlife Terror	Ward 5 Nuklipur, Karmidanda, Bankatti, Bangalpur, Premnagar		<ul> <li>Destroyed 10 houses by Elephants</li> <li>Rs. 5 million Financial lost</li> <li>Damaged the plants by a wild animal</li> </ul>

2013 2014	Flood Hurricane Wildlife Terror	Ward 5 Basanta, Shahipur and Manikapur Ward 7 Ward 3 Ghiya, Puchari, Katanpur and Shankpur	Two- person injured (one from tiger and one from rhino	• • • • • • • • • • • • • • • • • • • •	50 houses were destroyed, all the grains in the house were damaged and the road was flooded. Destroyed10 Bighas land including farmed rice. Lost Rs. 3.5 million. Damaged farmed rice. Blown the roofs of 20 households Demolished the wall of Bedarline Public School. Destroyed the vegetable farming of 2 Bighas Worthing 2 Lakh Destroyed the crops on 24 Bighas of land.
2015			attack)		
2016	Flood Hurricane	Ward 2 Vijayanagar Ward 9 Jhunga, Bauniya, Khairipur and Tanda	Some people were Injured.	• • • •	Swept away 50 houses made by mud. Damaged 100 houses. 50 quintals of crops were flooded and stored grained were soaked. Increased the epidemics problem. 5-6 Bigahas of forest land swept way and turned into Karnali river. Blown the roofs of houses and some houses were destroyed
2017	Flood (2) Hurricane (3) Wildlife Terror (3)	Ward 6, Vijayanagar, Shibir Ward 2 Bijayanagar Ward 8 Phanta, Banjariya, Bangau, Batanpur Ward 6 Bhagabanpur, Bhartapur, Beluwabojhi, and Parseni Ward 6 Bijayanagar Camp Ward 2 Bijayanagar Camp Ward 9 Jhunga, Baunia, Darujan and Tanda, Ward 3 Ghiya, Puchari, Katanpur and Shankpur	Death of a child. Injured 7 person		Roads have been damaged in various places. Human settlements are in disarray due to the collapse of water canals. Destroyed paddy crops Rs. 500,000. Hundreds of houses have been inundated. Eight camps have been flooded. Rs 25,000 was destroyed, and valuable documents were soaked. 10 quintals of food were washed away by the flood. Blown the roofs of 60 houses and loss of 10 Lakhs Blown the roofs of 130 houses and destroyed the stored grained Blown the roofs of houses and schools and fallen the trees. Economic losses around one lakh 70 houses destroyed by elephants 2 million worth of crops have been destroyed 3 injured (2 by rhino attack and 1 by tiger attack) Damaged the 5 Bighas of crops Destroyed the crops by the wild animals Crushed the plants by wild animals Vegetable and crops 24 Bighas of cultivable land have been lost which costing more than Rs. 20,000.
2018	Hurricane (2)	Ward 9 Jhunga and Bauniya Ward 8 Phanta, Suryapur, Banjariya and Batanpur	Injured 1 person	A AA A	Blown the roof of School and Shiva temple and loss of 50 thousand Blown the roofs of 15 houses and loss of 50 thousand Blown the roofs of four grocery and destroyed the goods of shop. Destroyed the one houses by falling the trees on the roof of house.

2019 Hi (3 W 2019 Te	/ildlife error (3)	Jyotinagar, Shibanagar, Shibir, Ward 8 Chaupurti, Timalsen, Ramdanda, Kamalgau and Kalimaati Shivnagar Shibir Ward 2 Vijayanagar Ward 5 Nuklipur Karmidanda, Bankatti, Bangalpur, Premnagar Ward 8 Ramdanda	Some people are injured	<b>A A A A A A A A A A</b>	Blown the roofs of 25 houses, destroyed the 10 households and loss of stored grains worth 5 Lakhs. Blown the roofs of 2 cooperative buildings. Blown the roofs of ten houses, one Church and loss of two lakh. Fallen the trees. Destroyed the one house by Fire due to Hurricane Blown the roofs of three houses at Kamalgau, eight house of Kalimati and 5 groceries of Ramdanda. Economic losses one lakh Completely damaged crops of the farm. The wild animals have eaten the crops and damaged the plants planted in the orchards. About 80 houses were destroyed by elephants. 7 million worth of crops destroyed. Injured one person by animal attacked.

# Seasonal Calendar (Tikapur)

Highlight the key disaster faced by the community in different months. This mainly helps to identify the types of disaster in each month and support for preparedness and response;

Hazards	Floods	l an dalida	Foutboucker	Fires	Wildlife	Hail	Linktuine	Pandemic	Hurri	Road	Cold	Snake
Month	Floods	Landshde	Earthquakes	Fires	Threats	Stones	Lightning	(COVID- 19)	cane	Accident	Wave	Bite
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												

# Hazard Ranking (Tikapur):

Hazards	Earthquake	Floods	Hurri cane	Wildlife Threats	Cold Wave	Fires	Pandemic (COVID- 19)	Pest attack in crops	Draught	Lightning	Hail Stones	Road Accident
Earthquake												
Floods			Floods	Floods	Floods	Floods	Floods	Floods	Floods	Floods	Floods	Floods
Hurricane				Hurricane	Hurricane	Hurricane	Hurricane	Hurricane	Hurricane	Hurricane	Hurricane	Hurricane
Wildlife					Cold Wave	Fires	Wildlife Threats	Wildlife Threats	Wildlife Threats	Wildlife Threats	Wildlife Threats	Wildlife Threats
Cold Wave						Cold Wave	Cold Wave	Cold Wave	Cold Wave	Cold Wave	Cold Wave	Cold Wave
Fires							Fires	Fires	Fires	Fires	Fires	Fires

Pandemic (COVID- 19)								Pest attack in crops	Draught	Pandemic (COVID- 19)	Hail Stones	Pandemic (COVID- 19)
Pest attack in crops									Pest attack in crops	Pest attack in crops	Pest attack in crops	Pest attack in crops
Draught										Draught	Draught	Draught
Lightning											Hail Stones	Lightning
Hail Stones												Hail Stones
Road Accident												
Number Weight	12	11	10	7	9	8	3	6	5	2	4	1
Ranking Order		I	П	v	111	IV	IX	VI	VII	х	VIII	хі

According to the peer ranking of the hazards of Tikapur, the flood is the major hazard of this municipality after the earthquake, the second is the windstorm and the third is fire. Similarly, the effects of cold waves, wildlife threats, paediatric insect threats or and drought are found to be moderate while the effects of hailstorms, pandemics (COVID-19), lightning and road accidents are minimal.

# 2.2. Chure Rural Municipality

### **Disaster Risk Reduction and Management**

The Chure rural Municipality is one of the disaster-prone municipalities. In this Rural Municipality, the water-borne catastrophe as well as human casualties seems regular. According to the study of Municipality, the major climate disasters in this area are landslide, flood, epidemic, snakebite, hailstones, etc. Landslide is the worst affected, followed by floods and epidemics in the second and third rank, and forest fire in the ranking last.

Most of the households residing in the risky sensitive area are in ward 3 and 5. A total number of 365 households in this Municipality are at risk of landslides, bank cutting by the river, and steep slopes. As the settlements are located in a very steep place, the sensitivity to disaster risk is increasing. Details of vulnerable places and households are given below.

### Details of families living in risk-sensitive areas

Ward No.	Vulnerable places by Landslide	No. of Household
1	Chokte	12
	Paladi Sen	15
	Ritthe Khola	10
	Shahil Bhasu	10
	JhalJhale Bhir	15
2	Khairala, Chhad Khola	15
	Haldani	15
	BudiBhid	14
3	Markhebh	32
	Thuligad Area	33
4	Rani Bhukada	14
	Gajaari	21
5	Jaljala	22
	Salleri	23

	Patreni, Guni	21
	Raji Gau	18
	Thula Gau	21
6	Titare Gojana	19
	Nunedanda	17
	Chitra Bisaune	18
Total		365

The study has shown that the recent COVID-19 pandemic is a catastrophic human loss. The last ten years' figures show that three people died due to the floods and one from snake bites. Similarly, landslides, fires, and wild animals' threats are the major causes of loss and damage. Although snakebite reduction and management appear to be easy, they are found to be high risk. Floods and landslides are more vulnerable to human casualties in this area.

# Seasonal Calendar (Chure):

Highlight the key disaster faced by the community in different months. This mainly helps to identify the types of disaster in each month and support for preparedness and response.

Hazards	Eloodo	Landelida	Forthquakes	Forest/Fires	Wildlife	Hail	Pandemic	Cold	Snake
Month	Floods	Landshde	Earthquakes	Forest/Fires	Threats	Stones	(COVID-19)	Wave	Bite
January									
February									
March									
April									
May									
June									
July									
August									
September		-							
October									
November									
December									

# Hazard Ranking (Chure)

Hazards	Earthquake	Flood	Landslide	Forest/ Fires	Wildlife Threats	Hail Stones	Pandemic (COVID-19)	Cold Wave	Snake Bite
Earthquake									
Flood			Landslide	Flood	Flood	Flood	Flood	Flood	Flood
Landslide				Landslide	Landslide	Landslide	Landslide	Landslide	Landslide
Forest/Fires					Wildlife Threats	Hail Stones	Pandemic (COVID- 19)	Cold Wave	Snake Bite
Wildlife Threats						Wildlife Threats	Pandemic (COVID- 19)	Wildlife Threats	Snake Bite
Hail Stones							Pandemic (COVID- 19)	Hail Stones	Snake Bite

Pandemic (COVID-19)								Pandemic (COVID- 19)	Pandemic (COVID- 19)
Cold Wave									Snake Bite
Snake Bite									
Number Weight	9	7	8	1	4	3	6	2	5
Ranking Order	I	III	Ш	IX	VI	VII	IV	VIII	v

# 2.3.Bhajani Municipality

# **Disaster Risk Reduction and Management**

Bhjanai is one of the most flood prone Municipality in Kailali district with a total population of 53795. The most common natural hazards identified during hazard mapping are i) earthquake, ii) flood, iii) wildlife threats, iv) fires and v) cold waves.

There are nine wards in this Municipality where four wards (3, 5, 7 & 8) are most prone to flood and about 3150 HHs are at very high risk of flood. Mohana river, Kanda river and Patharaiya rivers are the prime rivers and the settlements nearby these rivers are at high risk to flood. Detail of natural hazards and vulnerable wards and vulnerable HHs are summarized in Table below.

v unici ubic wulus ul				pesonnatara	i i iuzui u.	<i>,</i>
	Flood	Landslide	Fire	Inundation	EQ	Wildlife conflict
# of wards affected	4	0	1(7)	4 (3,5,7&8)	All 9	4 (4, 5, 7 & 9)
	(3,5,7&8)					
# of vulnerable	3150	0	NA	3150	8717	NA
HHs						

### Vulnerable wards and vulnerable HHs for different types of Natural Hazards

# Seasonal Calendar (Bhajani Municipality)

Highlight the key disaster faced by the community in different months. This mainly helps to identify the types of disaster in each month and support for preparedness and response.

					Wildlife	Hail	Pandemic (COVID-	Cold	Snake
Hazards	Floods	Landslide	Earthquakes	Forest/Fires	Threats	Stones	19)	Wave	Bite
Month									
Jan									
Feb									
March									
April									
May									
June									
July									
August									

September					
October					
November					
December					

# Hazard Ranking (Bhajani Municipality)

Llaranda	Fauthmusika	Flood	l on delide	Forest/	Wildlife	List Change	Pandemic (COVID-	Cald Maria	Cooleo Dite
Hazards	Earthquake	Flood	Landslide	Fires	Inreats	Hall Stones	19)	Cold wave	Shake Bite
Earthquake		Earthquake	Earthquake	Earthquake	Earthquake	Earthquake	Earthquake	Earthquake	Earthquake
Flood			Flood	Flood	Flood	Flood	Flood	Flood	Flood
Landslide				Forest/ Fires	Wildlife Threats	Hail Stones	Pandemic (COVID- 19)	Cold Wave	Snake Bite
Forest/Fires					Wildlife Threats	Forest/ Fires	Forest/ Fires	Wildlife Threats	Wildlife Threats
Wildlife Threats						Wildlife Threats	Pandemic (COVID- 19)	Wildlife Threats	Wildlife Threats
Hail Stones							Pandemic (COVID- 19)	Cold Wave	Snake Bite
Pandemic (COVID-19)								Pandemic (COVID- 19)	Pandemic (COVID- 19)
Cold Wave									Cold Wave
Snake Bite									
Number Weight	9	8	1	4	7	2	6	3	3
Ranking Order	I	Ш	VIII	v	111	VII	IV	VI	VI

# 2.4. Joshipur Rural Municipality

# **Disaster Risk Reduction and Management**

Joshipur lies in the southern part of the Kailali district, is one of the most flood prone rural Municipality with an inhabitant of 37167 people according to preliminary findings from National Census 2078 (2021). Alike Bhajani, Earthquake, flood, wildlife threat, fires and cold waves were the key major natural hazards that were identified as part of hazard mapping during hazard mapping in Joshipur Rural Municipality.

There are seven wards in Joshipur Rural Municipality where three wards i.e. ward no. 1, 3 & 5 are most prone to flood and about 1970 HHs are at high risk due to flood in this Rural Municipality. Likewise, all the wards in Joshipur Rural Municipality are vulnerable in terms of earthquake, four wards (ward no. 2,3,5&6) are more prone to fire, and three wards (ward no. 2,3&6) are vulnerable to wildlife threats. Details of natural hazards and vulnerable wards and vulnerable HHs are summarized in Table below.

### Vulnerable wards and vulnerable HHs for different types of Natural Hazards

	Flood	Landslide	Fire	Inundation	EQ	Wildlife conflict
# of wards	3	0	4 (2,3,5 &6)	3 (1,3&5)	All 9	3 (2,3&6)
affected	(1,3&5)					

# of vulnerable	1970	0	2627	1970	6392	NA
HHs						

# Seasonal Calendar (Joshipur Rural Municipality)

Highlight the key disaster faced by the community in different months. This mainly helps to identify the types of disaster in each month and support for preparedness and response.

Hazards	Floods	Landslide	Forthquakes	Forest/Fires	Wildlife	Hail	Pandemic (COVID-	Cold	Snake
Month	FIOOUS	Lanushue	Lai Inquakes	FOIESL/FILES	Theats	Stones	17)	Wave	Bite
Jan									
Feb									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									

# Hazard Ranking (Joshipur Rural Municipality)

				Forest/	Wildlife		Pandemic (COVID-		
Hazards	Earthquake	Flood	Landslide	Fires	Threats	Hail Stones	19)	Cold Wave	Snake Bite
Earthquake		Earthquake	Earthquake	Earthquake	Earthquake	Earthquake	Earthquake	Earthquake	Earthquake
Flood			Flood	Flood	Flood	Flood	Flood	Flood	Flood
Landslide				Forest/ Fires	Wildlife Threats	Hail Stones	Pandemic (COVID- 19)	Cold Wave	Snake Bite
Forest/Fires					Forest/ Fires	Forest/ Fires	Forest/ Fires	Wildlife Threats	Wildlife Threats
Wildlife Threats						Wildlife Threats	Pandemic (COVID- 19)	Wildlife Threats	Wildlife Threats
Hail Stones							Pandemic (COVID- 19)	Cold Wave	Snake Bite
Pandemic (COVID-19)								Pandemic (COVID- 19)	Pandemic (COVID- 19)
Cold Wave									Cold Wave
Snake Bite									

Number Weight	9	8	1	5	7	2	6	4	3
Ranking Order	I	Ш	XI	v	=	VIII	IV	VI	VII

# Annex-5: List of people consulted during the assessment

Only available to the designated team member to ensure the confidentiality of the respondents as outlined in ethical section.

# **Annex-6: Policy review of Disability**

Articles 18, 24, 31, 39, 42, 43, and 51 of the Constitution of Nepal, as well as Schedule-8, have established the rights of persons with disabilities against human rights, equality, social justice, education, and discrimination. To implement these rights, legal and institutional provisions have been made in the Rights of Persons with Disabilities Act, 2074 BS, and the Rules made under it, 2077 BS.

Clause (d) of Rule 37 of the DRR Regulation enables persons with disabilities to participate in disaster management activities at the local level and to conduct necessary training and orientation programs to ensure the access, preparedness, search, rescue, relief, and access of persons with disabilities in the post-disaster situation. It has been mentioned that it will be done. In addition, in section (e), there is a rule to make arrangements for the storage of such items by making a separate list of such items keeping in view the needs of persons with disabilities.

Disaster management in Nepal is done at the behest of the Ministry of Home Affairs and its subordinates. Due to the lack of adequate awareness and commitment in this institutional system to raise awareness and commitment on the proper treatment of the helpless and the disabled, the existing laws and regulations have not been implemented.

The Government of Nepal provides free treatment for the injured in the disaster rescue and relief criteria. However, the Disaster Management Act and rules do not make it mandatory for persons with disabilities to make necessary arrangements to reduce the risk of disasters. Even the national disaster response framework does not include disability-friendly strategies and measures.

These issues are included in the guidelines for disaster preparedness and response planning, but not in accordance with the guidelines. The Disaster Risk Reduction and Management Authority has been preparing pre-monsoon preparations since 2077 BS. However, these plans do not address the issue of disability.

# Annex-7: GESI provisioned in Municipal DRRM Act

The act and policy of the Municipality related to DRRM are gender neutrality which created the barrier to decision level participation of women, senior citizens, children, and people with disability. Due to the lack of GESI friendly policies and plans, the problem created by the disasters of the at-risk groups, especially women, children, adolescents, and persons with disabilities, has not been identified. The opportunity of discussion on the participation of atrisk groups in the Disaster Management Committee, the impact of the disaster on the group, and their contribution to problem-solving are limited. In addition, the involvement of this group in disaster management campaigns, risk analysis, capacity building, and disaster response at the municipal and community levels has become limited. It has been mentioned in Part-2 of the Municipal Disaster Risk Reduction and Management Act 2075 - The formation, functions, and rights of the Municipal Disaster Management Committee, conducting special vigilance programs to prevent vulnerable groups, especially women, children, adolescents, and persons with disabilities (sexual violence, trafficking and any other form of exploitation) during disasters. and (ma) To make special plans and programs for women, children, senior citizens, dalits, marginalized classes and communities, persons with disabilities and persons with disabilities at risk of disasters.

In part-3, article 7 of the Municipal DRRM Act, 2075 formation, responsibility, and rights of ward level DMC, the following provisioned is mentioned:

(Ta) To conduct awareness programs by taking special precautions for the prevention of incidents (sexual violence, trafficking and any other kind of exploitation) against the groups at risk, especially women, children, adolescents, and persons with disabilities.

Part 5 of the DRRM Act mentions the provisions related to the Disaster Management Fund and a separate Disaster Management Fund Operation Procedure 2076 has been prepared.

In part 7 miscellaneous of the DRRM Act, Article 18 (3) the provisions relating to the minimum standard of relief, the following provisions of GESI are mentioned:

(C) Special relief packages (such as Dignity Kits and Children's Kits) to address the needs of women, children, senior citizens, the disabled, and persons with disabilities.

(D) Materials relating to personal privacy and security.

#### The practice of Chhaupadi Custom

Menstruation is a regular process in women. It is also a sign that women are physically able to reproduce. It is also said to be untouchable in the Nepali language. In the literal sense of the word, women should not enter the kitchen during this time, should be kept away from others, and in some places, in the western part of Nepal, they should live in separate huts and sheds. At the same time, the traditional notion of not being allowed to perform puja at such a time, not being allowed to participate in religious activities, is unfortunate, and god is angry. Some people even take the medicine for it and postpone it so that it is not possible to fast in worship. Our religions and societies do not seem to have taken this very normal process for women as normal yet. Even the women themselves have not been able to take it easy due to a lack of reproductive education. Chhaupadi custom is still practiced in all the households of this village. It has been found that only 10 or 20 households in Ward # 5 and 6 do not follow the practice of Chhaupadi.

# **Annex 8: Assessment questionnaire**

#### Checklist to Assess LG's Capacity to prepare and Respond to Disasters

can skip any questions you wish not to answer. But we believe that you will provide an open answer to all of the questions.

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

Do you provide consent for further discussion?

Yes		if yes, Name:	Signature:	
No				
Date of Municipal Visit				
Venue of Meeting				
Name of Meeting				
Name o	fsurvey	team members		

#### Section-1: Background Information 1.1.Population Dynamics

1:1:1 Optication Dynamics									
Ward #	Male	Female	Disability	Elder population (65+	# of HHs				
				years)					
1									
2									
3									
4									
5									
6									
7									
8									
9									

1.2. The population growth rate in the Municipality:

1.3. Literacy rate in percentage:

1.4.% of HHs served with a water supply and sanitation:

1.5.% of HHS served with electricity services:

1.6.% of HHs served with telecommunications service:

1.7.% of HHs with access to financial services (bank account, saving, and credits): (*Please specify the sources for the above information*)

# 2. Hazard Information

2.1 Has Municipality prepared hazards maps for flood, landslides, fire, earthquake, etc. [If no please proceed to section 2.3.]

a. Yes

b. No

2.2. If yes, provide the following information in the table below with the name of the organization that helped prepare it and the date of preparation.

Wards #	Maps prepared	Supporting organizations	Date of preparation	Remarks

2.3. Exposed Assets (exposed assets refers to the environment, physical infrastructures within our

surrounding that are likely to be affected by disasters)

- a. # of public schools:
- b. # of private schools:
- c. # of hospitals/health facilities
- d. # of ambulance
- e. # of birthing centers

(Please specify the sources for the above information)

2.4. Has the Municipality undertaken GIS mapping with features like roads, HHs information?

- a. Yes
- b. No

2.5. Is there geo-referenced disaggregated data on the number of house typologies (kachha, semi pakka, pakka etc)?

Typologies	# of HHs
RCC Building	
Semi-Pakka	
Mud wall House	

(Please specify the sources for the above information)

### 3. Vulnerability

3.1.Disability

Ward #	Types of disability	/		
	Red card-	Blue card-	Yellow Card-	White Card-
	Profound (#)	Severe (#)	Moderate (#)	Mild (#)
1				
2				
3				
Total				

(Please specify the sources for the above information)

### 3.2. Children and Elderly Population

Ward #	Age	Male	Female	Total
1	0-4 years			
	5-9 years			
	65-69 years			
	70+			
2	0-4 years			
	5-9 years			
	65-69 years			
	70+			
3	0-4 years			
	5-9 years			
	65-69 years			
	70+			
4	0-4 years			
	5-9 years			

Ward #	Age	Male	Female	Total
	65-69 years			
	70+			
5	0-4 years			
	5-9 years			
	65-69 years			
	70+			
6	0-4 years			
	5-9 years			
	65-69 years			
	70+			
7	0-4 years			
	5-9 years			
	65-69 years			
	70+			
8	0-4 years			
	5-9 years			
	65-69 years			
	70+			
9	0-4 years			
	5-9 years			
	65-69 years			
	70+			

3.3 Number of families with sufficient food for more than six months but less than 12 months 'Poor':

3.4. Number of families with sufficient food for less than six months of the year from their land, business, or occupations 'extremely poor':

### 3.5. Squatter and slums: number, name of settlement, size, and location

Name of squatter settlement	Tole, ward number	# of HHs	Details on squatter
			e.g. in a government land along the flood plains of xxx river

### 4. Risk Landscape

List out key disaster events that have occurred in the past. Include major casualties, damage, and loss

Year	Description of the disaster event	Deaths	Damage and loss figures in property and agriculture (or qualitative information, if data not available)

4.1. Is there any system or means on how historical and current disaster-related data is recorded, updated, and disseminated at rural/urban municipalities? If no, proceed to 4.3

a. Yes

b. No

4.2. If yes, please explain how disaster-related data are recorded, managed, updated, and disseminated at municipal levels?

4.3. How do you think that disaster-related data can be recorded, managed, and updated at the municipal level in a better way?

SN	Questions	Yes	No
5.1	Is there training on DRRM for, ward level disaster preparedness		
	and response committee or community level conducted?		
5.2	Are there any plans or strategies to establish new or increase the		
	existing Disaster Management fund at the ward level and		
5.0	municipal?		
5.3	established?		
5.4	Have any municipal officials taken any previous training on		
	DRRM or Climate Change Adaptation		
<b>_ _ _</b>	If Yes, please specify the number (M/F)		
5.5	Have any municipal officials taken any previous training on DRPM policy strategy and act?		
	If Ves please specify the number (M/E)		
56	Have any municipal officials taken any previous training on		
5.0	Disaster Risk Assessment?		
	If Yes, please specify the number (M/F)		
5.7	Have any municipal officials taken any previous training on		
	Disaster Risk Reduction?		
	If Yes, please specify the number (M/F)		
5.8	Have any municipal officials taken any previous training on Post		
	Disaster Needs Assessment?		
5.0	If Yes, please specify the number (M/F)		
5.9	Does the Municipality have any trained/skilled human resources		
	UII SAR/FITSLAIU: If Ves. please specify the number (M/E)		
5 10	Have any Municipal officials taken any previous training on		
5.10	Humanitarian Standards?		
	If Yes, please specify the number (M/F)		
5.11	Does the Municipality have the practice of Warehousing?		
5.12	Has the Municipality prepared its Local Disaster and Climate		
	Resilience Plan (LDCRP)?		
5.40	If No, please specify the reasons		
5.13	Has the Municipality prepared its Disaster Preparedness and		
	Response Plan (DPRP): If No. please specify the reasons		
5 14	Has the Municipality prepared its DRRM Act/Policy Relief		
5.14	Standard/Building By-Laws, etc.?		
	If Yes, please specify		
	If No, please specify the reasons		
5.15	Is there culture or practice to conduct comprehensive drill		
	exercises?		
5.16	Is there any form of DRR education (formal and informal) to		
	promote a culture of safety?		
5.17	Are there any practices of Risk Transfer mechanism or system		
5 1 0	(Insurance)		
5.10	DRR		

#### Thank You for the time and cooperation!! Key Informant Interview – Mayor/Deputy Mayor

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

Do you provide consent for further discussion?

Yes if yes, Name:

Signature:

### **Opening Question:**

• What are the major hazards of this Municipality in the last ten years? Could you explain the trend, frequencies, and magnitude of these hazards? And what were the impacts (loss and damage) of these hazards in the community?

### Main Questions:

- Who are the most vulnerable Household (HH) and or marginalized groups in the target areas? Is there any mitigation and preparedness plan focusing on them? (Probe: If yes, could you explain more on it)
- What is the legal instrument of the Municipality for local level disaster management?
- Does the Municipality have a DRR Strategic Action Plan/LDCRP/DPRP, etc
- How do LGs initiate the DRR response system?
- How is the LG using provincial and federal resources in managing and consolidating preparedness and response plans? (Probe: if not why?)
- How is the LG coordinating with the provincial and federal government during;
  - Planning & preparedness and
  - Response to disasters?
- What are the early action interventions implemented by the LG? And how is it supported to reduce the impact of disasters?
- Is the LG implementing shock responsive social protection (SRSP)? What is the key learning from implementing these interventions?
- What other risk-informed development approaches are being implemented?
- What are the major disaster-related risks in the proposed locations, who are most affected, and why?
- What is the field level (implementation) challenges related to local Disaster Risk Management governance for risk-based preparedness and anticipatory action, focusing on flood and landslides?

- Who are the possible stakeholders including private sectors for disaster preparedness and response and how are they being mobilized?
- How does the government manage and allocate the resources for DRR? What is the status of resource management in the Municipality for preparing and responding to Disasters?
- How are technological innovations being used for disaster preparedness and response? What are the gaps and requirements with a focus on sustainability?
- How is the secondary database including disaggregated data of population maintained in the Municipality? Is the information feed in the **BIPAD** portal?
- What are the existing legal instruments (the frameworks on DRR) and their implementation status in the local Palikas? What are the current challenges?
- What about the status of the Disaster management fund in the Municipality? Is it established? If yes what about the disaster management fund operational Guideline?
- How is the disaster management fund mobilized, is it on an ad-hoc basis, only for disaster response, or for disaster preparedness as well?
- What are the immediate, mid-term, and long-term needs concerning DRR?
- What are the challenges in reaching out to every household for disaster preparedness and response? What are the ways ahead to reaching every household?
- What is the type of capacity-building support needed by the LG or LDMC to:
  - $\circ$  Implement the DRRM act
  - Develop, implement and monitor the progress of LDRCP?
- What have been the recent disaster situation, preparedness, and risk reduction initiatives at the Municipality level
- What is the existing inter-agency Coordination Mechanism?
- What is the mechanism to control the local market during the onslaught of any disasters?

### **Closing Questions:**

- Are there any initiatives taken to minimize the multiple impacts of disaster to women, children, PwD, the elderly population, etc? (Probe: what are these initiatives and how does it support reducing the impact on these populations?)
- Anything you want to share more...

# Thank You for the time and cooperation!!

### Key Informant Interview – Ward Chairperson

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

Do you provide consent for further discussion?

Yes if yes, Name:

Signature:

# **Opening Question:**

• What are the major hazards/ risks of this Municipality in the last ten years? Could you explain the trend, frequency, and magnitude of these hazards? And what were the impacts (loss and damage) of these hazards in the community?

# Main Questions:

- Who are the most vulnerable HH and or marginalized groups in the target areas? Do they participate in the LDMC/CDMC meeting?
- If yes, how are the most vulnerable households/marginalized groups engaged in their decision-making process?
- What are some of the obstacles for the most vulnerable HH/marginalized groups to participate in CDMC/LDMC, and why?
  - How can they be engaged more meaningfully?
- What is the level of awareness/understanding /expectations of most vulnerable households relating to the CDMC/LDCRP/Social Protection mechanisms?
- How is the LG coordinating with provincial and federal government during:
   a) planning & preparedness and
   b) response to disasters?
- Were there any initiatives undertaken by humanitarian agencies and the government to reduce the impact of disasters on special target groups to support them in preparedness and/ or response to disasters in the past 2-3 years?
- What are the coordination and response mechanisms during any disasters?
- Have there been any practice of conduction regular drills and simulation exercises to prepare and cope with disaster situations?
- How has COVID-19 impacted (increased or decreased) vulnerability to disasters, especially for the most vulnerable HHs/marginalized communities b) What are their coping mechanisms
  - What support have they have received from LGs?
- What are the gaps/challenges to promote gender equality in disaster preparedness and response?
- Is the LG implementing shock responsive social protection (SRSP)?
  - What are some of the protection concerns (women, children, PwD) in emergencies? (Probe: access to and control over the Social Protection schemes)

# **Closing Questions:**

- What is the current role of I/NGOs to reduce the impacts of flood/landslide? How does it reduce the impact of disaster?
- How did you see the competence and understanding of NGOs in Disaster Preparedness Actions?
- Anything you want to share more...

#### Thank You for the time and cooperation!! Key Informant Interview – DRR focal person

Namaste. My name is....... I am from National Disaster Risk Reduction Centre (NDRC Nepal) and we are conducting the needs assessment for the project on behalf of WVI Nepal. The purpose of this needs assessment is to explore the status of the local level disaster risk management (DRRM) system, the impact of disaster mostly floods and landslides with a focus on its effect on the most affected groups. All the discussions will be recorded, which will be transcribed and translated. All the recordings will be deleted once the recording is translated into English. The information provided will be confidential and we will not share any personal identifiers anywhere throughout the report. Your participation in this discussion is voluntary

and you can quit the discussion anytime when you feel uncomfortable. Further, you can skip any questions you wish not to answer. But we believe that you will provide an open answer to all of the questions.

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

Do you provide consent for further discussion? if yes, Name:

Signature:

# **Opening Question:**

Yes

No

What are the major hazards of this Municipality in the last ten years? Could you explain the trend, frequencies, and magnitude of these hazards? And what were the impacts (loss and damage) of these hazards in the community?

# Main Questions:

- Who are the most vulnerable Household (HH) and or marginalized groups in the target areas? Is there any mitigation and preparedness plan focusing on them? (Probe: If yes, could you explain more about it?)
- Has the Municipality conducted any participatory risk assessment in all wards of the • Municipality?
- Is there any form of Early Warning System installed in the Municipality? If yes how is the information disseminated?
- In the absence of EWS, how are LGs accessing early warning information to initiate the • early action interventions/DRR response system?
- How are the LG using provincial and federal resources in managing and consolidating preparedness and response plans? (Probe: if not why?)
- How is the LG coordinating with the provincial and federal government during: a) Planning & preparedness and
  - b) Response to disasters?
- Is the LG implementing shock responsive social protection (SRSP) and protection concerns (women, children, PwD) in emergencies? What is the key learning from implementing these interventions?
- What other risk-informed approaches are being implemented?
- What is the field level (implementation) challenges related to local Disaster Risk Management governance for risk-based preparedness and anticipatory action, focusing on flood and landslides?
- Who are the possible stakeholders including private sectors for disaster preparedness and response and how are they being mobilized?
- How is the DMIS (Disaster Management Information System) managed in the Municipality? Is this information linked up with the **Bipad** portal?
- Have there been any research activities on DRR conducted? What is the way forward for the promotion of such activities?
- How does the LG manage and allocate the resources for DRR? What is the status of resources management in the Municipality for preparing and responding to Disasters?
- Is there any practice to work on the public-private sector together for risk reduction and response?
- How are technological innovations being used for disaster preparedness and responses? What are the gaps and requirements with a focus on sustainability?

- What are the existing legal instruments (Acts/Policies/Strategy/Guidelines and Directives) and their implementation status in the local Palikas? What are the current challenges?
- What about the status of the Disaster management fund in the Municipality? Is it established? If yes what about the disaster management fund operational Guideline?
- How is the disaster management fund mobilized, is it on an ad-hoc basis, only for disaster response, or for disaster preparedness as well?
- What are the immediate, mid-term, and long-term needs concerning DRR?
- What are the challenges in reaching out to every household for disaster preparedness and response? What are the ways forward to reaching every household?
- What is the type of capacity-building support needed by the LG or LDMC to:
  - $\circ$  Implement the DRRM act
  - $\circ$  Develop, implement and monitor the progress of LDCRP?
  - $_{\odot}$  Understanding about Humanitarian Standard for effective emergency response
- What has been the recent disaster situation, preparedness, and risk reduction initiatives at the Municipality level?
- What is the ongoing shock responsive social protection intervention and/ or process?
- What are the protection concerns and challenges (women, children, PwD) in emergencies?
- Describe the existing system- DMC, LDCRP, Sectoral contingency plan, municipal EPRP, etc
- Is there any DRR related expert roster in the Municipality?
- Are there any disaster and climate change learning centers?

### **Closing Questions:**

- How do the existing systems support reducing the impact of disaster?
- Anything you want to share more...

### Thank You for the time and cooperation!! Key Informant Interview – Local/Partner NGOs

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

Do you provide consent for further discussion?

Yes if yes, Name:

Signature:

**Opening Question:** 

• What are the major hazards of this Municipality in the last ten years? Could you explain the trend, frequencies, and magnitude of these hazards? And what was the impact (loss and damage) of these hazards in the community?

# Main Questions:

- Who are the most vulnerable HH and or marginalized groups in the target areas? Do they participate in the CDMC/LDMC meeting?
  - If yes, how are the most vulnerable households/marginalized groups engaged in their decision-making process?
- What are some of the obstacles for the most vulnerable HH/marginalized groups to participate in CDMC/LDMC, and why?

b) How can they engage more meaningfully?

- What is the level of awareness/understanding/expectations of most vulnerable households relating to the CDMC/LDMC/LDCRP/Social protection mechanisms?
- Do you know how the LG is coordinating with the provincial, federal government, and local actors during:

a) Planning & preparedness and

b) Response to disasters?

- Was there any initiative undertaken by humanitarian agencies and the government to reduce the impacts of disaster on special target groups to support them in preparedness/responding to disasters in the past 2-3 years?
- Is the existing coordination mechanism effective? If not, what necessary the areas to improve?
- How has COVID-19 impacted (increased or decreased) vulnerabilities to disasters faced by the most vulnerable HHs/marginalized communities
  - What have been their coping mechanisms?
  - What support have they received from LGs?
- What are the gaps/challenges to promote gender equality and social inclusion in disaster preparedness and response?
- Is the LG implementing shock responsive social protection (SRSP)?
  - Are there protection concerns (women, children, PwD) in emergencies? (Probe: access to and control over the Social Protection schemes)

# **Closing Questions:**

- What role has I/NGOs been playing to reduce the impact of flood/landslide?
- How do you see the competence and understanding of NGOs in Disaster Preparedness Actions?
- Anything you want to share more...

# Thank You for the time and cooperation!!

# Key Informant Interview – People with Disability (PwD)

any questions you wish not to answer. But we believe that you will provide an open answer to all of the questions.

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

Signature:

Do you provide consent for further discussion?

Yes	if yes, Name:
No	

### **Opening Question:**

• What are the major hazards of this Municipality in last five years? Could you explain the trend, frequencies, and magnitude of these hazards? And what were the impacts (loss and damage) of these hazards in the community and People with Disability (PwD)?

### Main Questions:

- What are the key challenges faced by the People with Disability (PwD) during and postdisaster? (Probe: lack of food, shelter, protection, WASH-related issues, etc.)
- How was the support from different stakeholders like LG, humanitarian actors during the disaster?
- Who are the key actors while responding to the disaster in the community? How sensitive are these actors during response for PwD?
- Do you know the compositions of the Local Disaster Management Committee (LDMC)? If yes, what is the composition of it?
- Do the most vulnerable households/marginalized groups participate in the CDMC/LDMC meeting? (Probe: If yes, how do they engage in its decision-making process? If they participated somehow and not, what are some of the obstacles for the most vulnerable HH/marginalized groups to participate in CDMC/LDMC, and why and how they can engage more meaningfully?
- What is the level of awareness /understanding /expectations of most vulnerable households /marginalized groups relating to the LDMC/LDCRP/Social Protection mechanisms supporting them in responding/preparing for disaster? (Probe: any example?)
- Do you have any information about the Marginalized population receiving the allowance regarding the social protection scheme during or before the disaster (once it is forecast)?
- Were there any initiatives undertaken by humanitarian agencies and the government to reduce the impacts of disaster on special target groups (PwD) to support them in preparedness/responding to disasters in the past 2-3 years? (Probe: If so could you explain more on it?)

### **Closing Questions:**

- Are there any initiatives that the PwD network undertook to reduce the impact of hazards? (Probe: what are these initiatives and how are this network and PwD involved in it, especially to reduce the impact of flood and landslide?)
- Would you suggest the ways to foster justice in disaster preparedness and response for PWDs
- What are the expectations of the community from the Municipalities and support agencies to reduce the impact of the disaster on PwD and the most affected groups?
- Anything you want to share more...

#### Thank You for the time and cooperation!! Focus Group Discussion: PwD Groups/networks

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

SN	Name	Age	Sex	Disability status (Yes/No)	Consent (Yes/No)	Signature

#### List of Respondents:

# **Opening Questions**

- What are the major disasters and/or hazards/risks in this Municipality in the last 10 years?
  - Explore the trends, frequencies, and magnitude of these hazards/risks
  - $\circ~$  Impacts (loss and damage) from these disasters

### Main questions

- What are the key challenges faced by people with disability during and after the period of disaster?
- Is PwD included in the LDMC at the ward and Municipality level?
- What are some of the obstacles of PwD and other marginalized groups to participate in LDMC and why?
- How can PwD and other marginalized groups engage more meaningfully in the LDMC?
- Who are the key actors in preparedness and responding to a disaster in the community? How sensitive are these actors to the needs of people with disability and marginalized groups while responding to disaster?
- What is the level of awareness /understanding /expectations of most vulnerable households /marginalized groups relating to the CDMC/LDMC/LDCRP/Social Protection mechanisms supporting them in responding/preparing for disaster?
- What were the initiatives undertaken by humanitarian agencies and the government to reduce the impacts of disaster on PwD and other marginalized groups and support them in preparedness/responding to disasters in the past 2-3 years?

- Have any PwD and other marginalized groups in the community received training on DRR/Climate change?
- Is there any form of DRR education (formal and informal) to promote a culture of safety?
- Are there provisions for prepositioning of emergency equipment? If yes, are they PwD user-friendly?
- Is there a culture or practice to conduct comprehensive/Inclusive drill exercises?
- What are the emergency communication and coordination systems that PwD is also part of it?
- Is the DRR information disseminated/promoted that the PwD can understand? What new role of digital media should be for PwD friendly?
- Do you have any information about the Marginalized population receiving the allowance regarding the social protection scheme during or before the disaster (once it is forecast)?
- How sensitive are government and humanitarian actors in addressing the needs of people with disaster during and aftermath of a disaster?

### **Closing Questions:**

- What is the current role of PwD networks to reduce the impact of disaster and how can they be strengthened?
- Ways to foster accountability in disaster preparedness and response for PwDs (What do PwD expect from Municipalities (LGs) and support agencies to reduce the impact of disaster most affected/vulnerable groups?
- Anything you want to share more...

### Thank You for the time and cooperation!!

#### Focus Group Discussion: Elderly Groups/Networks

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

SN	Name	Age	Sex	Disability status (Yes/No)	Consent (Yes/No)	Signature

### List of Respondents:

### **Opening Questions**

- What are the major disasters/hazards/ risks in this Municipality in the last 10 years?
  - Explore the trends, frequencies, and magnitude of these hazards/ risks
    - Impacts (loss and damage) by these events

### Main questions

- What are the key challenges faced by elderly people during and aftermath of a disaster?
- What are some of the obstacles for elderly people and other marginalized groups to participate in CDMC/LDMC and why
- How can the elderly people and other marginalized groups engage more meaningfully in the CDMC/LDMC?
- Who are the key actors in preparedness and responding to a disaster in the community? How sensitive are these actors to the needs of elderly people, and marginalized groups while responding to disaster?
- What is the level of awareness /understanding /expectations of most vulnerable households /marginalized groups relating to the CDMC/LDMC/LDCRP/Social Protection mechanisms supporting them in responding/preparing for disaster?
- Do you have any information about the Marginalized population receiving the allowance regarding the social protection scheme during or before the disaster (once it is forecast)?
- What were the initiatives undertaken by humanitarian agencies and the government to reduce the impacts of disaster on special target groups to support them in preparedness/responding to disasters in the past 2-3 years?
- Have any Elderly People or other marginalized groups in the community received training on DRR/Climate change?
- Is there any form of DRR education (formal and informal) to promote a culture of safety?
- Is there culture or practice to conduct comprehensive drill exercises?
- How sensitive are government and humanitarian actors in addressing the needs of elderly people during and aftermath of a disaster?
- Access to and control over the Social Protection schemes

# **Closing Questions:**

- What is the current role of elderly groups to reduce the impact of disaster and how can they be strengthened?
- Ways to promote justice in disaster preparedness and response for elderly people (What are the expectations of elderly groups from the Municipalities (LGs) and support agencies to reduce the impact of disaster?
- Anything you want to share more...

#### Thank You for the time and cooperation!! Focus Group Discussion: Dalit Groups

Namaste. My name is....... I am from National Disaster Risk Reduction Centre (NDRC Nepal) and we are conducting the needs assessment for the project on behalf of WVI Nepal. The purpose of this needs assessment is to explore the status of the local-level disaster risk management (DRRM) system, the impact of disaster mostly floods and landslides with a focus on its effect on the most affected groups. All the discussions will be recorded, which will be

transcribed and translated. All the recordings will be deleted once the recording is translated into English. The information provided will be confidential and we will not share any personal identifiers anywhere throughout the report. Your participation in this discussion is voluntary and you can quit the discussion anytime when you feel uncomfortable. Further, you can skip any questions you wish not to answer. But we believe that you will provide an open answer to all of the questions.

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

### List of Respondents:

SN	Name	Age	Sex	Disability status (Yes/No)	Consent (Yes/No)	Signature

# **Opening Questions**

- What are the major disasters/hazards/ risks in this Municipality in the last 10 years?
  - Explore the trends, frequencies, and magnitude of these hazards/ risks
  - o Impacts (loss and damage) by these events

### Main questions

- What are the key challenges faced by the people during and aftermath of a disaster?
- What are some of the obstacles for Dalit groups to participate in CDMC/LDMC and why?
- How can the Dalit groups and other marginalized groups engage more meaningfully in the CDMC/LDMC?
- Who are the key actors in preparedness and responding to a disaster in the community? How sensitive are these actors to the needs of Dalit and other marginalized people while responding to disaster?
- What is the level of awareness /understanding /expectations of most vulnerable households /marginalized groups relating to the CDMC/LDMC/LDCRP/Social Protection mechanisms supporting them in responding/preparing for disaster?
- What have been the activities carried out by humanitarian agencies and the government to reduce the impacts of disaster on Dalit groups and support them in preparedness/responding to disasters in the past 2-3 years?
- Have any Dalit members/groups received any capacity-building training on disaster risk reduction or climate change adaptation?
- Is there any form of DRR education (formal and informal) to promote a culture of safety?
- Is there culture or practice to conduct comprehensive drill exercises?
- How sensitive are government and humanitarian actors in addressing the needs of Dalit and marginalized groups during and aftermath of a disaster?
- What are gaps, challenges, and anticipation to promote gender equality and social inclusion in disaster preparedness and response?
- What is the status of accessing the Social Protection schemes?
• Do you have any information about the people from Dalit Community receiving the allowance regarding the social protection scheme during or before the disaster (once it is forecast)?

# **Closing Questions:**

- Ways to promote justice in disaster preparedness and response for Dalit and marginalized population (What are the expectations of Dalit community from the Municipalities (LGs) and support agencies to reduce the impact of disaster?
- Anything you want to share more...

### Thank You for the time and cooperation!!

## Focus Group Discussion: Women's group /Single women Groups

If you have any questions related to this assessment, you can contact the WVI Nepal Assessment team.

SN	Name	Age	Sex	Disability status (Yes/No)	Consent (Yes/No)	Signature		

# List of Respondents:

### **Opening Questions**

- What are the major disasters/hazards/risks in this Municipality in the last 10 years?
  - Explore the trends, frequencies, and magnitude of these hazards/risks
    - Impacts (loss and damage) by these events

### Main questions

- What are the key challenges faced by the people during and aftermath of a disaster?
- What are some of the obstacles for women especially single women and other marginalized groups to participate in CDMC/LDMC and why?
- How can be the women and other marginalized groups engage more meaningfully in the CDMC/LDMC?

- Who are the key actors in preparedness and responding to a disaster in the community? How sensitive are these actors to the needs of women while responding to disaster?
- What is the level of awareness /understanding /expectations of most vulnerable households /marginalized groups relating to the CDMC/LDMC/LDCRP/Social Protection mechanisms supporting them in responding/preparing for disaster?
- What have been the activities carried out by humanitarian agencies and the government to reduce the impacts of disaster on women and support them in preparedness/responding to disasters in the past 2-3 years?
- Have any Women members/groups received any capacity-building training on disaster risk reduction or climate change adaptation?
- Is there any form of DRR education (formal and informal) to promote a culture of safety?
- Is there culture or practice to conduct comprehensive drill exercises?
- How sensitive are government and humanitarian actors in addressing the needs of women, especially single women during and aftermath of a disaster?
- What are gaps, challenges, and anticipation to promote gender equality in disaster preparedness and response?
- Access to and control over the Social Protection schemes.
- Do you have any information about the Marginalized population receiving the allowance regarding the social protection scheme during or before the disaster (once it is forecast)?

## **Closing Questions:**

- Ways to foster justice in disaster preparedness and response for women especially single women (What are the expectations of women from the Municipalities (LGs) and support agencies to reduce the impact of disaster?
- Anything you want to share more...

### Thank You for the time and cooperation!!

### Focus Group Discussion: Youth Groups/networks

If you have any questions related to this assessment, you can contact t WVI Nepal Assessment team.

#### List of Respondents:

SN	Name	Age	Sex	Disability status (Yes/No)	Consent (Yes/No)	Signature

# **Opening Questions**

- What are the major disasters/hazards/ risks in this Municipality in the last 10 years?
  - Explore the trends, frequencies, and magnitude of these hazards/ risks
    - $\circ$   $\;$  Impacts (loss and damage) by these events

# Main questions

- What are the key challenges faced by the people during and aftermath of a disaster?
- What are some of the obstacles for Youths groups to participate in CDMC/LDMC and why?
- How can the Youth groups and other marginalized groups engage more meaningfully in the CDMC/LDMC?
- Who are the key actors in preparedness and responding to a disaster in the community? How sensitive are these actors to the needs of elderly people, Youth, and marginalized groups while responding to disaster?
- What is the level of awareness /understanding /expectations of most vulnerable households /marginalized groups relating to the CDMC/LDMC/LDCRP/Social Protection mechanisms supporting them in responding/preparing for disaster?
- Do you have any information about the Marginalized population receiving the allowance regarding the social protection scheme during or before the disaster (once it is forecast)?
- What have been the activities carried out by humanitarian agencies and the government to reduce the impacts of disaster on Dalit groups and support them in preparedness/responding to disasters in the past 2-3 years?
- Have any Dalit members/groups received any capacity-building training on disaster risk reduction or climate change adaptation?
- Is there any form of DRR education (formal and informal) to promote a culture of safety?
- Is there culture or practice to conduct comprehensive drill exercises?
- How sensitive are government and humanitarian actors in addressing the needs of Youths during and aftermath of a disaster?
- What is the status of Youth Volunteerism for Disaster Preparedness and response, and promoting young cadre for DRRM?
- How effective are the community-level volunteers while responding to emergencies? Any lesson learned on mobilizing to volunteer?

# **Closing Questions:**

- What is the current role of young groups to reduce the impact of disaster and how can they be strengthened?
- What are the expectations of youths from the Municipalities (LGs) and support agencies to reduce the impact of disaster?
- Anything you want to share more...

# Thank You for the time and cooperation!!