

Study on Causes of Climate Vulnerability, Conflict Dynamics and Existing Local Adaptive Capacities of *Dalit* Communities in Nepal



Nepal Report 2022

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Executive Summary

Section A - Research Framework: Samata Foundation is executing “Combating the impacts of Climate Change in Severely Affected Areas of Ganges-Brahmaputra Basin in South Asia” project, also known as TESCAI project, in partnership with the NETZ Partnership for Development and Justice. The project is implemented in Siraha and Saptari districts of Madhesh province, and in Rolpa and Rukum East districts of Lumbini province. The project working areas altogether consist of 16 *palikas* (municipalities/rural municipalities). A total of 21 community-based organizations (CBOs) have been formed in these project *palikas*; and each CBO is led by a *Dalit* Human Rights Defender (DHRD). In each district, a civil society organization (CSO) – a NGO – is facilitating and coordinating the project activities.

Under this TESCAI project, a study entitled “Causes of Climate Vulnerability, Conflict Dynamics and Existing Local Adaptive Capacities of *Dalit*¹ Communities in Nepal” was conducted to research and document the experiences and perspectives of *Dalit* communities at grass roots level in Nepal with regard to climate change and climate justice, and share the findings with relevant policy makers and the public at local and national levels. The research was carried out in the working areas of the TESCAI project. The focus was more on qualitative methods. Both primary and secondary sources of information were explored. The data/information collection techniques and tools used included (i) household survey using semi-structured questionnaire, (ii) focus group discussions using open-ended checklists, and (iii) key informant interviews using open-ended checklists. The household surveys were conducted with 133 respondents, 21 focus group discussions were held with 252 participants, and 147 key informants representing different stakeholders at local (*palika* and district), provincial, and federal levels were interviewed. The field data/information were collected in August 2022 simultaneously in all the four project districts.

Section B-Causes of Climate Vulnerability and Conflict Dynamics of *Dalit* Communities

Existing Social Structure: The societies in the study area are composed of different caste groups with pronounced hierarchy. *Dalits* are placed at the lowest strata in the hierarchy. Caste based discrimination and untouchability practices are widely rampant.

Livelihood and Economic Condition of *Dalits*: Majority of *Dalits*, particularly in the Terai are landless. They either live in the land of landlords or live in “Ailani” (public) lands. Even if they own land, *Dalits* have much less land compared to non-*Dalits*. Most of the *Dalits* do not have the land ownership certificates. The crops they grow last only for less than three months.

Local Experiences on Climate Change Trends: The respondents have observed remarkable changes in climate over the past 30 years. The summer and winter temperatures have increased. The rainfall pattern has changed with an overall increase in annual rainfall.

¹ *Dalits* are the communities/social groups who in Nepal have for centuries suffered from caste-based discrimination and untouchability and the resultant atrocities, exploitation, and exclusion, that have marginalized them the most in social, economic, political, cultural and all spheres of life and have deprived them from the mainstream of national development. 26 caste groups in Nepal are categorized under this community of people, known as *Dalits*. *Dalits* constitute about 14% of the national population.

Local Perspectives on Climate Change Future Scenario: The respondents are of the opinion that the summer and winter temperatures will continue to increase, the rainfall pattern will continue to change, and overall rainfall will continue to increase in future.

Existing Climate Induced Risks: The rapid onset risks/hazards that are frequently observed in the project area are flash floods/inundations in Siraha and Saptari districts (in flat lands/Terai plains), and land slides in Rolpa and Rukum East districts (in the hilly/mountainous areas). The slow onset risks/hazards reported are drought, desertification, epidemic diseases, and insect/pest infestations.

Impacts of Climate Change: Different climate-induced hazards/risks have affected differently. The impacts of drought are: low food production, drying of water sources and human health issues. Floods have eroded river bank settlements, damaged infrastructure and ecosystem; and caused loss of crops, land desertification, loss of human lives, loss of property, loss of livestock, and outburst of epidemic diseases. Likewise, landslides have damaged settlements, infrastructure, roads, and ecosystems. The human health issues have resulted increased mortality rate, lower food availability and limit to worker productivity.

Coping Strategies adopted by Dalits: The coping strategies adopted by *Dalits* are: seasonal migration to other cities in Nepal for wage earning; temporary migration to India, Middle East and other countries for employment; growing drought/flood tolerant crops; temporary migration to safer places during or prior to disaster; selling of assets, livestock or other properties, ornaments; and storage of grains for the drought and flood situations.

Causes of Climate Vulnerability: *Dalit* communities are highly vulnerable to climate induced risks/disasters. They are highly exposed to climate change because of marginal location of their settlements, and poor quality of housing structure. They are highly sensitive to climate changes because of their marginalized position in the society, and the nature of their occupation – the menial jobs that they undertake. Their adaptive capability is very low because they possess little or no land, they mostly work as casual farm labor, and they lack knowledge and resources to adapt to climate change.

Drivers of Climate Vulnerability: The drivers of climate vulnerability of *Dalit* communities are: poverty and poor economic conditions, voicelessness (inability to put forward their grievances/sufferings to authorities/agencies), low access to resources, poor political influence, caste based discrimination, poor social network (isolated and boycotted conditions), lack of education/knowledge, geographical remoteness (no roads in hills), lack of information on climate change induced risks and disasters, and lack of preparedness.

Causes of Climate related Conflict Dynamics: The causes for the conflict dynamics reported by the respondents are: discrimination based on caste (social hierarchy); inadequate/inappropriate/inequitable relief package/ materials; biased behaviour of the local representatives; increased difficulty in livelihood (shortage of fertile and safe land; loss of economic opportunities; shortage of food materials); delayed responses of government, CSOs and other aid agencies during disasters; inadequate policy frameworks and mechanisms to address impacts of climate changes.

Section-C: Existing Local Adaptive Capacities and Vulnerabilities as well as Climate-related Conflict Dynamics of *Dalit* Communities

Existing Local Adaptive Capacities: *Dalits* in Madhesh and Hills face the disasters every year. They have no options other than continuing to reside in the same locality even after disasters. Both in Terai and Hills, *Dalits* stockpile the crops (grains) to be used during dearth period especially in winter seasons. In Terai, the base-level of the houses are raised to be safe from inundation. Before the rainy seasons, the houses are repaired with mud and bamboos. In hills, the roofs are repaired with fresh materials like thatch or corrugated sheets. The walls are reworked with mud and stones. To prevent the damages by rivers, bamboo, gabion or sand filled sacks are placed at riverbanks to create temporary embankment. The sheds of animals and birds are shifted to safe places. The community specifies a safe area (mostly schools) for shelter during floods and landslides.

Perception on Differential Impacts of Climate Change: Most of the stakeholders believe that *Dalits* are already in marginalized conditions, and climate –induced disasters get them more marginalized. The distributions of the relief packages are not equitable. Stakeholders believe that *Dalits* due to their poor economic condition, are less resilient, have low adaptive/absorptive capacities. They also realize that the government needs to work on rehabilitation focusing on *Dalits* for the longer term solution. The study has reflected that the local elected members are, sometimes, biased and have no concept of *Dalits* being differentially impacted by the climate-induced disasters.

In monetary terms, the losses and damages incurred by *Dalits* may look small compared to non-*Dalits*, but in reality the losses and damages incurred by *Dalits* lead them to an absolute homelessness and a complete loss of livelihoods; but for non-*Dalits*, there could be several other places owned by them or their relatives where they could find a safe shelter and also could find livelihood opportunities through their network of well-to-do and influential relatives and networks.

Perspectives in Relation to Climate Justice: The study indicates the cases of climate injustice resulting from inequitable distribution of relief materials during disaster. It also reflects that government does not have preparedness plans targeting the *Dalit* communities. It also reveals that there is no long term plan with the government for disaster reduction/management and to cope with climate change. Each year reactive measures are in place during or prior to the disasters. The rehabilitation measures/actions are not adequate. There is a lack of adequate information on risks, hazards and plans (disaster mitigation plans of local governments)

Specificities of Social Structure Leading to Differential Impacts: *Dalits* falling under the lowest rung of the societal hierarchy are more affected by the climate change. There is also an inequality from the gender perspective. When disasters occur, more women die than men, reflecting women's social exclusion. They are less able than men to run, often have not learned to swim, and have behavioral restrictions that limit their mobility and voice in the face of risk. There are gendered differences also in the rehabilitation and recovery phases after disasters: women and girls are particularly vulnerable in post-disaster situations because they lack land and other assets that could help them cope, making them more likely to face food shortages, sexual harassment, unwanted pregnancies, trafficking and vulnerability to

diseases and could be forced to drop out of school or marry earlier. Dalit women are affected the most.

Implications of Climate Change on Economic, Social and Cultural (ESC) Rights of Dalits: The study has explored how the economic, social and cultural rights of *Dalits* have been affected by climate change. The respondents of the household survey and focus group discussion participants have reflected that there has been severe implication of climate change on economic rights (e.g., rights to work, rights to receive a fair wage, rights of a safe working condition) of *Dalits*. They also expressed that their social rights, e.g., right to social security, right to protection of the family, right to an adequate standard of living (freedom from hunger, access to clean water, adequate housing, protection of property) have been affected. Their cultural rights, e.g., rights to education and right to take part in cultural life are also severely affected due to climate change.

Existing Climate Related Laws and Policies: There are several climate related laws and policies in Nepal, e.g., Nepal Climate Change Policy 2019, Nepal Framework on Local Adaptation Plan for Action 2019, Climate Change Strategies and Work Plan (2077-2087) for Gender Equality and Social Inclusion, National Adaptation Plan (NAP) 2021-2050: Nepal. All these laws and policies are framed under the overarching principles and guidance of the Constitution of Nepal 2015. The above laws and policies have been deeply reviewed during the course of this study, and their salient features have been highlighted in the report.

Existing DRRM Related Laws and Policies: Important laws and policies related to disaster risk reduction and management are: Disaster Risk Reduction and Management Act 2017, Disaster Risk Reduction and Management Rules 2019, Disaster Risk Reduction Strategic Action Plan (2018-2030), National Policy for Disaster Risk Reduction 2018, National Disaster Response Framework 2013 (Amended 2019), Local Governance Act 2017, Fifteenth Periodic Plan (2019-2023). These legal documents have been thoroughly reviewed and summarized in this study report.

Existing Institutional Structure for Climate Change Management: The existing institutional structure for climate change management at (i) federal level are: Environment Protection and Climate Change Management National Council (EPCCMNC), Inter-Ministerial Coordination Committee (IMCC), Ministry of Forest and Environment (MoFE), Climate Change Management Division (CCMD)/MoFE; (ii) provincial level are: Provincial Environment Protection and Climate Change Management Council (PEPCCMC), Provincial Climate Change Coordination Committee (PCCCC), Thematic Ministry; and (iii) local level are: District Climate Change Coordination Committee (DCCCC), Local level Executive Board. The governance system of these institutions are summarized in this study report.

Existing Institutional Structure for DRRM: The existing institutional structure for disaster risk reduction and management at (i) federal level are: National Council for Disaster Risk Reduction and Management (NCDRRM), National Disaster Risk Reduction and Management Executive Committee (NDRRMEC), National Disaster Risk Reduction and Management Authority (NDRRMA); (ii) provincial level are: Provincial Council for Disaster Management (PCDM), Provincial Disaster Management Committee (PDMC); and (iii) local level are: District

Disaster Management Committee (DDMC), Local Disaster Management Committee (LDMC). The governance system of these institutions are summarized in this study report.

Analysis of Climate Change Management Stakeholders: The study report has listed the climate change management stakeholders functioning at different levels of government (e.g., EPCCMNC, IMCCCC, MoFE, CCMD, Ministry of Finance and NPC at federal level; PEPCCMC and PCCCC at provincial level; and DCCCC, Executive Board/Forest, Environment and Disaster Management Section at local level). The report has also analyzed their roles and responsibilities.

Analysis of DRRM Stakeholders: The study report has listed the disaster risk reduction and management stakeholders functioning at different levels of government (e.g., NDRRMC, NDRRMEC, Ministry of Home Affairs, Ministry of Federal Affairs and General Administration, and Line Ministries at federal level; Province Disaster Management Council, and Province Disaster Management Executive Committee at provincial level; and DDMC, LDMC at local level). The report has also analyzed their roles and responsibilities.

Section-D: Conclusions and Recommendations

Conclusions

- There is differential impacts of climate change. *Dalit* communities have suffered the most due to climate change.
- Climate injustice is widely prevalent with *Dalits*
- Existing laws and policies do not adequately deal with the issues differential climate impacts and climate injustice
- Existing institutional structures are not able to address the issues of differential impacts and climate injustice.
- Stakeholders are currently not well informed about the issues of differential impacts and climate injustice.

Recommendations

- Reforms are needed in Laws/Policies/and Institutional Structure to address the issues of differential impacts and climate injustice
- Stakeholders require to be sensitized and informed about these issues
- More in-depth, qualitative as well as quantitative researches are needed to generate evidences, facts and figures on differential climate impacts and climate injustice

Abbreviations

IDSN:	International Dalit Solidarity Network
DRSCS:	Development Research Communication and Services
MJSKS:	Mahideb Jubo Somaj Kallayan Somity
DASCOH:	Development Association for Self-reliance, Communication and Health
DHRD:	Dalit Human Rights Defender
CBO:	Community Based Organization
CSO:	Civil Society Organization
NNDSWO:	Nepal National <i>Dalit</i> Social Welfare Organization
UN:	United Nations
IPCC:	International Panel on Climate Change
GDP:	Gross Domestic Product
GLOF:	Glacier Lake Outburst Flood
IDSN:	International Dalit Solidarity Network
NCDHR:	National Campaign for Dalit Human Rights
NDW:	National Dalit Watch
ESC:	Economic, Social and Cultural
TESCAI:	
NETZ:	
HLS:	Household Level Survey
KII:	Key Informant Interview
FGD:	Focus Group Discussion
SSP:	Senior Superintendent of Police
SP:	Superintendent of Police
DSP:	Deputy Superintendent of Police
NAP:	National Adaptation Plan
LAPA:	Local Adaptation Plan for Action
GESI:	Gender Equality and Social Inclusion
NDC:	Nationally Determined Contribution
UNFCCC:	United Nations Framework Convention on Climate Change
NGO:	Non-Government Organization
SFDRR:	Sendai Framework for Disaster Risk Reduction
DRRM:	Disaster Risk Reduction and Management
DRR:	Disaster Risk Reduction
NDRF:	National Disaster Reduction Framework
EPCCMNC:	Environmental Protection and Climate Change Management National Council
IMCCCC:	Inter-Ministerial Climate Change Coordination Committee
T/CWG:	Thematic and Cross-cutting Working Group
CCMD:	Climate Change Management Division
PEPCCMC:	Provincial Environmental Protection and Climate Change Management Council
PCCCC:	Provincial Climate Change Coordination Committee
DNA:	Designated National Authority
REDD:	Reducing Emissions from Deforestation and forest Degradation
NCDRRM:	National Council for Disaster Risk Reduction and Management
NDRMA:	National Disaster Reduction and Management Authority
PDMC:	Province Disaster Management Council

PDMCom: Province Disaster Management Committee
EWS: Early Warning System
DDMC: District Disaster Management Committee
LDMC: Local Disaster Management Committee
EOC: Emergency Operation Center
CCDMMRC: Climate Change Data Management, Monitoring and Reporting
Centre
MoHA: Ministry of Home Affairs
DCMD: Disaster and Conflict Management Division
MoFAGA: Ministry of Federal Affairs and General Administration
CNDRC:
PDMEC: Province Disaster Management Executive Committee
SPSS: Statistical Package for the Social Sciences

SECTION-A: RESEARCH FRAMEWORK

A1. BACKGROUND INFORMATION

A1.1 Caste Systems and *Dalits*

A1.1.1 Global Scenario on Caste System

Caste system is one of the oldest forms of social division in the world. A caste-system functions as a 'hidden apartheid' that divides people from birth into unequal social groups where those at the bottom of the system, known as *Dalits* in South Asia, are historically considered inferior, impure and polluting to other caste groups. The division of society into different castes is a global phenomenon not exclusively practiced within any particular religion or belief system. In South Asia, caste discrimination is traditionally rooted in the Hindu caste system, according to which *Dalits* are considered 'outcasts'. However, caste systems and the ensuing discrimination have spread into Christian, Buddhist, Muslim and Sikh communities as well. Caste-based discrimination is widespread in South Asia, but it also exists across the globe in Africa, other parts of Asia, the Middle East, and the Pacific and in countries like Nigeria, Senegal, Mauritania, Yemen and Japan. There are an estimated 260 million people affected by being born into a historically 'untouchable' status, in caste systems across the world (International Dalit Solidarity Network, 2019).

The *Dalits* of South Asia constitute the majority of victims facing this form of structural discrimination, which leads to marginalization, social and economic exclusion and limited access to basic services, including water and sanitation. Discriminatory practices include physical and social segregation, restrictions on occupation or enforcement of certain types of menial jobs as well as widespread caste-based violence. Caste-based discrimination, therefore, continues to involve massive violations of civil, political, economic, social and cultural rights. Those at the bottom of the system may be forced to do the most dirty and hazardous jobs, and may be subjected to modern slavery. Due to exclusion practiced by both state and non-state actors, they also have limited access to resources, education, services, political participation and development, keeping many in severe poverty. *Dalit* women are particularly at risk of severe rights violations, including violence and sexual abuse, as they suffer the compounded effects of gender and caste-based discrimination.

While caste-based discrimination has been banned in many countries, the realities on the ground are not reflecting this as often the legislation is either not implemented or implementation is inadequate or inhibited by deeply rooted caste bias in law enforcement or the systems of justice.

A1.1.2 *Dalits* in Nepal

Nepal is a landlocked country that lies along the slopes of the Himalayan Mountains between China and India. With a land area of 147,181 km², the country has the largest elevational gradient in the world, extending from tropical alluvial plains as low as 67 meters above sea level (m asl) in the lowland *Tarai* to the alpine-nival earth's highest peak, Mount Everest at 8,848.84 m asl. The country's total population was estimated to be 30 million in 2020. Socio-culturally, the country has over 126 ethnic groups and castes and 123 languages. Among these caste/ethnic groups, 26 caste groups constitute a community of people, known as *Dalits*.

The *Dalits* in Nepal have for centuries suffered from caste-based discrimination and untouchability and the resultant atrocities, exploitation, and exclusion. Caste-based segregation continues in a form of marriage segregation, inter-caste marriage violence, denial of access to temples, religious and cultural functions, denial to access public utilities and educational facilities, blocking access to housing/residential facilities, occupational segregation and many other forms discrimination. The caste-based discrimination and untouchability are rampant in the country, and meaningful execution of existing laws and regulatory provisions to end this heinous crime remains far from reality. With as high as one-fifth (officially 13.6%) of the total population, effective mainstreaming of *Dalits* in various spheres of national development still remains a wishful dream.

Various reports, statistics, facts and figures reveal that *Dalits* in Nepal, who bear the brunt of caste-based discrimination and untouchability, remain the most backward in social, economic, educational, political and religious spheres and are deprived of human dignity and social justice. *Dalits*, for decades, have had the lowest level of political participation compared to other castes/ethnicities. Landlessness among *Dalits* is extreme –36.7% among the Hill *Dalits* and 41.4% among *Madheshi Dalits*, and those that do hold land have very small landholdings. In Nepal approximately 42% of *Dalits* fall below the poverty line, which is 17% point higher than that of the national average (25.2%). An average per capita consumption in Nepal is Rs. 34,187 per year, yet *Madheshi Dalits* consumption per capita is Rs. 23,106, followed by Hill *Dalits* at Rs. 25,298 per annum. *Dalits'* literacy rate (6 years and above) is 52.4% compared to the national average of 65.9% and 34.5% for *Madheshi Dalits*. Literacy rate of *Dalit* women is 45.5%, but from *Musahar* and *Dom* communities, it is only 17.4% and 17.9%, respectively. Children from *Dalit* communities face discrimination at school by teachers and peers. *Dalit* children are not permitted to drink water from public taps, are addressed in a rude manner, and placed in separate lines. Ultimately, their learning achievements become slow, often leading to dropout. Only 39.7% of Hill *Dalits* have access to health care services. As high as 43% of *Madheshi Dalits* and 14.6% of Hill *Dalits* experience discrimination when receiving medical treatment in local health services. Although the overall access to drinking water of Nepalese people has significantly improved, only 14.1% of *Madheshi Dalits* have access to safe drinking water. *Dalit* population also has a very minimal access to the improved toilet facilities - just 5.5% of *Madheshi Dalits*, compared to 30.6% of Hill *Dalits* and 41.7% of the national average (DCSOC, 2015).

A1.2 Samata Foundation and NETZ Partnership

In the backdrop of the widespread exclusion and exploitation of *Dalits* and the need to effectively address their concerns in Nepal, Samata Foundation was established in 2009 with a vision of “creating a just and inclusive society free from all forms of discrimination”. Over a period of 13 years, the Foundation has emerged as a leading, independent and prominent think tank - focusing on social inclusion and issues related to *Dalits* and marginalized groups - which the Foundation believes, has a crucial role in giving concrete and scientific inputs to develop/improve policies both in public and private sectors. The Foundation has become a devout research organization dedicated to conducting researches, both empirical and policy, and discourses on issues related to representation, empowerment, justice and rights of *Dalits* and other marginalized communities. It has executed several researches generating new knowledge fulfilling information gaps on socio-cultural, economic, and various other aspects of the target groups, and engages in evidence-based informed policy advocacy. It has special

focus on youths and creating new generation leaders. Women's empowerment and capacity enhancement constitute one of the core elements in the projects/programs implemented by the Foundation. It has been working in all the seven provinces, and has several on-going projects supported by various national/international donors/agencies. Backed with a multidisciplinary, multi-ethnic, and gender-balanced team of working team, and guided by a distinctly qualified, experienced and visionary board of directors and well-wishers, Samata Foundation has been expanding its outreach to local, national and international levels year after year through its research undertakings on contemporary issues of *Dalits* and marginalized communities. More about the organization can be found from web site: <https://samatafoundation.org>

Samata Foundation has partnered with NETZ Partnership for Development and Justice for implementing **“Combating the impacts of Climate Change in Severely Affected Areas of Ganges-Brahmaputra Basin in South Asia”** project. This three-year transnational project, which commenced in January 2021, is being implemented in Nepal, Bangladesh and India with an overall objective of significantly increasing the economic and social resilience of the poorest population affected by the consequences of climate change in the Ganges-Brahmaputra Basin, and strengthening civil society to protect and promote the rights of marginalised groups affected by climate change. The project is implemented by Development Research Communication and Services (DRSCS) in India, and by Mahideb Jubo Somaj Kallayan Somity (MJSKS) and Development Association for Self-reliance, Communication and Health (DASCOH) Foundation in Bangladesh. In Nepal, the project focuses on *Dalit* communities who are the most climate vulnerable, and economically, socially and culturally the most marginalized communities in the country. The project is being implemented in Siraha and Saptari districts of Madhesh Province, and East Rukum and Rolpa districts of Lumbini Province. The working areas altogether consist of 16 *palikas* (municipalities/rural municipalities) - 4 *palikas* in Siraha, 5 *palikas* in Saptari, 3 *palikas* in East Rukum and 4 *palikas* in Rolpa. There are a total of 21 community-based organizations (CBOs), spread over 21 wards of the project *palikas*. These CBOs are formed by *Dalit* families of the respective settlements. Each CBO is led by a *Dalit* Human Rights Defender (DHRD) who is a member of the community, and is the main contact person for the project activities. In each district, a civil society organization (CSO) – a NGO – is facilitating and coordinating the project activities in the respective district: *Dalit* Jan Kalyan Yuwa Club in Siraha, Nepal National *Dalit* Social Welfare Organization (NNDSWO) in Saptari, Srijanshil Yuwa Sanjal in East Rukum, and *Dalit* Mahila Sachetana Kendra in Rolpa. At the central level, the project is led by a project coordinator with the guidance of a senior advisor.

A1.3 Climate Change

A1.3.1 Global Climate Change Scenario

Climate change is one of the most pervasive and growing threat to the world today. All countries, especially the developing countries, are affected by its adverse impacts including persistent drought and extreme weather events, rising sea levels, and coastal erosion. These increasing adversities are further threatening food security, water, energy and health, and more broadly efforts to eradicate poverty and achieve sustainable development. A recent report of the UN's climate science body - the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) on the physical basis of climate change

concluded that human influence has warmed the climate and has contributed to many observed changes in weather and climate extremes. The increase in global surface temperature is a contributor to changing precipitation patterns, and climate warming is associated with declines in snow and ice cover (V.P. Zhai, 2021).

Changes in the Earth's climate has adverse impacts on the people and all living beings in the world, but due to its geophysical conditions and socio-economic challenges, South Asia is the world's one of the regions which have been affected the most by the consequences of climate change. In the last 10 years alone, 700 million people - almost half of the region's population - have been affected by one or more climate-related disasters. The World Bank estimates that climate change could drive 62 million people in South Asia into extreme poverty over the next decade. Temperatures have been rising across the region. The symptoms of climate change are multifaceted, including sea-level rise, shifts in average temperature and precipitation patterns, and increasing frequency of extreme events such as storms and droughts. These climatic changes have profound effects on societies, such as greater frequency of flooding events, more year-to-year variability in agriculture productivity, a greater demand for water (which may be more difficult to meet), and increased instances of heat-related medical problems. Furthermore, these and other climate change impacts will cause economic disruption in South Asia, with the effects continuing to grow over time to continue increasing for the next several decades under all plausible climate scenarios (Mosier, 2018).

A1.3.2 Nepal's Climate Context

Nepal is one of the most climate change vulnerable countries in the world. According to the ND-GAIN Country Index, which measures a country's vulnerability to climate change and also the national willingness to use investments effectively for adaptation measures, Nepal ranks 126th (score 41.7) out of 182 countries in 2020 (University of Notre Dame, 2022). The climate impacts are more profound due to the country's mountainous topography and its abrupt ecological and climatic transitions, combined with a low level of development and a reliance on natural resource-based livelihoods and embedded poverty. Nepal has already experienced changes in temperature and precipitation at a faster rate than the global average. The impacts of the climate changes range from drought in *Tarai* region, to melting glaciers, to reductions in snowfall that impact livelihoods, tourism, and ecology in the mountain regions, to changes in the amounts and intensity of rainfall contributing to floods and landslides in the mid-hills and downstream. Nepal's changing climate influences the country's main ecosystems (forests, grasslands, rangelands, wetlands, mountains and agro-ecosystems). Increasing temperatures and rainfall variability have resulted in shifts in agro-ecological zones, prolonged dry spells and higher incidence of pests and diseases. Nepalese lives and livelihoods are at high risk from these impacts that include reductions in agricultural production, food insecurity, damaged infrastructure, and reduced water supply, among many. The estimated costs of such events have been large, equivalent to approximately 1.5 percent of current GDP per year (USAID, 2017).

About 80% of the population live in rural remote areas and are exposed to the risk of natural hazards such as earthquakes, droughts, floods, landslides, extreme temperature, and glacier lake outburst floods (GLOFs). Floods, landslides and drought are principal climate hazards in the country. More than 80% of property loss due to disasters is attributable to climate hazards, particularly water-related events such as floods, landslides, and GLOFs that displace

people, and destroy homes, farmland, and other essential infrastructure. The Nepal vulnerability and risk assessment (VRA) report 2021 (MoFE, 2021) stated that on average Nepal loses 647 lives and sustains economic losses of over NPR 2,778 million each year due to climate-induced disasters. The report asserted that forest fires are another common hazard in the country that occur more frequently in the low-lying south-west regions and cause severe harm to ecosystems and livelihoods. As temperatures rise in Nepal, acute climate hazards such as extreme weather events (including heavy rainfall, snowstorms, high winds, hailstorms, and increased lightning), heat waves, cold waves, floods, landslides, and forest fires are expected to increase in frequency and severity; and chronic or slow onset hazards such as drought, changes in precipitation patterns, snow cover changes, glacier retreat, and GLOFs, are expected to intensify. Multiple events may occur simultaneously across regions, which could be catastrophic. Multi-hazard mapping with the data period 2011-2021 shows that the low-lying south-east districts are highly impacted by multiple climate induced hazards. These climate hazards will trigger biophysical and socio-economic impacts including loss of life and harm to human health; reductions in food production; damage to livelihoods and well-being; loss of biodiversity; changes in ecosystems and availability of natural resources; damage to and destruction of property and infrastructure; and reduction in services. The future economic costs of climate change in Nepal could be very large, equivalent to an additional 2% to 3% of current GDP per year by 2050. The climate hazards will interact with and cause harm to vulnerable systems and vulnerable communities living in mountainous and low land *Tarai* districts (MoFE, 2021).

A2. INTRODUCTION

A2.1 Caste and Climate Dynamics

Climate change has, today, become one of the most dangerous challenges to life. While it is common knowledge that climate change has no bedfellows and affects everyone, it does so unequally. The reality is that it's the poorest of the poor who are affected most by climate change (World Bank, 2021). Case studies carried out by the World Bank in Bangladesh, India and Honduras has reflected that poor people lose relatively more to disasters when affected. The results show that in absolute terms, wealthier people lose a larger amount of assets or income because of a flood or storm, which is expected as they have more assets and higher incomes. But in relative terms, poor people (who hold more vulnerable and lower quality assets, who depend on fragile infrastructure and are not well protected, who depend on agricultural and ecosystem incomes that are particularly vulnerable to hazards, who are more vulnerable to rising food prices after a disaster, and whose children are particularly vulnerable to indirect impacts through health and education) always lose more than non-poor people from floods and storms. It is these relative losses, rather than absolute numbers, that matter more for livelihoods and welfare (Stephane Hallegatte, 2016).

On April 25, 2015, a magnitude 7.8 earthquake struck Nepal. In the aftermath of the earthquake, the poor and the marginalized sections of Nepal suffered immense losses due in large part to an absence of adequate knowledge on safety protocols, including how to access evacuation sites, emergency relief and rescue services, and post-disaster assistance packages.

These anecdotes bring to the fore questions about who disproportionately suffers due to climate change or disaster events (Keiko Sakodqa, 2021).

Climate change has affected differently to different sect of people. The *Dalits* and other marginalized communities, who have less resilience capacities and resources, are victimized the maximum, and their plight to adapt to climate change, recover from climatic shocks and stresses, and access rescue and relief amenities during the climatic disaster are largely unaddressed. *Dalits* are more vulnerable to both natural and human-made disasters compared to non-*Dalits* due to their marginalized social position; the location of their homes, usually in marginal lands in the periphery of settlements; their vulnerable occupations, such as rubbish and sewage disposal, casual farm labour; and the nature of their housing. *Dalits* often have little or no land rights.

Researches carried out in India indicate that those from scheduled castes (*Dalits*) and those from poorer rural backgrounds have significantly smaller carbon footprints. Despite a lack of contribution to the problem, they continue to suffer the consequences of pollution (health problems which can range from breathlessness, a 'choking' sensation and skin irritation, among a range of other issues) without possessing the means of accessing proper medical care. This is just one example of the many injustices which are suffered by lower caste individuals who continue to bear the devastating effects of rapid climate change. There is an obvious link beginning to form between caste and experiencing the adverse effects of climate change (Dhavde, Caste & Climate Change, 2021).

In an another research carried out in India, it has been reflected that critical issues concerning *Dalits* in humanitarian crises include unequal or denied access to health services, shelter and housing, clean water and education; no compensation or restitution due to e.g. lack of documentation to claim entitlements related to land and property; lack of protection of rights of *Dalits* who after major natural disasters embark on inter-state migration or are displaced internally. The research further states that *Dalits* are more exposed to disasters than other groups, and less likely to receive humanitarian aid. Laws that are meant to protect them are not properly implemented, and humanitarian agencies do not always understand the particularly vulnerable situation of *Dalits*. Humanitarian initiatives, however, can effectively address gaps and inequalities in vulnerability by ensuring that such initiatives specifically take into account, and are targeted to, the needs of excluded persons and groups. Those who are most vulnerable and marginalized need primary attention when a disaster strikes, both because the impact of the disaster is likely to be higher on them than others, and because of the likelihood that they find themselves excluded from response and recovery efforts (IDSN, 2013).

In an another report, it is stated that *Dalits* in India are highly vulnerable to climate change impacts. Floods affect the *Dalits'* habitat the most as they are low-lying areas. As the *Dalits* are denied access to services, relief does not reach them in time. *Dalits* are not allowed to take shelter in upper caste areas during the floods and they are denied shelter by the upper caste people even in the common shelters set up by the government. *Dalit* women taking shelter from floods are also attacked/ harassed by upper caste men. In the aftermath of the floods, they don't have access to clean drinking water, and are not allowed to take water from the common bore-well because of caste-based discrimination. In some areas the *Dalits* even started drinking flood water during the 2007 floods in Bihar. Other climate related disasters

such as cyclone and drought also affect the *Dalits* as much as the floods. Eighty five per cent of *Dalits* are daily wage agricultural labourers, and when there is a drought they are out of work and have no access to relief as well. They are landless and don't have stored food grains to tide them through the drought. Climate-related disasters affect their right to health, education, land and livelihood (NCDHR, 2008).

A study carried out by National *Dalit* Watch in India states *Dalit* stakes in climate change are high due to their dependence on natural resources for livelihoods. Though climatic uncertainties have implications on many sectors, rural livelihoods are most affected by changes in climatic patterns. *Dalits*, who are highly dependent on earnings from agricultural labour and, livestock rearing dependent on forests and other common lands have fewer resources and options to combat the damages to the resource base because of climate change. The internalization of discrimination and exclusion continue to deprive them of their social, economic and political rights and opportunities. Their locational, social and economic vulnerabilities place a greater strain on their adaptive capacity to climate change and ability to deal with shocks, stresses and change. The study further states that the present institutional mechanisms for disaster management do not recognize caste induced vulnerabilities. Casualties and damage or loss of properties, infrastructures, environment, essential services or means of livelihood on such a scale is beyond the normal capacity of the affected *Dalit* communities to cope with. Unlike indigenous communities, the state neither recognizes *Dalit* communities as local minority communities nor acknowledges their contribution to biodiversity conservation (NDW, 2013).

A2.2 Conceptual Premises

Researches conducted in India and else where in the world reflect that impacts of climate change are different to different sects of people. The poor and the marginalized communities have suffered the most from the adversities of climate change. These voiceless marginalized communities who need rescue, relief, and rehabilitation the most following the climatic shocks and hazard, are often highly neglected, and they grossly suffer from climate injustice because of lack of or inadequate access to relief and rehabilitation measures provided by state and non-state actors.

In Nepal as well, the situation is apparently no different. It has been widely realized that *Dalits* who are the poorest and the most marginalized communities with less resilience capacities and resources, have suffered the most, and their plight to adapt to climate change, recover from climatic shocks and stresses, and access rescue, relief and rehabilitation amenities before, during and after the climatic disaster, is largely unaddressed. But there is only a little evidence to support this proposition. There is grossly a lack of reliable facts and figures to justify that climate change has resulted differential impacts on various social groups in Nepalese society. There is only a little information on effects of climate change on economic, social and cultural (ESC) rights of the excluded social group, and on adequacy of existing legal/policy provisions/frameworks and institutional structures to address the issue of climate injustice which these voiceless poverty stricken social groups are confronted with in their day-to-day lives.

In the above backdrop, the TESCAI project in Nepal envisions to carry out research studies on two aspects, viz., (i) Study on the causes of vulnerability and conflict dynamics of *Dalit* communities in Nepal, and (ii) Study on existing local adaptive capacities, vulnerabilities and

climate-related conflict dynamics of *Dalit* communities in Nepal. The conceptual premise that drive these initiatives is that these research studies will fulfill the existing knowledge gap by providing reliable facts/information to various stakeholders (both right-holders and duty-bearers) on differential impacts of climate change, and on the pervasive climate injustice in Nepalese societies; and will generate evidence base for the development of an impact strategy and for the definition of concrete advocacy goals and policy recommendations for the *Dalit* communities in Nepal.

A2.3 Objectives of the Research Studies

The overall objective of the studies is to research and document the experiences and perspectives of *Dalit* communities at grass roots level in Nepal with regard to climate change and climate justice, and share the findings with relevant policy makers and the public at local and national levels. The specific objectives are:

- Carry out a study on the causes of vulnerability and conflict dynamics
- Conduct an assessment of existing local adaptive capacities, vulnerabilities and climate-related conflict dynamics of *Dalit* communities.
- Analyse the climate justice situation of *Dalit* communities with respect to the services delivered by state and non-state actors to the common public.
- Carry out a stakeholder analysis and examine the role of state and non-state actors within these causal complexes and conflicts
- Produce and disseminate information, education and communication materials on the effects of climate change on marginalized groups and possible strategies to strengthen their resilience
- Prepare advocacy strategy visible through concrete measures at the local and national level
- Present and discuss the results of the study and option in seminars at province and national levels.

A2.4 Scope and Limitations of the Research

- The studies focuses on *Dalit* communities who are the most climate vulnerable people in Nepal
- The studies are carried out in Lumbini Province and Madhesh Province, specifically in Rukum East and Rolpa districts, and Siraha and Saptari districts.
- The municipalities and rural municipalities (*palikas*) which constitute the working areas of the TECSAI project, are the working area for the research.
- The project community-based organizations (CBOs) and the *Dalit* Human Rights Defenders (DHRDs) are the key stakeholders to provide, collect and share the research related grass roots level information, data, facts and figures.
- The research studies have been completed in a period of six months (from July to December 2022).

A3. RESEARCH METHODOLOGY

A3.1 Research Design

The focus of the research is more on quality. However, both qualitative and quantitative methods are used to collect the information. The field visits and participatory methods for community level interactions considering caste, gender, age and social diversities and perspectives, discussion with the civil society organizations (including advocacy organizations and networks), local political parties, local elected members, representatives from the government, development workers, consultation with experts and other stakeholders, constitute the foundation of the studies.

A3.2 Research Location and Sites

The research is carried out in Rolpa and East Rukum districts (which represent the hill physiography) of Lumbini province, and in Siraha and Saptari districts (which represent the *Tarai*/plain physiography) of Madhesh province. The 16 *palikas* (municipalities/rural municipalities) which constitute the working area of the NETZ TESCAI project, are the working area for the research. The list of these *palikas* are given in **Attachment-1**. Within the project *palikas*, the settlements where the 21 community-based organizations (CBOs) have been formed by the TESCAI project, constitute the main site for the grass roots level data collection.

A3.3 Data Collection Techniques/Tools

Household Level Surveys (HLSs), Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) constitute the main basis for data collection. A Questionnaire (given in **Attachment-2**) is developed for household level survey. Checklists are developed for administering key informant interviews (**Attachment-3**) and focus group discussions (**Attachment-4**). Nepali versions of these questionnaires and checklists are used for data collection.

A3.4 Sources of Information

Both primary and secondary sources are explored for information collection. The secondary source of information includes appropriate national/international researches, exiting laws and policies, and other relevant documents. The primary source of information includes interviews with right-holders *Dalit* members of the project CBOs, focus group discussions with the project CBOs, key informant interviews with duty-bearers such as policy-makers, *Dalit* NGOs/civil society organization, human rights organizations and interactions with various state and non-state actors at *palika*, district, province and national levels. Besides the above, field visits, transect walks, informal interactions with communities/passersby also constitute the primary source of information.

A3.5 Sampling and Sample Size

From each of the 21 CBOs, six/seven members representing a mix of different age groups and gender are selected purposively for household survey. Thus a total of 133 members (representing a sample size of over 25% from a population of 518) are interviewed, of which 38% are female and 62% are male. Likewise, age of the interviewees range from 18 to 78 years. **Attachment-5** gives the list of CBOs and number of CBO members. A total of 21 focus group discussions @ one FGD per CBO have been held.

A3.6 Respondents

The list of respondents of the household level survey is given in **Attachment-6**. A total of 252 persons (male= 105 and female = 147) have participated in 21 focus group discussions @ one FGD/CBO. The list of the participants of the focus group discussion is given in **Attachment-7**. Altogether 147 persons have been interviewed as key informants at *palika*, district, province and federal levels. The key informants who have provided information at *palika* level include: mayor/chairperson, deputy mayor/deputy chairperson, ward chairperson, ex-mayor/ex-chairperson, ex-deputy mayor/ex-deputy chairperson, ward ex-chairperson, *palika* executive officer, *Dalit* leaders, and other knowledgeable person. The district level key informants include: chief district officer/deputy chief district officer, district Red Cross Society president, civil society organizations, SSP/SP/DSP of Police, and SP/DSP Armed Police. At province level, the key informants include: minister of forest, minister of home affairs, vice-chairman of policy and planning commission, SSP police, and national human rights commission. At national level, the key informant interviews have been conducted with climate expert, national *Dalit* commission, ministry of forest and environment, and Nepal Red Cross Society Central Office. A total of 105 key informants at *palika* level, 23 key informants at district level, 14 key informants at province level, and four key informants at national levels provided data/information during the course of this research. The list of the key informants is given in **Attachment 8**.

A3.7 Key Research Questions

The key research questions which this research endeavors to address are:

- What are the underlying causes of climate vulnerability and conflict dynamics of *Dalit* communities in Nepal?
- What are the exiting local adaptive capacities and vulnerabilities as well as climate-related conflict dynamics of *Dalit* communities in Nepal?

A3.8 Administration of Interviews/FGDs

The household level surveys have been administered by the *Dalit* Human Rights Defenders (DHRDs) of the project. The focus group discussions and key informant interviews at *palika* level have been conducted by the DHRDs under the guidance of the project CSO partner representative. The key informant interviews at district, province and national levels have been conducted by the lead researcher and the team of researchers.

A3.9 Enumerator Training of Dalit Human Rights Defenders (DHRDs) and CSO Representatives

The project DHRDs and CSO representatives have received a 2 ½ day enumerator training in Dhulikhel, Kavre on and from 26 to 28 July 2022 during which they have been oriented about data collection tools and techniques, objectives of the research studies, and expectations from them in fulfilling the research objectives. They are made aware to complete the following tasks during their field works.

- Conduct household level survey: Select six or seven members of their CBO considering diverse age groups and gender, and conduct interviews with each of the selected members individually using the survey questionnaire provided to him/her, and He/she should note down the responses at appropriate places in the questionnaire itself. Additional papers may be used for the write-up of the response, if required.
- Conduct focus group discussion with their CBO, ensuring that most of the CBO members are present and take part in the discussion in a participatory manner. The DHRD under the guidance of the CSO representative will use the checklist provided to him/her. The information collected shall be noted in the appropriate section of the checklist, or in a separate paper.
- Conduct key informant interviews: The DHRD with the support of the CSO representative shall conduct interviews with the Mayor/Chairperson, Deputy Mayor/Deputy Chairperson, Ward Chairperson (CBO Ward), Local Representatives of political parties, relevant *palika* staff, LEOC, CBO chairperson, DHRD. He/she shall use the KII checklist provided to him/her for collecting the information.

During the orientation, the DHRDs and the CSO representatives received a thorough training on how to fill-in the questionnaire and collect data based on the queries in the checklists provided to them for conducting surveys, FGDs and interviews. They have been given a thorough understanding about the questions, and possible answers. The orientation has also included practical sessions in which they have conducted mock surveys, FGDs and interviews using the questionnaires and checklists. The filled-in questionnaires and responses against the checklists have been reviewed and checked by the research team. The orientation/training schedule is given in **Attachment-9**. The list of DHRDS and CSO representatives who participated in the training is given in **Attachment-10**.

A3.10 Data/Information Collection

The data have been collected at *palika* levels by the DHRDs and CSO representatives on and from 30th July to 17th August 2022. The district level and province level data have been collected by the lead researcher and the team of researchers on and from 6 to 17 August 2022. During this period, the lead researcher and the team of researchers have held meetings with DHRDs/CSO representatives in each district, and reviewed, checked, verified and validated the questionnaires and responses against the checklists provided by the enumerators. Clarifications have been made on answers which created confusions. **Attachment-11** presents a photo glimpse of the field work.

A3.11 Data Entry and Analysis

The data/information collected from the primary and secondary sources have been entered into the computer and analyzed using SPSS and Excel software packages.

A3.12 Report Writing

The findings have been compiled and produced in line with the pre-determined formats.

A4. ETHICAL CONSIDERATIONS

In this study several ethical considerations were made. All the respondents including CBO members, ministers, Mayor/Deputy Mayors, ward chairs, chief district officer/deputy chief district officer, district Red Cross Society president, civil society organizations, SSP/SP/DSP of District Police, and SP/DSP Armed Police, and journalists were interviewed with informed consent. The purpose of the research was well informed. No interviewee was put under any kind of stress during the interaction. No non-relevant questions were asked during the interview. In this research necessary confidentiality related to the individuals, systems, processes and situation have been maintained. Necessary anonymity is maintained upon the request of subjects.

SECTION-B: CAUSES OF
CLIMATE
VULNERABILITY AND
CONFLICT
DYNAMICS OF DALIT
COMMUNITIES IN
NEPAL

B1. EXISTING SOCIAL STRUCTURE AND CONDITIONS OF *DALITS*

B1.1 Existing Socio-Structure

The study investigated the socio-demographic characteristics of respondents and research areas. Particularly, gender, marital status, age, level of education and income of the respondents were the socio-demographic attributes of concern in the study. The societies in the study area are composed of different caste groups with pronounced hierarchy. *Dalits* are placed at the lowest strata in the hierarchy. Caste based discrimination and untouchability practices are widely rampant. The detailed findings for the districts and project *palikas* are presented below.

B1.1.1 Socio-demography of Saptari District

Saptari District is a part of Madhesh province. Rajbiraj is the head quarter of this district. This district covers an area of 1,363 km², and has a population as 639,284 (51 percentage female and 49 percentage Male according to the census of 2011), which makes it the 10th most populated district of Nepal. Saptari is renowned for its agricultural production and is bordered on the east by the Saptakoshi River. There are nine municipalities and nine rural municipalities in this district. Most of the people in the district are *Hindus* (86 percentage) and the second largest religion is Islam (9 percentage). Majority of the people speak Maithili (79 percentage). Second most spoken language is Tharu which is spoken by 10 percentage of the total residents. Only 4 percentage people in the district speak Nepali as their mother tongue. The most populous caste or ethnic group of this district is Yadav (16 percentages). The second largest caste group is Tharu. Muslman, Teli and Dhanuk cover about 7 percentage of the population. Likewise, Musahar and Khatwe (the *Dalits*) cover 6 percentage of the population. Chamar community (*Dalit*) also is in the remarkable number in the district. The literacy rate in the district is 54 percentage. The research was carried out in four rural municipalities and one municipality in Saptari district. The socio-demographic characteristics of these municipalities are given below.

Socio-demography of Tilathi Koiladi Rural Municipality: Tilathi Koiladi is a rural municipality of Saptari district. It has 8 wards, which are scattered across 33 square kilometers of geographical area. According to the census 2011, total population of this *palika* is 31735(16184 Male and 15551 Female) and has 5697 households. Maithili is the mostly spoken language in this *palika* (98.78% people of this *palika* speak Maithili language). Only 1.22 % people in Tilathi Koiladi speak Sunuwar, Nepali, Rai and Hindi as their mother tongue. In this *Palika*, the most populated caste group is Dhanuk (23.16 %) and second largest caste group is Khatwe, the *Dalits* (9.61%). This *palika* consists of the highest population of the *Dalits* as compared to other *palikas*.

Socio-demography of Tirahut Rural Municipality: Tirahut Rural Municipality has five wards which are scattered across 38 square kilometers of geographical area. According to census 2011, the total population of this RM is 22,010 (10,913 males and 11,097 females). The total number of households in this *palika* is 5,078. According to the Census of 2011, only 9,807 people are fully literate who could read and write while 739 people are able to only read. Maithili is spoken by more than 97.27% of the people and only 1.65% people speak other languages like, Sunuwar, Nepali Tharu, Tamang as their mother tongue. According to the census of 2011 this rural municipality is inhabited mostly by Yadav and khatwe community.

Tirahut Rural Municipality is also thickly populated by *Dalit* community. The **Dalit** caste groups living in this *palika* are Khatwe (14.50%) Musahar (8.4%) and Chamar, Bantar and, Dhobi.

Socio-demography of Agnisair Krishnasawaran Rural Municipality: Agnisair Krishnasawaran rural municipality has six wards, which are scattered across 103 square kilometers of geographical area. According to the Census 2011 report, the total population of this rural municipality is 27,129 (12846 males and 13283 females) and the total household of this *palika* is 5,422. Only 13337 people are fully literate in Agnisair Krishnasawaran rural municipality while 678 people are able to only read. Most spoken language is Maithili, spoken by 45.19% of the population, while 34% people speak Tharu Language. Other languages like, Nepali, Urdu, Danuwar, Tamag, Rai Magar etc. are also spoken here. Various caste groups have inhabited this *palika*. Tharu caste groups is the most populated and second largest caste group is Musahar community covering 10.60% of total population. Bantar/Sardar, Chamar, Khatwe are the other caste group from Dalit community found in this *palika*.

Socio-demography of Surunga Municipality: Surunga Municipality, located in Saptari district has 11 wards, which are scattered across 107 square kilometers of geographical area. The total population of this municipality is 44221 as per the 2011 national census with 20787 males and 23435 females. The municipality has 8650 households. Only 55.29% people are fully literate, able to both read and write, and 41.87% people are able to read but not write. Mostly spoken language in this *palika* is Maithili, spoken by 47.97% people. Other spoken languages are Tharu, Nepali, Magar, Sunuwar, and Bhojpuri. Surunga municipality is inhabited mostly by Tharus who cover about 34.35% of the population, and other large caste groups are Yadav. Musahar cover more than 7% of the total population of the municipality. Likewise Chamar, Dusadh and Kami from Dalit communities are also found in substantial number in this municipality.

Socio-demography of Rajgadh Rural Municipality: Rajgadh Municipality has 6 wards, which are scattered over 46.9 Square Kilometers of geographical area. According to the census 2011, the population of this *palika* is 29,459. The total number of households is 8450. Mostly spoken language of this *palika* is Maithili.

B1.1.2 Socio-demography of Siraha District

Siraha covers an area of 1,188 Km². It has a population of 637328 as per the census of 2011. The district is bordered with Saptari district in the east, Udayapur district in the north, Bihar state of India in the south and Dhanusa district in the west. The caste groups/communities with high population are *Yadav*, *Tharu*, *Dalit*, Muslims and ethnic minorities with majority of people speaking Maithili language and Nepali language. The research was carried out in three rural municipalities and one municipality in Siraha district. The socio-demographic characteristics of these municipalities are given below.

Socio-demography of Lahan Municipality: Lahan municipality has 24 wards which are scattered across 167 square kilometers of geographical area. The total population of this municipality is 91766 with 45515 males and 46251 females as per the census 2011. The total household of this municipality is 17182. More than 57% of the people as fully literate, able to read and write, while more than 40% people are able to only read. Majority of the people speak Maithili language covering 69.95% of the population and second most spoken language

is Tharu language in the municipality. Only 5.90% people speak Nepali here. Various caste groups are living in the Lahan municipality. Tharu is the most populated caste groups covering 17% of total population of the municipality. Second Largest caste was Yadav covering 11%. Muslim and Musahar cover 8% of the total population of the municipality. Other *Dalit* caste groups like Chamar/Harijan/ Ram cover 5%, Dusadh/Pasawan/Pasi cover 3% and Tatma, Khatwe also are in remarkable number.

Socio-demography of Sakhuwanankarkatti Rural Municipality: Sakhuwanankarkatti rural municipality has 5 wards which are scattered across 33 square kilometers of geographical area. The total population of this *palika* is 18558 with 8862 males and 9696 females and the total household is 3388 as per the census of 2011. About 48% of people are fully literate, able to both read and write, while 49% people are able to only read. About 97% people speak Maithili language and 1.30% people speak the Urdu language whereas 1.75% people speak other languages like Tharu Nepali etc. The *palika* is dominated by Yadav caste group which covers around 46% of total population. The second largest caste group is Musahar which covers 9% of the population. Other cast groups are Khatwe, Dusadh/Paswan/Pasi, Chamar/Harijan/Ram, Tatma/Tatwa from Dalit community constituting a big population in the *palika*.

Socio-demography of Bhagawanpur Rural Municipality: Bhagawanpur rural municipality has 5 wards which are scattered across 33 square kilometers of geographical area. The total population of this *palika* is 20957 with 10291 males and 10666 females and the total households is 3661 as per the census of 2011. About 50% of the people are fully literate, able to both read and write. More than 48% people are able to only read. The mostly spoken language is Maithili in this *palika* covering 96% of the total population of the *palika*. Tharu language is the second largest spoken language covering 1.23% of the population. Other languages spoken are Urdu, Nepali and Gurung language. Bhagwanpur rural municipality is inhabited mostly by Yadav caste group (34.67%). Khatwe and Chamar/Harijan are the third largest caste groups that cover more than 6.6% of the total population. People of several other caste groups such as Dusadh/Pasawan/Pasi, Musahar, Dhobi, Tatma etc also live in this *palika*.

Socio-demography of Aurahi Rural Municipality: Aurahi rural municipality has a total of 5 wards. The total population of Aurahi rural municipality is 23045 with 11116 males and 11930 females and the total household is 4245 as per the census of 2011. In Aurahi rural municipality 47.60 % people are fully literate, able to both read and write, while 47.99% people are able to only read. Most of the 98.89% of people of this *palika* speak Maithili language while the rest of the people speak various other languages such as Urdu, Nepali, Hindi, Rai, Sunuwar language. The most populated caste is Yadav which covers around 48 % of the total population. Second largest caste group of this *palika* is Chamar/Harijan/Ram. It covers 5.57% of the total population of this *palika*. Third largest group is Musahar which covers 5.43%. Other caste groups in this *palika* are Dusadh/Pasawan/Pasi, Kami and, Khatwe.

B1.1.3 Socio-demography of Rolpa District

Rolpa district is a hill district in Lumbini province. The district covers an area of 1,879 km² with population 224506 as per the census of 2011. Livang is the district's administrative center. Rolpa is an underdeveloped area plagued by low life expectancy and poverty.

Adjoining districts are Dang to the south, Pyuthan to the east, Salyan to the west and Rukum to the north. Rolpa is rugged highlands populated by the indigenous group namely, Kham Magar. The highlands are drained southward by the Mardi Khola (stream) from a complex of 3,000 to 4,000 meter ridges about 50 kilometers south of the Dhaulagiri Himalaya. Upland harvests of maize, millet and barley are invariably insufficient and so Rolpa has chronic food deficits. Food deficits have driven upland Kham into growing market crops better suited to the terrain than grain, although marketing fruit and vegetables beyond adjacent districts is hampered by lack of roads. The research was carried out in three rural municipalities and one municipality in Rolpa district. The socio-demographic characteristics of these municipalities are given below.

Socio-demography of Lungri Rural Municipality: Lungri rural municipality has a total of 7 wards which are scattered across 135 square kilometers of geographical area. The total population of Lungri is 23631 with 10504 males and 13127 females and the total household of this Palika is 4402. About 52% of people are fully literate, able to both read and write, and 45% people are able to only read as per the census report of 2011. About 99.44% people speak Nepali language in the Lungri rural municipality and only 0.56% people speak other languages such as Gurung, Magar etc. Chhetri caste group has the highest population with 46% in the *palika* and the second largest caste group, Magar covers 31% of the population. Likewise, Kami is the third largest caste group in the *palika* covering around 12% likewise, Damai 2% and other Dalit caste groups cover the 3 % of the total population in the *palika*.

Socio-demography of Sunil Smriti Rural Municipality: Sunil Smriti rural municipality has 8 wards which are scattered across 157 square kilometers of geographical area. The municipality has a total population of 28213 with 12,715 males and 15498 females and the total household of this *palika* is 5657. About 58% people are fully literate, able to both read and write, and 38% people are able to read only. About 98.36% people speak Nepali Language. Only 1.64% people speak other languages, such as Kham, Magar, Urdu, Hindi, Newari, Tharu etc. Most of the inhabitants in Sunil Smriti rural municipality are the people from Magar caste groups covering the 34% of the total population of the *palika*. Likewise, second largest caste group is Chhetri that cover 32% and the third largest caste is Kami which covers 14% of the total population. Other caste groups living in the rural municipality are Damai, Thakuri, Sarki, Muslim, Newar, and Gaine.

Socio-demography of Rolpa Municipality: Rolpa municipality has 10 wards, which are scattered across 270 square kilometers of geographical area. The municipality has a total population of 32759 with 14744 males and 18015 females and the total household of this municipality is 7133. About 63% people in Rolpa municipality are fully literate, able to both read and write, and the 33% people are able to read only. More than 73% people speak Nepali language whereas 18% people speak the *Magar* language. Only 6.56% people speak the Kham language in the Rolpa municipality. This municipality is mostly inhabited by *Magar* caste group which cover 43.69% of the total population. The next large group, *Chhetri* covers 27% of the total population of the *palika*. Likewise, Kami is the third largest caste group covering 13.17% of the population. Other caste groups living in Rolpa municipality are *Damai*, *Gurung*, *Sarki*, etc.

Socio-demography of Sunchhahari Rural Municipality: Sunchhahari rural municipality has a total population of 16034 with 7434 males and 8600 females and the total household in this Palika is 3020. About 78% people are fully literate, able to both read and write. About 19% people are able to only read. About 50.77% people speak Nepali language in this *palika*. Similarly, 42.72% people speak the Magar language and 6% people speak the Kham language. Only a small population speak other languages. The largest caste is in this *palika* is Magar covering 72% of the total population. Second largest caste is Kami which covers 15% of total population of the *palika*. Several other castes who live in Sunchhahari are Chhetri, Damai, Gurung, Brahmin Sarki, Newar etc.

B1.1.4 Socio-demography of Rukum East District

Eastern Rukum district is the northernmost part of Lumbini province and it's a mountainous district. Most of the district is drained by west-flowing tributaries such as Uttar Ganga draining Dhorpatan valley and to the north of that the Sani Bheri draining southern slopes of the western Dhaulagiri Himalaya. Elevation reaches 6,000 meters in the Dhaulagiri with a range of climates from sub-tropical to perpetual snow and ice. Agricultural use ranges from irrigated rice cultivation through upland cultivation of maize, barely, wheat, potatoes and fruit, to sub-alpine and alpine pasturage reaching about 4500 meters.

The district has only 3 local levels and the total population of this district is 53184 according to Census of 2011. Magar and Dalits community are the most populated caste groups in this district. The research was carried out in three rural municipalities in Rukum East district. The socio-demographic characteristics of these municipalities are given below.

Socio-demography of Putha Uttarganga Rural Municipality: Putha Uttarganga rural municipality has a total of 14 wards which are scattered across 560 square kilometers of geographical area. According to the CBS 2011, Putha Uttarganga Rural Municipality has a total population of 17,932 with 8,512 males and 9,420 and total household of this Palika is 3861. About 45% people are fully literate, able to both read and write, while 51% people are able to only read. More than 45% people speak Nepali language. 27% people speak Magar language and 25% people speak Kham language in this *palika*. Putha Uttarganga rural municipality is inhabited mostly by the Magar caste group which covers 57% of the total population of the *palika*. Similarly, Second largest caste group is Kami covering 24% the total population. Other caste groups who live in this *palika* are the Thakuri and Badi.

Socio-demography of Sisne Rural Municipality: Sisne rural municipality has 8 wards, which are scattered across 327 square kilometers of geographical area. The total population of this *palika* is 16497 with 8607 females and 7890 males and the total households of this *palika* are 3506. About 62% people are fully literate who were able to read and write while 34% people are able to only read. More than 99.87% of the people of this *palika* speak Nepali language. Only 0.13% people speak other languages. Chhetri is the most populated caste group covering 46% of the population. The second largest caste group is Magar covering 15% and third largest caste group is Kami covering 10% of the total population. Other caste groups living in this *palika* are Thakuri, Brahmin, Damai, Sarki, Newar, Badi, and Gurung.

Socio-demography of Bhume Rural Municipality: Bhume rural municipality has 9 wards. These wards are scattered across 274 square kilometers of geographical area. Bhume rural municipality has a total population of 18589 with 8443 males and 10146 females and the

3,835 households according to the census 2011. About 54% people are fully literate, able to both read and write, while 42% people are able to only read. More than 64% people speak Nepali language. Similarly, 28% of the people speak the Magar language and 5% people speak the Kham language. The *palika* is inhabited mostly by Magar caste group covering 66% of the total population. The second largest caste of this *palika* is Kami covering 16% of the total population. Other caste groups who live in Bhume are Damai, Gurung Badi and other Dalits.

B1.2 Livelihood and Economic Conditions of Dalits

The household survey was conducted with 133 respondents covering the 16 project municipalities in all four project districts. The analysis below shows the socio-demography, livelihood and economic conditions of Dalits. especially the age, gender, language, type of family, marital status, education, land ownership, and income levels of the respondents. The findings are presented below.

Age: Age is one of the most critical socio-demographic factors of the research. Respondents of various age group will express the inter-generational view which is important study the pattern of change in climate. Respondents of different age groups have shared their views on the climate change. Table-1 below shows the distribution of respondents belonging to different age groups.

Table no. 1: Age-wise Distribution Pattern of Respondents

Age Group	Frequency	Percent
15-24	4	3.0
25-34	22	16.5
35-44	36	27.1
45-54	28	21.1
55-64	23	17.3
65+	20	15.0
Total	133	100.0

Sources: Field Survey 2022.

Gender: Table-2 below shows the gender-wise distribution of the respondents. It is seen that female participation as respondent of the household survey was remarkable (almost two-fifth) given the limited mobility of women and other factors like male domination in the family and outside the house causing gender-based discrimination, and underinformed comparing to male counterparts. This participation implies that women's views/concerns have been duly incorporated/addressed in the research.

Table 2: Gender-wise Distribution Pattern of Respondents

Gender	Frequency	Percent
Male	82	61.7
Female	51	38.3
Total	133	100.0

Sources: Field Survey 2022.

Language: Table-3 below shows that Maithili language is most common in Saptari and Siraha districts. More than 49% of total respondents speak the Maithili language as their mother tongue. Likewise, Nepali language is most common in hill areas (Rukum east and Rolpa). About 50% of the respondents in the Rolpa and Rukum East districts speak Nepali language as their mother tongue.

Table 3: Languages spoken in the Study districts

Language	Districts	Frequency	Valid Percent
Maithili	Saptari, Siraha	66	49.6

Nepali	Rolpa, Rukum East	67	50.4
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Sources: Field Survey 2022.

Types of family: Table-4 below shows that majority of the respondents live in a joint family. About 56% respondents said they live with joint family.

Table-4: Family Type of the Respondents

Family Type	Frequency	Percent
Nuclear family	58	43.6
Joint Family	75	56.4
Total	133	100.0

Sources: Field Survey 2022.

Marital status:

Table-5 below shows that more than 91% of the respondents were married. Around 5% of the respondents were single and 2% respondents were unmarried. 1.5% respondents were divorcee.

Table no.5 : Marital status

Marital Status	Frequency	Percent
Unmarried	3	2.3
Married	122	91.7
Divorce	2	1.5
Single	6	4.5
Total	133	100.0

Sources: Field Survey 2022.

Education: The figure-1 below reflects the literacy status of the respondents. More than 60% of the respondents were unable to get the basic education in surveyed four districts. Only 15% respondents were literate. Likewise, 9% respondents were able to get basic education in the districts. Moreover, 13% respondents had passed the secondary education and 3% respondents have completes bachelor's degree and above.

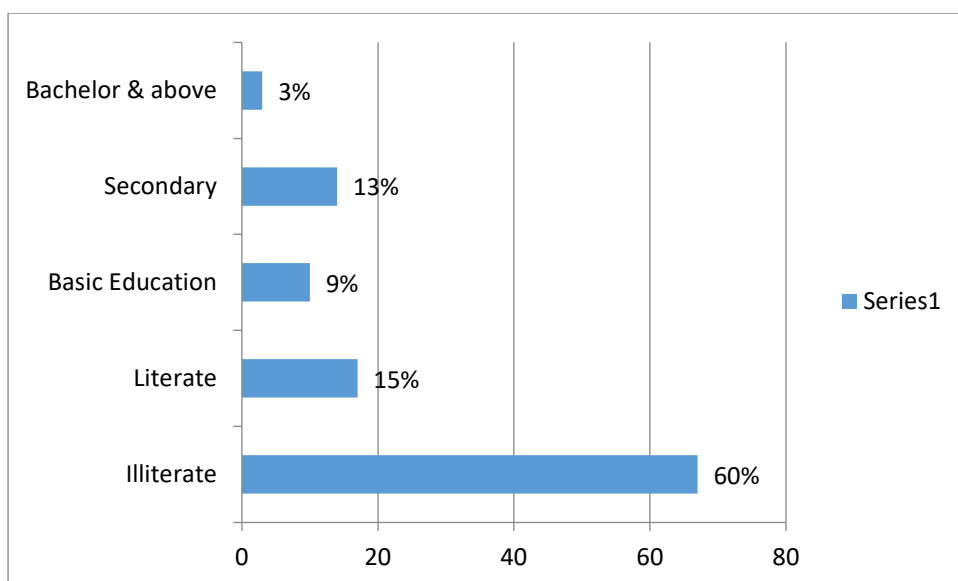


Figure 1 Education level
Sources: Field Survey 2022.

The table-6 below shows the literacy levels of respondents in the project districts.

Table 6.: Comparison of education levels

		Education					Total
		Illiterate	Literate	Basic Education	Secondary	Bachelor & above	
District	Saptari	20	1	3	3	0	27
	Siraha	34	0	0	2	0	36
	Rukum East	1	9	7	8	1	26
	Rolpa	12	7	0	1	2	22
Total		67	17	10	14	3	111

Sources: Field Survey 2022.

In this study, the literacy rate was found higher in Rukum East. Both hill districts, Rolpa and Rukum East show the higher literacy rate than the Terai districts (Saptari and Siraha).. The respondents who passed the Bachelor's degree were from hill region Rukum East and Rolpa. 3 respondents from Saptari and 2 respondents from Siraha had passed the Secondary education.

Land ownership: The pie chart below (Fig no.2) shows that 33% of respondents have land less than 10 Dhur . About 37% respondents have land more than 91 Dhur. Likewise, about 19% respondents have 11 to 30 Dhur land for the livelihood purpose and to build the house. Respondents from all four districts were asked whether they possess their own land. The responses received further revealed that majority of the people from Terai are landless.

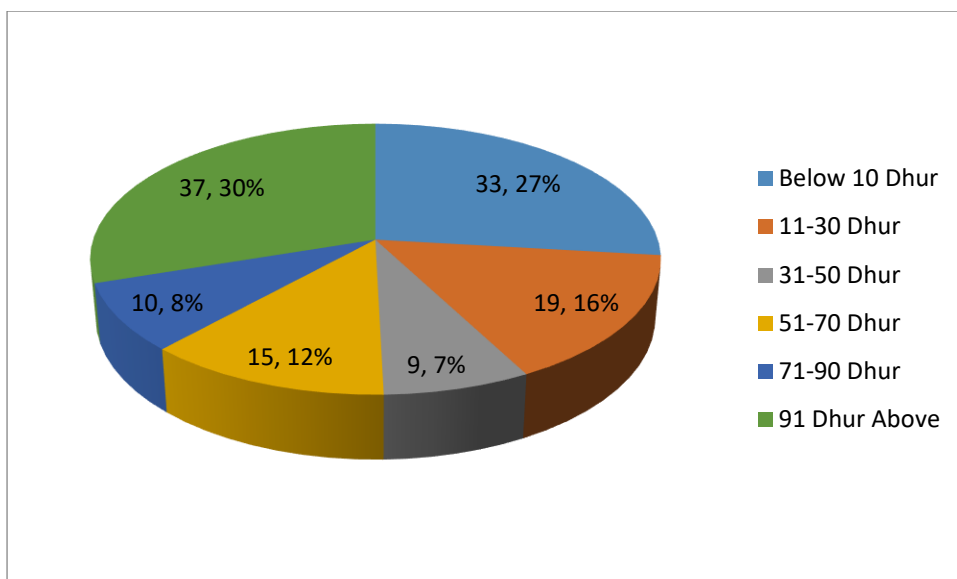


Figure 2 Land ownership (1 Dhur = 6.32.sq. m.)

Sources: Field Survey 2022.

Income: Table-7 below shows that majority of the respondents replied that a single person earns for the entire family. More than 61% respondents report one person in a family earns the money. Similarly, 29% respondents said they two persons in a family earn the money and 9% respondent said 3 persons earn the money for the family with the general average family size is 6.

Table no. 7: Number of person earning for the family

Person(s)	Frequency	Percent
1	81	61.4
2	39	29.5
3	12	9.1
Total	132	100.0

Sources: Field Survey 2022.

B2. LOCAL EXPERIENCES ON CLIMATE CHANGE TRENDS

During the research, one of the queries made with the respondents was about how they perceive the current trend of climate change. Due to climate change in last thirty years, there has been changes in the pattern, period and amount of rain, atmospheric temperature resulting rise in temperature during summer and drop in temperature during winter.

Change in summer temperature

The respondents were asked about if they have experienced changes in summer temperature over the past 30 years. The result (table no. 8) showed that about 78 % respondent said the

temperature has been rising each year. Only about 16% said that summer temperature is decreasing.

Table-8: Change in summer temperature

Experience	Frequency	Percent
Increased	104	78.2
Decreased	22	16.5
No any change	4	3.0
Don't know	3	2.3
Total	133	100.0

Change in winter temperature

The respondents were asked about if they have experienced changes in winter temperature over the past 30 years. The result (table no. 9) showed that about 63 % respondent said the winter temperature has been increasing each year. Only about 31% said that winter temperature has decreased. And 7 % think that there has been no change in winter temperature at all.

Table no. 9: Change in winter temperature

Experience	Frequency	Percent
Increased	84	63.2
Decreased	41	30.8
No any change	7	5.3
Don't know	1	.8
Total	133	100.0

Change in rainfall pattern

The respondents were asked about if they agree that there has been a change in rainfall pattern over the past 30 years. The result (table no. 10) showed that about 80 % (33% strongly agree and 47% agree) respondent said the rainfall pattern has changed over last 30 years.. Only about 7% disagree to it.

Table no.10: Change in rainfall pattern

Experience	Frequency	Percent
Strongly agree	44	33.1
Agree	62	46.6
Moderate	18	13.5
Disagree	9	6.8
Total	133	100.0

Early monsoon rain

The respondents were asked about if they have experienced increase in early monsoon rain (March-May).The result (table no. 11) showed that about 69.2 % (24.1% strongly agree and

45.15% agree) respondent said that there is increase in early monsoon rain. About 22% were having moderate views and small portion (9%) disagreed to it.

Table no. 11: Increase in early monsoon rain

Experience	Frequency	Percent
Strongly agree	32	24.1
Agree	60	45.1
Moderate	29	21.8
Disagree	12	9.0
Total	133	100.0

Monsoon rain

The respondents were asked about if they think that it rains more during monsoon rain (June-September).The result (table no. 12) showed that about 60.9 % (21.8% strongly agree and 39.1 agree) respondent said that there is increase in early monsoon rain. About 19.5 % were having moderate views and small portion (1.5%) disagreed to it.

Table no. 12: Increase in monsoon rain

Experience	Frequency	Percent
Strongly agree	29	21.8
Agree	52	39.1
Moderate	26	19.5
Disagree	24	18.0
Strongly Disagree	2	1.5
Total	133	100.0

Post Monsoon rain

When the respondents were asked if they think that it rains more after monsoon (October-February).The result (table no. 13) showed that about 47.4 % (12.8% strongly agree and 34.6% agree) respondent said that there is increase in post monsoon rain. About 27.1 % were having moderate views and 23.3%) disagreed to it and 2.3% strongly disagreed to it.

Table no. 13: Increase in post monsoon rain

Experience	Frequency	Percent
Strongly agree	17	12.8
Agree	46	34.6
Moderate	36	27.1
Disagree	31	23.3
Strongly Disagree	3	2.3
Total	133	100.0

Overall annual rainfall: When the respondents were asked if they think that there is an increase in overall annual rain. The result (table no. 14) showed that about 51.1 % (6% strongly agree and 45.1% agree) respondent said that there is an increase in overall annual rainfall. About 28.6 % were having moderate views and 17.3% disagreed to it and 3% strongly disagreed to it.

Table no. 14: Change in overall annual rainfall

Experience	Frequency	Percent
Strongly agree	8	6.0
Agree	60	45.1
Moderate	38	28.6
Disagree	23	17.3
Strongly Disagree	4	3.0
Total	133	100.0

B3. LOCAL PERSPECTIVES ON CLIMATE CHANGE FUTURE SCENARIOS

During the research, one of the queries made with the respondents was about how they perceive the climate change future scenario in terms of alteration in rainfall and temperature patterns. The respondents were asked a series of questions.

Change in summer temperature: Based on the result of the survey, the majority of the respondents (53.4%) of the survey strongly agree that the summer temperature is likely to go on increasing in the future. About 33.3% agree the same. Only few respondents (1.5 %) of the respondents think that the temperature will not go on rising in the future (table no. 15)

This ascertains that the locals have been experiencing the raising temperatures in the past and they speculate it will continue to increase in the future. This kind of behaviour of the respondents shows that the respondents are in position of speculating future changes in climate which will help them in preparedness.

Table no. 15: Increase in temperature in future

Perception	Frequency	Percent
Strongly Yes	71	53.4
Yes	45	33.8
So-So	15	11.3
No	2	1.5
Total	133	100.0

Change in winter temperature: When the respondents were asked if they expect an increase in temperature during winter. About 28.6 % strongly agree and 39.8% agree that the winter temperature will increase in the future (table no. 16a). Comparatively, more percentage of respondents from Terai disagree about possibility of increase in winter temperature when compared with the respondents from the hills.

Table no. 16a: Increase in winter temperature in future

Perception	Frequency	Percent
Strongly Yes	38	28.6
Yes	53	39.8
Neither Yes nor no	32	24.1
No	10	7.5
Total	133	100.0

Majority of respondents from hills (Rolpa and Rukum east), think that temperature of winter will be increasing in the future (table no. 16 b). In contrary, most of the respondents from Terai (Siraha and Saptari) are think that winter temperature may not increase in future.

Table no. 16b: Comparison between the hill and terai

Perception		District				Total
		Saptari	Siraha	Rukum East	Rolpa	
Strongly Yes	Count	4	6	13	15	38
	% within Do you think winter temperatures will increase in the future?	10.5%	15.8%	34.2%	39.5%	100.0%
Yes	Count	9	18	15	10	52
	% within Do you think winter temperatures will increase in the future?	17.3%	34.6%	28.8%	19.2%	100.0%
So-So	Count	12	11	6	3	32
	% within Do you think winter temperatures will increase in the future?	37.5%	34.4%	18.8%	9.4%	100.0%
No	Count	4	1	1	3	9
	% within Do you think winter temperatures will increase in the future?	44.4%	11.1%	11.1%	33.3%	100.0%
Total	Count	29	36	35	31	131
	% within Do you think winter temperatures will increase in the future?	22.1%	27.5%	26.7%	23.7%	100.0%

Rainfall Pattern: When the respondents were asked if they agree that the rainfall pattern will change in future. About 25.6 % strongly disagree and 45.1% agree that the rainfall pattern will be changed in the future. Among the respondents who 'agree' , most of the respondents are from Terai (table n. 17) .

Table no. 17: Change in rainfall pattern in future

Perception	Frequency	Percent
Strongly agree	34	25.6
Agree	60	45.1
Moderate	29	21.8
Disagree	9	6.8
Strongly Disagree	1	.8
Total	133	100.0

The district-wise opinions of respondents over the change in rainfall pattern in future can be observed below.

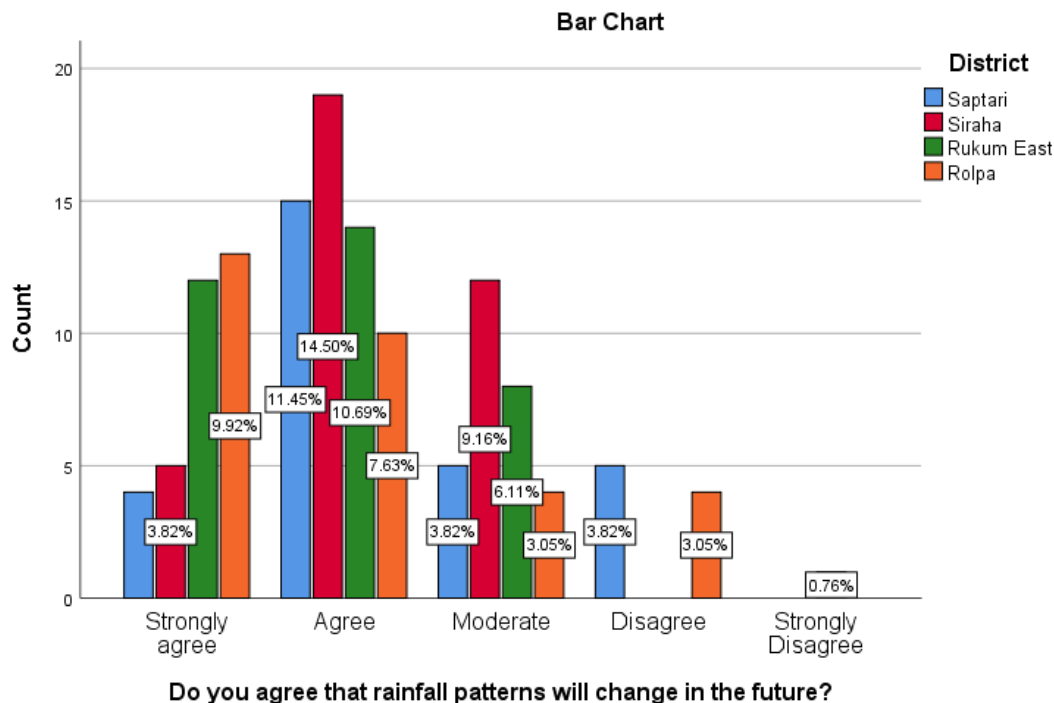


Figure 3 change in rainfall pattern in future

Early monsoon rainfall: When the respondents were asked about their views if early monsoon rain (March-May) will increase in future, about 15 % strongly disagree and 39%

agree that the early monsoon rainfall will be increased in future. 17% "disagree" to it . Among the respondents who 'disagree' , most of the respondents are from Terai (*table no. 18*) .

Table no. 18: Increase in early monsoon rainfall in future

Perception	Frequency	Percent
Strongly agree	20	15.0
Agree	52	39.1
Moderate	36	27.1
Disagree	23	17.3
Strongly Disagree	2	1.5
Total	133	100.0

Overall monsoon rainfall: When the respondents were asked about their views if overall monsoon rain (June-September) will increase in future, about 18% 'strongly agree' and 39.1% 'agree' that in the future, the rainfall will go on increasing. Most of the respondents who disagree (total 15.8%) are from the Terai (*table no.19*).

Table no. 19: Increase in overall monsoon rainfall in future

Perception	Frequency	Percent
Strongly agree	24	18.0
Agree	52	39.1
Moderate	33	24.8
Disagree	21	15.8
Strongly Disagree	3	2.3
Total	133	100.0

Post-monsoon Rainfall: When the asked about increase of post-monsoon rain in the future, the respondents expressed that about 17.3% of the respondents "strongly agree" and 30.1% 'agree" that the rain post monsoon will go on increasing in the future. About 22.6% "disagree" to it. About 70% who 'disagree' are from Terai (*table no.20*).

Table no. 20: Increase of post-monsoon rain in the future

Perception	Frequency	Percent
Strongly agree	23	17.3
Agree	40	30.1
Moderate	39	29.3
Disagree	30	22.6
Strongly Disagree	1	.8
Total	133	100.0

Annual rainfall in the future: When asked about the increase of overall annual rainfall in future, about 20.3% "strongly agree" and 43.6% "agree" that the overall annual rainfall will go on increasing in the future. However, 15.8% of the respondents "disagree" to it. The respondents who 'disagree' to it are from Terai (*table n. 20*).

Table no. 20: Increase of annual rainfall in the future

Perception	Frequency	Percent
Strongly agree	27	20.3
Agree	58	43.6
Moderate	25	18.8
Disagree	21	15.8
Strongly Disagree	2	1.5
Total	133	100.0

B4. EXISTING CLIMATE-INDUCED RISKS

Based on the interviews and FGDs conducted in the study areas (both Terai and hills) , the local people have the experience of both rapid onset risks and slow onset risks. The mountainous terrains of Nepal are at high risk of landslides whereas the Terai belt is at high risk of flash floods. The rise of an atmospheric temperature has made the snow at the mountains melt and glacier lakes to outburst. This ultimately leads to increase in the flow of water in rivers and streams in the mountains. Due to excessive rainfalls in the last couple of years, the risk of landslide has increased in Rolpa and Rukum East districts; and similarly, the risk of floods has increased in Siraha and Saptari districts. The increased instances of drought, desertification, epidemic diseases, and pests harming crops are also noted in these districts during the past few years.

During the household survey, the respondents were asked about the rapid-onset risks that they have experienced or observed in last thirty years. The findings are presented in Table 21a and 21b.

Flash floods were experienced/witnessed by 55.6% and landslide was experienced/witnessed by 59.6% of the respondents. Likewise 72.2% of the respondents have experienced of drought, 18.8% have faced desertification, 54.9% epidemic, 61.7% diseases and 58.6% insect infection.

Table no.21 a: Sudden-onset risks (Multiple Responses)

Type of Risk	Frequency	Percent
Flash flood	74	55.6
Landslide	79	59.4
Total Respondent	133	100.0

Table no. 21b: Slow-onset risk (Multiple Responses)

Type of Risk	Frequency	Percent
Drought	96	72.2
Desertification	25	18.8
Epidemic	73	54.9

Diseases	82	61.7
Insect infection	78	58.6
Total Respondent	133	100.0

B5. IMPACTS OF CLIMATE CHANGE

Dalit communities are most affected by climatic hazard. They are deprived group in terms of economic condition, political empowerment and social opportunities. Usually, their habitation are at steep lands or at the low flat river cutting areas. In addition, they are even more vulnerable due to less sensitization on climate change and negligible participation under the mainstreaming program of climate change and disaster risks management.

The following findings are deduced based on the data collected from survey, FGD and KII conducted with various respondents in Madhesh Province and Lumbini Province. Impacts of climate change has made severe impacts to the marginalized communities in both provinces. But, however due to varying geographic conditions, the impacts are also differing with respect to various climatic conditions.

B5.1 Impacts in Siraha and Saptari

Most of the respondents and key informants experienced that the atmospheric temperature has been increasing over the past 30 years. Number of the hotter days has increased annually; and the intensity of rainfall has increased over the past 10 years.

Flood and Inundation: In Madhesh, flooding/inundation over the settlements is the major challenge for poor marginalized Dalit communities. During the monsoon period, due to excessive rainfall, most of the houses, properties and lives in Siraha and Saptari are under risk due to flood. Because of less preparedness actions taken by the local people, they have been facing various losses and damages such as loss of land due to cutting of river banks, damages of infrastructures, loss of crops, loss of human lives, properties and livestock. The flood has also been a major cause of epidemic.

Drought: Due to increase in temperature in last 30 years during dry seasons, drought has become a major concern in Terai areas. There has been low food production as the productivity of food crops such as rice, wheat has declined because of drought. Even the water gets dried up as the rivers and streams are not managed properly. The shortage of water has led to deteriorating health situation of the people in the community. The stagnant water has given rise to spread of diseases.

Heat waves and Cold waves: Intensity of heat wave and cold wave have been increasing every year in Siraha and Saptari districts. This has caused more troubles to poor Dalits who are not able to protect themselves during summer and winter. Their houses are not weather proof and are not able to purchase warm clothes, fire-woods or, not able to install fans at homes to protect themselves from extreme heat.

Wind storm and diseases on crops and vegetables: Wind storms damage to the vegetables and crop in recent year has increased. Strong wind damages the crops like rice, wheat, maize, and vegetables etc. Due to extreme heat and untimely rain various diseases are seen in the crops and vegetables. Similarly because of swarm of army-insects, crops and vegetables are damaged. New diseases of crop and vegetables have been major causative factors for reduction of agriculture production.

Human health & safety Issues:

Cholera, dengue have been common in the community. Dengue has been a new disease. Water logging and stagnant water caused by dried of flowing water sources has amplified the growth of dengue. Children suffers heat stroke and vector borne diseases during the summer days. Dalits of Siraha and Saptari districts at the risks of snake bites and attacks by the wild elephant herds as most of the settlements are near forest.

B5.2 Impacts in Rolpa and Rukum East

Most of the respondents experienced that the atmospheric temperature has increased over the past 30 years Rolpa and Rukum-East districts. Number of the hotter days has been increasing annually. Intensity of rainfall has also increased over the 10 years. The onset and withdrawal of rainfall is irregular in recent years. The extreme cold days are increasing during the winter season.

Landslides: Occurrence of landslide has been increasing annually due to intense rainfall. Settlements and arable land are in vulnerable zone of local area. Because of less preparedness actions taken by the local people, they have been facing various losses and damages of lives and properties.

Drought and Forest Fire: Due to increase in temperature in last 30 years during dry seasons, drought is the increasing concern even in hills. Water sources are drying up as the rivers and streams are not managed properly. Because of increased drought during dry seasons (October to February), there is a high possibility of catching forest fires leading to damages of properties and loss of live stocks.

Extreme cold winter: Winter is getting colder and colder every year in Rolpa and Rukum-East districts. This has caused much troubles to poor Dalits during winter seasons (November to February). Their houses are not weather proof, and they are not able to purchase warm clothes, fire-woods or, not able to use electrical or gas heater at homes to protect themselves from extreme cold.

Disrupted agricultural routines : The agricultural system is largely depending upon the rain fed water so drought and irregularity in onset and withdrawal of rainfall are major reasons for alternating annual agricultural routine and declination of crop productions. Drying off of water resources and less recharge in water sources are another critical issues for irrigation. This has been one of the major causes of declination of agricultural production in hills. Abundance of invasive species (army-insects) are another factors leading to decline agricultural production. Outbreak of epidemic are responsible to death and damages for livestock.

Human health Issues:

Dengue has been seen even in hills of Rolpa and Rukum-East. During the time of disaster caused due to soil erosion and landslides, water borne diseases like cholera, diarrhea, dysentery, and typhoid are commonly spread.

B6. COPING STRATEGIES ADOPTED BY *DALITS*

Due to regular encounter of disasters like flood, inundation, landslide, forest fire, epidemics and disrupted farming, with time, the local *Dalits* have developed ideas and practices own their own. Although these strategies they implement are of elementary level, this knowledge has been extremely important for tackling the issues on a short term basis. These strategies have controlled the possible losses and damages to some extent.

B6.1 Strategies adopted in Siraha and Saptari Districts

Strategies adopted to cope floods and Inundation: Riverbank cutting occurs naturally along the rivers that run along the foothills of the Chure (Siwalik) range in Nepal when the stream collides with the river bank or the bank is eroded by water coming from agricultural land above the affected area. When riverbank cutting occurs, it leaves behind an eroded area shaped like a small cliff. In one of the study conducted by ICIMOD, it is mentioned that the erosion takes place naturally and is difficult to stop because the site is devoid of natural vegetation. When the riverbank is eroded it damages agricultural land and decreases soil fertility. When the productivity of the land is decreased it affects the lives and livelihoods of nearby communities most of whom are subsistence farmers (ICIMOD, 2020).

Communities have developed local measures to help protect the riverbanks and to prevent further erosion and cutting. This technology uses both structural and vegetative measures to help control the erosion and protect both agricultural land and settlement areas from flooding (Uddhaw Ghimire, 2015). To cope with the floods, sand/mud-filled sacks are put those in river banks by the locals beforehand. Small pits are dug around the river banks to control excessive water. In this areas, they grow flood tolerant crops, the varieties of rice such as *Ganga Sagara-1* , *Ganga Sagar -2* . Likewise, *Sukkha* rice resistant to drought and floods.

The local families shift to safer places before the start of the monsoon when possible. Otherwise, be alert about the floods, build palisades with wooden stalk and tree trunks and use sand bags, build toe-walls out of bamboo. Request the ward and *palika* for building gabion toe-walls.

They store their belongings in the neighbor's houses for the temporary storage and live in the temporary tarpaulin shelters. Before the monsoon the houses are repaired. Some sheds/houses are raised high.

To handle the water logging in the field and to remove flood water from the houses/courtyards, the community people use water pump. These pumps are generally rented on need basis.

Strategies to cope basic sustenance issues: During the shortage of food, people rely on taking loans or borrow from one another. Sometimes they have to sell properties (household goods), livestock and even ornaments to survive the drought and dry seasons period. For basic sustenance many youth from Dalit community travel to other cities for seasonal works in Nepal and travel to India and to middle east as temporary migrant workers

In order to tackle the drought, people dig pits to store water for future usage. Ground irrigation and solar irrigation systems have been installed at some part of the districts. People cultivate crops those require less water. People become more cautious and visit nearby health post during drought period when there would be diseases like cholera and dengue spread because of poor sanitation.

Strategies to cope with Human Health Issues: Nutrition food security program for children have been initiated at some *palikas*. In case of epidemic, the Dalits tend to see the shamans, consult the learned, respectable elders in the community. Some visit the local health post and near hospitals. In case of emergencies during disaster, they report to the ward and rural municipality offices through local CBOs.

B6.2 Strategies adopted in Rolpa and Rukum-East Districts

Strategies to cope with landslides: Some parts of the residential locations are protected with wire-mesh/gabion wire for preventing the areas from landslides. Tree plantation are done in some landslide prone areas. Some households are shifted to safer areas by the local government.

Strategies to cope with drought: The local people cultivate the crops and vegetables that require less water. During drought season, they look out for alternative sources of income such as masonry works and other daily wage works available in municipalities.

Strategies to cope with extreme cold winter: During winter, as it starts snowing, the locals shift to lower lands temporarily.

Strategies to cope with disrupted agricultural routine: In Rolpa and Rukum-East, the local farmers use hybrid seeds to increase crop production in some places. Vegetable cultivation is being practiced under the plastic houses in some places. Biological fertilizer is being used to control diseases in plants in some places. Plantation has been done at adjoin area of water resources in some places. Drop irrigation systems are quite commonly applied for irrigation. Pond water reservation is also applied some parts of the district. Fruits plantation has been done at steep slope land.

Farmers are linked with livestock insurance organized by *palika* (administrative government unit).

B7. CAUSES OF CLIMATE VULNERABILITY

During our study, it was observed that most of Dalits of Siraha and Saptari districts are residing in Ailani lands riverbank areas or near forests. Most of the forest areas fall under government conservation area. Most of the Dalits being landless, they have no other options than live in such areas. They have thatched roof houses made out of mud and bamboo. The base of the houses is normally as high as the water level of the river. Another reason for Dalits settling on the river banks is that river is the major source of water for drinking, washing, and irrigation. Some Dalits earn from fishing from the river.

The major risks Dalits living near riverbanks face is the flood during rainy seasons (June to August). Due climate change there are untimely rainfall like early rainfall or delayed rainfall which lead to flashfloods for which Dalits are hardly prepared for.

The settlement near or in the forest are more exposed to the risks of wild animals and snakes. The Dalits have to spend sleepless nights due to the risk of elephant attacks.

In Rolpa and Rukum, Dalits reside in stiff sloped hills. The land where Dalits have built houses are is quite fragile and difficult to reach. The major hazards faced by Dalits living in slope lands during the monsoon are highly risked by landslides and floods. The people of Putha and Bhime rural municipalities are troubled by snowfall during winter. This time most of the access roads get blocked by snow. From last few years the Dalits have been facing untimely and excessive rainfalls. Due to increase in overall atmospheric temperature, new insects like mosquitos and other insects on plants are seen. The mosquitos available in hills have increased the risk of diseases like dengue and malaria. Earlier mosquitos were very rare in mountainous areas like Rolpa and Rukum.

In Madhesh, Dalits are highly sensitive towards the climate variability. Lives are lost, house and properties get damaged due to inundation. Lack of knowledge, poverty and poor access to government services and supports they are affected each year. Whereas in hills, Dalits as well are highly sensitive towards the climate variability. Lives and properties are lost or/and damaged due to landslides.

Due to the extreme poverty, lack of knowledge and education, poor condition of sanitation and health, and poor access to government services and supports, sensitivity of Dalits towards the climate variability or change. The houses made out of mud and wood and their properties get easily swept or damaged due to landslides and floods. In many cases, due to unavailability of their own lands, they grow crops and vegetables in flood prone areas like riverbanks and landslide prone zones. The impact of loss and damages borne by Dalits stay for the long time. This take them to further marginalization as they are already under deprivation.

Unlike other caste groups, Dalits with poor knowledge and poor access to social safety networks. They are backward in terms of taking advantages of opportunities like receiving grants and supports from the government and CSOs. They lack adequate resources (financial and physical) to cope the disasters. Dalits have less adaptive capacity towards climate change. They consider disaster and calamities are the "*Daibik Prakop*" or just their own fate. After major disaster, they get displaced totally. They have to leave the place and move elsewhere in search of safety.

Hence, we can say that Dalit community with high sensitivity/exposure and low adaptive capacity are more susceptible to impacts, and therefore have an overall high vulnerability

B8. DRIVERS OF CLIMATE VULNERABILITY

In the Key Informant Interviews (KIIs) and FGDs conducted with the local Dalits in the four project districts, it was found that the major drivers of Dalits vulnerability to climate change were as under.

- Poverty / Poor economic conditions: Most of the Dalits from the research areas are extremely poor (below poverty line). Foods grown or earned are not sufficient for the year. The stockpiled food (grains) last only for 3 months. Hence, apart from the cultivation, they need to search for other income generation options such as work in brick kiln, masonry works or work as migrant workers, which make them highly vulnerable to the impacts of climate change.
- Voicelessness: Dalits lack confidence and courage to express their predicament.
- Low access to resources: Dalits reside in secluded areas isolated completely such as in areas on riverbanks, close to forest or on the steep slopes in hills.
- Poor political influence: Poor political influence of Dalits as a result of less representation of Dalits in government.
- Caste-based discrimination: Extreme in Siraha and Saptari whereas relatively low caste-based discrimination in Rolpa and Rukum-East.
- Poor social safety network: Isolated and boycotted conditions.
- Lack of education/knowledge: Comparatively less educated than non-Dalit communities.
- Geographical remoteness (no roads in hills): Settled in remote areas, far off from municipality offices and other service providers.
- Lack of information on climate change-induced risks and disasters: Less informed and less educated.
- Lack of preparedness: Dalits are located in remote areas, and are often not in contacts with CSOs working on climate change and the government mechanisms which execute disaster related programs such as trainings and preparedness plans. This has resulted in inadequate preparedness among *Dalits*.

B9. CAUSES OF CLIMATE RELATED CONFLICT DYNAMICS

The surveys conducted during the research have affirmed the occurrence of climate-induced conflicts among Dalits and non-Dalit communities. Some examples are presented below.

At Dhorna , Saptari, an entire settlement of Dalits (44 households)have been displaced due to flood. With a help of a local NGO, currently they are residing in conservation area in a forest. The district forest department is trying to remove them from the area. Dalits have filed a case in the court. The case is still pending. A conflict is going on between the Dalit community and the department of forest. During FGD, and KIIs (in-depth interviews), it was learnt that Dalits have faced exclusion during the relief distribution in the time of disasters. The local representatives (who are non-Dalits) tend to bias and favor their own community members. This has led to couple of arguments and even manhandling during disaster. Biased behavior of the local representatives was found more in Terai than in the hills.

Due to the geographical difficulties, the relief packages are not delivered to disaster locations on time. The relief packages generally consist of food items like grains, biscuits, and other items such as water, clothes, tarpaulin, tents etc. In Terai, delivery of the relief packages on time may not be the issue but the intention of the representatives of local government many a times create unnecessary hassle. When they bet bias and involve into financial irregularities, then the conflict between the Dalit community and other counterparts escalates. Dalits in all

study areas have faced the inequity and discrimination during Covid-19 period, and during floods and landslides.

The local government, excluding those from Rolpa district, are yet to form the Local Disaster management Committee (LDMC). There is huge inadequacy of policy frameworks and mechanisms to address impacts of climate changes. The disproportionate impact faced by Dalits is not taken in account by the local authorities. They have been applying blanket approach to mitigate the disaster related issues which in turn leads to conflict between the privileged and underprivileged groups.

SECTION-C: EXISTING
LOCAL ADAPTIVE
CAPACITIES AND
VULNERABILITIES AS
WELL AS CLIMATE-
RELATED CONFLICT
DYNAMICS OF DALIT
COMMUNITIES IN
NEPAL

C1. EXISTING LOCAL ADAPTIVE CAPACITIES

Dalits in Madhesh and Hills face the disasters every year. They have no options other than continuing to reside in the same locality even after disasters.

Here is a quote from an interview during which an elderly woman of Rolpa municipality mentioned..."It is very difficult to leave the place where we are habituated to live. I can't leave my goats and buffalos. Although less in amount, I can collect fodder and wood from nearby jungle. My grandchildren go to nearby school. I get water from the stream just few yards down from here. Where will we go? We don't have any piece of land elsewhere unlike our non-Dalit neighbors. We don't sleep at nights during monsoon, rather we keep awake the entire nights to cautiously watch the roaring sound of the floods. All our neighbors have abandoned this place except a few of we Dalits here.

In this settlement, there are about 5 houses under extreme risk of the landslides. The local ward office has sent some corrugated sheets to renovate their almost wrecked house. Most of the rich non-*dalits* have already left the place and moved their property in other safe places. The Dalits are still not able to move out of the place.

Similar was the case in Saptari. A resident in a Dalit community when asked as to how they adapt to the climatic hazards, and protect their lives and properties during floods, the response was..... they grow vegetables and lentils on the riverside which help them to some extent for the sustenance. Because of extreme discrimination based on caste, they live their life in isolation, away from the settlement of non-Dalits. These Dalits have somehow managed to survive on their own after encountering enumerable disaster year by year.

There is a growing trend of youths from Terai and hills go abroad to gulf countries in Middle East, Malaysia and India in search of employment. Youths from Terai both men and women go to India for seasonal labor works available in brick Kiln. Mostly Dalits get engaged in agricultural fields only for 3-4 months during rainy seasons mostly for rice –cropping. Other times they work as part timer for masonry works or labor in manufacturing and construction companies.

In hills of Rolpa and Rukum, the major climate change induced issues are like rise in temperature, dry up of water sources, intense rainfall. Some of the farmers have adopted new methods for the agricultural activities. In-depth interviews show that the farmers in hills in general apply the methods mentioned below.

- Hybrid seeds are used by the farmers to increase crop production in some places.
- Vegetable cultivation is being practiced under the plastic sheds in some places.
- Biological/Organic fertilizer is being used to control diseases in plants in some places.
- Plantation has been done at adjoined area of water resources in some places.
- Drip irrigation systems are applied for irrigation
- Pond water reservation is also applied some parts of the district.
- Fruits plantation has been done at slope land.
- Farmers are linked with livestock insurance arranged by *palika*.

In one of the FGDs conducted in Rolpa, it was found that most of the participants do not have clear perspective regarding climate change, they don't know about any coping practices to combat adverse impacts of climate changes yet.

Both in Terai and Hills, *Dalits* stockpile the crops (grains) to be used during dearth period especially in winter seasons. In Terai, the base-level of the houses are raised to be safe from inundation. Before the rainy seasons, the houses are repaired with mud and bamboos.

In hills, the roofs are repaired with fresh materials like thatch or corrugated sheets. The walls are reworked with mud and stones. To prevent the damages by rivers, bamboo, gabion or sand filled sacks are placed at riverbanks to create temporary embankment. The sheds of animals and birds are shifted to safe places. The community specifies a safe area (mostly schools) for shelter during floods and landslides.

C2. PERCEPTIONS ON DIFFERENTIAL IMPACTS OF CLIMATE CHANGE

Dalits of Nepal, both in Terai and hills have been economically, socially, politically and culturally backward. Given the fact of backwardness in many respects, the Dalits have poor social safety network as a resultant of fierce caste hierarchy prevailing in the society.

Major climate-induced disasters like floods and landslides affect all communities indiscriminately. But when it comes for the intensity of the impacts made on the victims of the disasters, it is higher and longer on *Dalit* communities as compared to the non-Dalit counterparts.

Based on the interviews and focus group discussions, the stakeholders expressed that Dalits with less livelihood options, less physical properties like land, houses etc., less or no social safety networks coupled by extreme exclusion and practice of untouchability, the Dalits face disproportionate amount losses and damages as compared any other caste groups. The Local government and CSOs provide entitlements such as money, food, clothes, and shelter materials equally to all the victims. But yet the service is not equitable. The so-called higher caste members surface up from the mishaps much faster. With reserved wealth, additional properties like lands and houses, strong social safety networks and easy access to government non-Dalit recover back easily. In this manner already marginalized communities are further marginalized after the disasters.

During the in-depth interviews at *palikas*, most of the elected members agree that *Dalits* are affected disproportionately by the climate change. For the recovery and rehabilitation *Dalits* require differential treatment unlike the non-Dalits counterparts. Even a less monetary loss for a *Dalit* could be totally irrecoverable. In monetary terms, the losses and damages incurred by *Dalits* may look small compared to non-Dalits, but in reality the losses and damages incurred by *Dalits* lead them to an absolute homelessness and a complete loss of livelihoods; but for non-Dalits, there could be several other places owned by them or their relatives where they could find a safe shelter and also could find livelihood opportunities through their network of well-to-do and influential relatives and networks.

The members from Red Cross Society and CSOs; journalist, politicians have the opinion that *Dalits* are in need of special attention. On the other hand, the government officials are yet to

realize that the *Dalit* communities need differential treatment (positive discriminatory actions) to recover from the disaster fully. The government officials include Chief District Officers, officers from police and arm police force, officers from various government departments such as Forestry, Agriculture, and Health etc.

C3. PERSPECTIVES IN RELATION TO CLIMATE JUSTICE

Many of the people and communities that are most vulnerable to climate change and environmental degradation are those who are already poor and largely excluded from the rewards of global economic activity. In addition to this geographical dimension, climate change is intimately related to other inequalities, such as structural racism (Grantham Research Institute on Climate Change and the Environment, 2022). In Nepali's context, structural castism is prevailing in lieu of structural racism. In Nepal, *Dalits* are the most likely to be worst affected by climate change.

The data from FGDs and KIIs indicate that exclusion is rampant during the time of planning and execution of disaster management by the government. The local representatives, in many instances, have favoured their own party members or the community members.

So far it's only Rolpa Municipality that has initiated the formation of LDMC. The *palikas* do not have substantial preparedness plans to cope with the impact of climate change in terms of livelihood options, agricultural production and health and safety. Limited budget is allotted for rescue and relief works. And, this happens every year. There are no long term preventive plans to cope with the climate change in any of the research areas. The Dalits who have been prone to floods and landslides have not yet been rehabilitated to safer places. Some Dalits in *Sunchhahari of Sunilsmriti*, rural municipality of Rolpa are shifted to another place by the local government, but these locations have even more fragile soil texture. The risk is much higher now.

In order to monitor potential danger of flood, early warning system has been installed in Butwal. This has benefited the residents alongside of Tinau riverbanks. But in other places, people hardly get any information on potential danger of landslides, floods, epidemics etc. The local government has been greatly supported by Nepal Red Cross Society in many places. Red Cross has been efficient in maintaining data of the needy people during disaster. The local government as such, does not have any preventive and mitigation plans and programs in most of the study areas. The action of most of the duty bearers is reactive. The potential threats and hazards are hardly communicated to the vulnerable groups. There are no information on risks, hazards and plan from the part of local governments.

Overall, the perception in relation to climate justice can be summarised as: Exclusion is rampant during the time of planning and execution by the government in regard to disaster management. The local representatives are known for favouring their own party members or the community members. The study indicates the cases of climate injustice resulting from inequitable distribution of relief materials during disaster. It also reflects that government does not have preparedness plans targeting the *Dalit* communities. It also reveals that there is no long term plan with the government for disaster reduction/management and to cope with climate change. Each year reactive measures are in place during or prior to the disasters.

The rehabilitation measures/actions are not adequate. There is a lack of adequate information on risks, hazards and plans (disaster mitigation plans of local governments)

C4. SPECIFICITIES OF SOCIAL STRUCTURE LEADING TO DIFFERENTIAL IMPACTS

The Nepalese society is made up of people/communities of different caste/ethnic groups, and these caste/ethnic groups constitute a social structure which has for generations placed Dalits (the cluster of 26 caste groups) at the lowest strata of the hierarchy. Dalits have suffered from the brunt of caste-based discrimination and untouchability. The social structure and the then prevailing formal/informal laws/practices have deprived Dalits from access to development opportunities. Their literacy rate is much lower than the national average. Almost two-third of the Dalit population is living below national poverty line. Landlessness is extremely high among the Dalits.

The Dalits of Siraha/Sapati and Rolpa/Rukum-East are no exceptions. In general, the lives of the Dalits in both in Terai and hills are hard and even marginalized from basic fundamental rights. Given the economic, social, cultural and political conditions of the *Dalits* of the study areas, they are more vulnerable than other caste groups who relatively have better economic conditions, have stronger social safety network and better access to government authorities and political parties. The losses and damages are recovered faster in case of non-*Dalit* caste group members unlike the *Dalits*. Non-*Dalits* have stronger houses, adequate lands, and multiple livelihood options. *Dalits's* source of income generation is limited to their traditional occupation or non-lucrative menial jobs such as masonry or lower wages factory works. *Dalits's* agricultural products such as milk and meat are denied by the so called high caste members.

Dalits falling under the lowest rung of the societal hierarchy are more affected by the climate change. Among the affected *Dalits*, there is a significant gender inequalities prevailing. Women suffer the most. Women spend most of the time at homes and are more exposed to climate-induced hazards and risks. Owing to a non-decision making role in a family but burdened with multiple responsibilities of house chores including raising children and taking care of livestock such as goat, chicken, ducks, pigs etc., they are more vulnerable to disasters like fire, floods and landslides. Women and children are less physically strong, and most of them are unable to swim to protect themselves from floods and inundation. They cannot run and save themselves as much as grown up male members during the time of disasters. Children, women and young girls get trafficked to other cities to tackle to poverty after the disasters. Children are malnourished because of further marginalization caused by disasters. Children are even dropped out of schools and indulged in traditional occupation.

C5. IMPLICATIONS ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS

It is undebatable topic that when we talk about climate change one needs to see how it has affected the most marginalized people and the country which has done least to affect the environment adversely. One has to see how climate change has adversely affected on the fundamental rights of the people who have been disproportionately affected by it. Climate change has substantially affected the economic, social and cultural life of the individuals. The UN Charter, the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights (ICESCR), and the UN Declaration on the Right to Development all make clear that State human rights obligations require both individual action and international cooperation.

The basic human rights principles of equality and non-discrimination require action to address and remedy the disproportionate impacts of climate change on the most marginalized and to ensure that climate actions benefit persons, groups and peoples in vulnerable situations and reduce inequalities (Understanding Human Rights and Climate Change, 2021).

Climate change has affected the rights to health, food, water and sanitation of most marginalized communities in Nepal, particularly a community with higher vulnerability towards the impact of climate change. This will be more at an increasing pace in the future if their conditions are not redressed on time.

The nutrition of poor people with limited lands and low income options are highly affected due to climate change through the changes in crop yields. The loss of livelihoods, increases in poverty, and reduced access to food, water and sanitation are the other effects of climate change on the *Dalits*.

Implications on the right to life:

The Dalit settlements in *Sisne*, and *Putha* rural municipality of Rukum and *Lungri*, *Sunilsmriti*, *Sunchhahari* rural municipality and Rolpa Municipality of Rolpa are in extreme risk of landslides (*see photos*). During monsoon period, the residents spend sleepless nights to save their lives.

The Dalits in Terai, have constant fear of inundation and floods during monsoon. Dalits in *Dhorna* Municipality live in forest area where their lives are continuously threatened by herds of wild elephants and snakes. During winter, people fear the deaths of coldwaves (*sheetlahar*)

Implications on the right to self-determination:

Dalits have to be displaced unwillingly and migrate to other places for better livelihood and safety. Some parts of project areas in hills have been affected by extreme climates like drought or extreme cold. The lands have become barren. Frost and dryness has lowered the crop-yield. Because of poor agricultural production, and poor income generating options (primarily due to caste based discrimination) Dalits have to go to India and other countries for the livelihood. Due to changed climatic condition and resulting loss of income source, Dalits in are forced to work in brick kilns and construction works in quite unsafe working conditions in search of income.

Dalits, particularly *Kami*ⁱ people have quit their traditional occupation as they are barred from collecting woods for burning the furnace. Domⁱⁱ and Mushaharⁱⁱⁱ are forced into other occupation other instead of their traditional occupation of weaving, making baskets as the vegetation has been changed due to climate variability. They hardly find raw materials for continuing their traditional occupation. As the Dalits quit their traditional occupation, the culture and customs are also fading away.

Due to river-cutting, inundation and landslides Dalits are forced to leave their homes and take shelter in the places provided by the government. These places are generally identified for immediate rescue purpose. The government has done very little for the rehabilitation aiming for longer term habitation.

Implications on the right to development, food, health and sanitation:

Climate change hinders the right of vulnerable communities to socio-economic development. Many families from Dalit community are forced to divert financial and human resources away from development priorities like health, education and agrarian support to confront climate change and its impacts.

During the FGDs it was learnt that the earnings of poor Dalits are spent mostly on repairing their houses to fight upcoming disasters like landslides and floods. Due to poor sanitation, Dalits fall ill from contagious diseases cholera and malaria as aftermath of floods and inundation. For better livelihood, Dalit youth go abroad taking loans from others. Most of their earnings are spent on repaying the loans. Foreign migration has not been much of help for already poor people. It was discussed during the FGDs that due to the floods and epidemics, the Dalit children are not able to go to schools regularly.

Increase of temperature and extreme rain has disrupted the crop-yield. Eg. Bananas are no more grown in Rolpa because of change in the temperatures. Some vegetables and fruits have stopped growing in hills. This leads to unavailability of nutritious foods which were readily available earlier.

During disaster, Dalits are enforced to survive on limited food and water, share spaces and face the sort of treatments and medicines.

Implications on the right to housing

Climate change has threatened the Dalit's right to housing in many ways. Extreme weather events have destroyed homes displacing multitudes of people. Drought, erosion and flooding have rendered territories inhabitable both in hills and Terai resulting in displacement and migration. Landless Dalits in Terai have houses in low-lying areas from which they face inundation and floods every year during rainy seasons.

Dalits in hills who are mostly landless have their houses in steep lands in isolated conditions. Their houses are situated in disaster prone areas whereas the safe and fertile lands are occupied mostly by rich non-Dalit communities. Dalits' settlements are generally away from main cities and have poor access to public amenities. The only reason for the settlements of Dalits in isolated condition is the discrimination faced by Dalits on the pretext of caste.

The materials used for building house are generally bamboo, canes, mud, hay and stone. It is very rare to have Dalits built cemented houses. These houses are quite sensitive to the climatic variability. The houses are not fully proofed from rain and cold. The foundation of the houses are not strong enough to withstand the floods and landslides/mudslides.

Implications on the right to education:

The climate change has exacerbate the existing development challenge of ensuring the proper education of Dalit children. The children have to shift to new locations with their parents in search of better living conditions and safety. During the disasters the children are not sent to schools for months until full recovery. Most of the time, the Dalit children join their parents for income generating activities such as work in farms, brick kilns, fishing in rivers.

Implications on the right to meaningful and informed participation:

The ICCPR guarantees to all persons the right to participate in public affairs and to vote. The Declaration on the Right to Development guarantees the rights of all persons to participate in, contribute to and enjoy economic, social, cultural and political development and to share in the benefits therefrom (Understanding Human Rights and Climate Change, 2021). In the context of climate change, this includes making available early warning information about the effects of climate change, and transparency regarding adaptation and mitigation measures, their potential impacts and their financing.

Most of the Dalits are under-informed about climate change and its impact. Their perspectives on climate change and its impact is kind of very basic. The local government has recently started forming committees like LDMC. There are marginal budget set aside for disaster victims but do not have any budgets for preventive actions such as, rehabilitation, river training, embankments, livelihood trainings, alternate cropping etc.

Hardly, any Dalits know about the entitlements provided by government to the victims.

Some CSOs like Asha Foundation have implemented some projects in Rolpa and in Terai areas on climate change. But their efforts have not focused particularly on Dalits communities.

The Nepal Red Cross Society in both Lumbini and Madhesh Province have played vital role in rescue and distribution of distributing relief materials to disaster victims. The action taken by Samata Foundation in developing volunteers (DHRDs) in climate justice has played vital role in imparting the knowledge on climate change to 21 CBOs in hills and Terai.

C6. EXISTING LAWS AND POLICIES

C6.1 Existing Legal Instruments related to Climate Change Management

The Constitution of Nepal, 2015: The Constitution of Nepal (2015), in its preamble, has clearly articulated for “ending all forms of discrimination and oppression created by the feudalistic, autocratic, centralized, unitary system of governance”. It has also resolved to “build an egalitarian society to ensure economic equality, ... and social justice”, by eliminating discrimination based on class, caste, region, language, religion and gender and all forms of caste based untouchability. In part three, under the fundamental rights and duties, various articles, e.g., right to live with dignity, right to freedom, right to equality, rights relating to justice, right against untouchability and discrimination, right relating to property, right to clean environment, right to education, right relating to food, right to housing, and others..., have been elaborated. All these articles are guided by the principle of inclusion that aims “to eliminate discrimination based on caste, class, region, language, religion, gender and all forms of untouchability”. In the same chapter, Article 20 has “Rights of *Dalit*” which writes seven different rights for *Dalits* including “The *Dalit* shall have the right to participate in all bodies of the State on the basis of the principle of proportional inclusion. Special provision shall be made by law for the empowerment, representation and participation of the *Dalit* community in public services as well as other sectors of employment.”

National Climate Change Policy 2019: The Government of Nepal has introduced the National Climate Change Policy 2019 to provide policy guidance to various levels and thematic areas towards developing a climate resilient society by reducing the risk of climate change impacts. The policy has recognized the need to integrate gender equality and social inclusion (GESI) through its objective “to mainstream GESI into adaptation and mitigation programs”, and its cross cutting theme “Gender Equality and Social Inclusion, and Livelihoods and Governance” with six key strategies and working policies. However, the policy is not informed by the specific problems, challenges and opportunities faced by different groups of women and men in the context of climate change. Even though under its cross-cutting GESI theme, the policy mentions about different vulnerable groups to be addressed, the sectoral policies within it considers the community/citizens as a monolithic groups and does not take into consideration their historical discrimination, situational vulnerabilities, and hence the differential impacts of climate change on these groups. This can pose problems in addressing the GESI issues and opportunities within/ and through the sectoral policies and isolate the GESI related policy provisions and strategies. The policy (GESI chapter) focuses on addressing the vulnerabilities of women and marginalized groups and does not consider these groups as contributors and agents of change.

National Framework on Local Adaptation Plan for Action (LAPA) 2019: The Government of Nepal introduced this framework to provide strategic direction to local governments and

other stakeholders to integrate and mainstream climate change adaptation and disaster risk reduction and management in the implementation of development priorities and resource management. In the changed governance structure of Nepal, climate change adaptation lies within the jurisdiction of the local, province and federal governments. The LAPA framework was formulated in order to mainstream climate adaptation and disaster risk reduction and management in the local development planning process. The LAPA framework, which focuses on local government, is guided by three main guiding principles. Firstly, to enhance the climate resilience of individuals, households and communities livelihoods through local development plans and programs; secondly, to make development infrastructures and investments more climate resilient; and thirdly, to identify and promote climate adaptation and disaster risk reduction and management practices, resources, capacity and knowledge generated through the leadership of individuals, households, communities and social groups and organizations. Participation of climate vulnerable households and local communities in the formulation and implementation of local adaptation plans remains at the core of these guiding principles.

Climate Change Strategies and Work Plan 2020-2030 (2077-2087) for Gender Equality and Social Inclusion: This document acknowledges that the effects and impacts of climate change have been more severe on women, *Dalits*, Janjatis, minorities and disadvantaged communities, and in areas with geographic remoteness. The livelihoods of these affected communities are directly affected; and because of lack of alternative livelihood opportunities, it is difficult for them to cope with the adversities of climate change. In the above backdrop, this strategy/work plan aims at building adaptation capacities of women and vulnerable communities through enhancing their access in decision making processes, and in resources and means related to climate change adaptation and mitigation. The document has developed sectoral strategies for all eight sectors, viz., agriculture and food security; forest, bio-diversity and watershed conservation; water resources and energy; disaster risk reduction and management; health, drinking water and sanitation; rural and urban habitats; industry, transport and physical infrastructure; and tourism, natural and cultural heritage. It has worked out a detailed list of activities, indicators, responsible agencies, and time limit; and has also spelled out responsibilities of all the three governments – federal government, provincial government, and local government.

National Adaptation Plan (NAP) 2021-2050 – Nepal: This NAP sets out a framework to integrate adaptation across sectors and levels of government. The plan sets out short-term priority actions to 2025, as well as medium-term priority programs to 2030 and long-term adaptation strategic goals to 2050 that aim to assist Nepal to better integrate actions and strategies to address climate risk and vulnerability in development planning and implementation. The short-term and medium-term actions are designed to help the Government of Nepal achieve the adaptation actions set out in its 2020 Nationally Determined Contribution (NDC). This Nap also serves as Nepal's instrument of Adaptation

Communication, a requirement of the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC).

C6.2 Existing Legal Instruments related to Disaster Risk Management

Constitutional Provisions for DRRM: For the very first time, disaster management is identified in the Constitution of Nepal. It underscores the ownership and priority of the state in managing disasters with an emphasis on early warning, disaster preparedness, rescue, relief and rehabilitation for preventing water induced disasters, developing sustainable and reliable irrigation through river management and minimizing the risks from disasters. Schedule 7 of the Constitution has listed natural and human induced disaster preparedness, rescue, relief and rehabilitation activities in the concurrent powers of federal and provincial governments. Similarly, Schedule 8 has listed disaster management as sole responsibility of the local government and Schedule 9 has included it in the concurrent powers of all tiers of governments. Disaster risk management is, thus, identified as one of the key responsibilities of all the three tiers of government

Disaster Risk Reduction and Management Act 2074 (2017): In order to effectively coordinate and manage all activities on reduction and management of disaster risks (e.g., protecting human lives and properties of the public, private and individual; preserving natural and cultural heritage; and keeping physical infrastructures safe from natural and non-natural disasters) through amending and unifying prevailing laws, this Act was promulgated in 2017 by Government of Nepal. The act reinforces the government's efforts to bring disaster risk management initiatives to a new height. It puts emphasis on risk reduction over response. The Act makes provisions for various councils and committees at various levels of governments. It has also defined the tenure, working procedures, functions, duties and powers of these institutions. The disaster management councils and committees in all levels are inclusive of all main sectors of life including political and humanitarian actors of the society. The Act also empowers the government to declare the state of emergency during the intensive disaster. It also furnishes some special rights to the disaster manager for managing rescue and relief work in an effective and efficient manner. It also empowers the government to allocate for dedicated fund at central to local level as a Disaster Management Fund for delivering effective risk reduction, relief and rescue functions before, during and after disaster. It has designated the Ministry of Home Affairs as the nodal Ministry for all activities related to disaster risk reduction and management.

Disaster Risk Reduction and Management Rules 2076 (2019): The government formulated the Disaster Risk Reduction and Management Rules in 2076 further elaborating the functions, duties and powers of the federal level executive committee, national disaster risk reduction and management authority, District Disaster Management Committee, and Local Disaster Management Committee. It has designated the District Administration Office as the Secretariat of the District Disaster Management Committee, and also spelled out the rules for administration of Disaster Management Fund at central and district levels

Disaster Risk Reduction Strategic Action Plan (2018-2030): This action plan is a legal planning framework that covers the entire cycle and stages of disaster risk management, formulated with the purpose of sound management and guidance for an able and longterm disaster risk reduction, efficient and effective response as well as sustainable development-oriented rehabilitation and reconstruction related actions and activities so as to succeed on the multi-aspects of disaster management. This document guides the government agencies, development partners, NGO sector including private sector working at federal, provincial and local levels for adopting effective process to make disaster resilient Nepal.

Inspired by the Sendai Framework for Disaster Risk Reduction-SFDRR 2015-2030, the National DRR Strategic Plan of Action (2018-2030) has adopted a holistic approach to uphold sustainable development by mainstreaming disaster risk reduction in the development process. Based on SFDRR's guiding principle, this action plan has identified 4 priority areas and 18 priority actions. Under each priority action, the strategic activities are identified for 2018 to 2020 as short-term interventions, 2018 to 2025 as mid-term interventions, 2018 to 2030 as long-term interventions and continuous actions. This Strategic Plan of Action has set the targets for reducing disaster loss considering the targets set by the Sustainable Development Goals 2030 in terms of substantially reducing the impact of disasters nationally. It aims to reduce the disaster mortality rate, reduce the number of disaster affected people, reduce the direct economic loss in GDP from disasters, reduce the damage to critical infrastructure and disruption of basic services enhancing resilience, developing DRM strategies and action plans at the provincial and local levels. And substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments. The substantial reduction of disaster risk and loss of lives, the economic, physical, social, cultural and environmental assets of persons, businesses, and communities of the country are key targets focused on reducing the impact of disaster.

National Policy for Disaster Risk Reduction 2018: The government of Nepal introduced this first policy on disaster risk reduction with the aim of ensuring a long term policy provision in the area of disaster risk reduction and management. The policy is formulated to systematize and streamline the work effectively in all stages of disaster management. It includes disaster risk reduction activities for effective relief and response operation after disaster and rehabilitation & reconstruction focusing on sustainable development along with the awareness raising programs and action.

The National Policy for DRR 2018 has been prepared and endorsed to build a safer, adaptive and resilient nation by reducing the existing risks and prevention of new and potential risks. The policy considers the national needs as well as international agreements and obligations, which is more focused on achieving the targets and commitments made in the Sendai Framework for Disaster Risk Reduction, the Sustainable Development Goals, and the Paris

Convention on Climate Change. It has identified 59 activities to cover all sectors and designated roles and responsibilities to sector ministries to carry out sectoral activities

National Disaster Response Framework 2013 (First Amendment 2019): The National Disaster Response Framework 2013 (NDRF 2103) has been amended by the Government of Nepal in 2019 in line with the federal governance system and other prevailing laws related to disaster risk reduction for mobilization of national level resources. The main objective of this framework is to carry out and guide comprehensive disaster response and maintain coordination among all three levels of government for preparedness during large scale disasters. The framework facilitates and expedites activities, such as search and rescue operation and arrangement of emergency shelters, besides ensuring protection of lives and property. As per the framework, the Government of Nepal (Council of Ministers) may approach the UN humanitarian coordinator, national and international governments, Red Cross, regional organizations, donor communities, international professional groups and non-resident Nepalese for humanitarian goods or services if its resources for rescue and relief operation including cash, are inadequate for disaster response. The UN and Red Cross may also call for international assistance in accordance with the government's decision.

The federal government, in association with the provincial and local governments, agencies concerned, security bodies as well as national and international organizations, will accord high priority to search, rescue and relief operation, damage assessment, medical care, treatment of injured, waste management, dead body management, resumption of supply of essential goods, roads, electricity and communication system in the wake of a disaster. Other activities of the government in the event of a disaster include data collection of displaced persons, special care for lactating mothers, pregnant women, senior citizens, children and other vulnerable people.

Local Governance Operation Act, 2017: Guided by the Constitution, the Local Government Operation Act, 2017 has replaced the Local Governance Act of 1999. The 2017 Act identified the functions for all aspects of disaster risk reduction under the duty, responsibility and rights of rural and urban municipalities. It also included the activities related to grant permission of building construction, monitoring and evaluation as per the National Building Code and Standard including the policy, planning, program formulation, implementation, monitoring, regulation and evaluation etc. regarding DRR to develop safer communities.

Public Health Act, 2018: Public Health Act is the pioneer Act for ensuring effective, regular, quality, and easy access to health care and free basic and emergency health services to all. It requires all health facilities to provide emergency health care services mandatorily and follow referral mechanisms. It has envisioned on reducing the impact on public health by food, pollution, hygiene and waste management, industries and urbanization, public health friendly

public infrastructure and safety. It also ensures the emergency medical service and management through ready-to-deploy health teams. It includes a mandatory provision for all tiers of governments to have emergency medical response plans. It also has a provision for local levels to declare a public health emergency in their jurisdiction and recommend the Government of Nepal to control and reduce its impact according to the scale of public health emergency.

Fifteenth Periodic Plan (2019-2023): Disaster management programs were first included in the 10th national plan (2002-2007) of the government of Nepal, this emphasis has gone to ascending orders until the current periodic plan (2019/20- 2023/24) that has emphasized the disaster management as separate topic and also has tried to mainstream the disaster risk reduction and management with various line items topics. It has also prioritized disaster risk management as an inherited character of sustainable development and has given priority to disaster risk reduction accordingly. The federal government with coordination to all tiers of government through this plan aims safe and resilient Nepal by focusing disaster risk reduction activities as well as response and relief functions. Evidence based disaster resilient governance system, integration of disaster management in all phases and dimensions of development, investment through public, private and community partnership are the main objectives of this plan. The plan has also adopted the policy to carry out a special program on capacity building for emergency search, rescue, treatment and immediate relief.

Other Laws, Policies and Guidelines: There are lot more Acts, Rules, Regulations and Guidelines, directly related to, just related to and indirectly related to the disaster management. Some of them are Act relating to Reconstruction of Earthquake Affected Structures, 2015, Soil and watershed conversation act, 1982, Nepal building Act, 1998 and Nepal National Building Code, 2015 and Environmental protection Act, 2019. National agriculture policy, 2004, National shelter policy, 2012, National urban policy, 2006, policies related to water plan and some strategies related to health and infrastructure sectors are also considered as majors in the area of disaster management in Nepal.

Similarly, Post Disaster Recovery Framework (2016 – 2020) by National Reconstruction Authority, Emergency Relief Standards for Disaster Affected People, 2007, Standard Operating Procedures of Emergency Operation Center, 2010, District Disaster Preparedness and Response Planning Guidelines, 2011, Search and Rescue Strategic Action Plan, 2014, Guidelines for the Relocation and Rehabilitation of High Risked Settlements, 2018, Standard Operating Procedures of Ware House (National and Provincial), 2018, Dead body Management Guidelines 2011 (amendment 2019), National Disaster Response Framework, 2013 (amendment, 2019), Standard for Emergency Communication System for Tiered Integration and Operation, 2019 are some more legal arrangements related to mitigation, preparedness, rescue, relief, reconstruction and rehabilitation on disaster management in Nepal.

C7. EXISTING INSTITUTIONAL STRUCTURE

C7.1 Institutional Structure for Climate Change Management

The National Climate Change Policy 2019 and the National Adaptation Plan (NAP) 2021-2050 have made provisions for institutional mechanism at federal, provincial and local levels for formulating and implementing the policies, strategies and working policies related to climate change management. The main institutions involved range from the Environmental Protection and Climate Change Management National Council (EPCCMNC), chaired by the Rt Hon. Prime Minister to the Inter-Ministerial Climate Change Coordination Committee (IMCCCC) to the Thematic and Cross-cutting Working Groups (T/CWGs) and Ministry of Forests and Environment (MoFE) at the federal level. The EPCCMNC maintains policy coordination on the matters of climate change at the national level, and functional coordination is made by the Ministry of Forests and Environment. An inter-ministerial coordination committee is formed under the coordination of Ministry of Forests and Environment for having coordination in climate change related matters. The Policy envisions the establishment of a Climate Change Research Center to facilitate research, technology development and expansion relating to climate change mitigation and adaptation.

The Climate Change Management Division (CCMD) of the Ministry of Forests and Environment functions as a central nodal agency on climate change. It leads formulation of climate change-related policies, plans, and programs, implements them in coordination with government and non-government organizations, and monitors their implementation. It also works as a focal point for the United Nations Framework Convention on Climate Change (UNFCCC). The Division, led by the Joint Secretary, reports to the MoFE Secretary. The Division is divided into five sections (Climate Change Section, Adaptation Section, Mitigation Section, Climate Technology Section, and Green House Gas Measurement Section), each of which is led by an Under Secretary and staffed by officers.

At the provincial level, the institutions responsible for climate change management and the NAP roll out and its effective implementation range from Provincial Environmental Protection and Climate Change Management Council (PEPCCMC) chaired by the Chief Minister, to Provincial Climate Change Coordination Committee (PCCCC) to Provincial Policy and Planning Commission, to the ministry related to forests, environment and climate change and other sectoral ministries at the province. The thematic ministry entrusted with the responsibility of climate change matters at province level coordinates the actions related to climate change at the province.

At the local level, the District Climate Change Coordination Committee provisioned under the chair of District Coordination Committee chief and the Local-level Executive Board are crucial to implement the strategic adaptation interventions outlined in the climate change policy and NAP document. Provision of Climate Change Section, Unit or Focal point is made at the local level and in the concerned thematic ministries of the federation and province.

The institutional provisions for climate change management, and their functions at different levels are given below.

Level	Institution	Functions
Federal	Environment Protection and Climate Change Management National Council (EPCCMNP)	<ul style="list-style-type: none"> • Formulate laws and standards in conformity with this policy and implement or cause to be implemented them; • Develop National Adaptation Plan and implement or cause to be implemented it; • Formulate programs and projects related to climate change in conformity with international and national standards and implement or cause to be implemented them; • Increase access to bilateral, multilateral and international financial resources related to climate change, and identify national resources and mobilize or cause to be mobilized them; • Prepare carbon registry, and coordinate and facilitate carbon trade; • Maintain coordination and collaboration at international and national levels on the matters related to climate change; • Update national data and prepare reports and submit the same to the concerned international organizations; • Participate in, and have coordination with, the international ' forums and processes related to climate change.
	Inter-Ministerial Coordination Committee	Coordination in climate change related matters
	Ministry of Forests and Environment (MoFE)	Functional coordination
	Climate Change Management Division of MOFE	<ul style="list-style-type: none"> • Facilitate the formulation of climate change policies and programs; • Assist and liaise with federal ministries, provincial governments, and municipalities to build their capacities to ensure that the provisions outlined in the National Climate Change Policy are integrated into their policies, plans, and programs • Offer technical assistance in the implementation of climate change policies and plans • Guide sectoral ministries and sub-national governments on mainstreaming climate change in their development policies and plans • Conduct research on climate change, • Carry out research and studies and prepare national and international communication reports on climate change, including GHG inventory and adaptation actions, in

		<p>coordination with various government and non-government organizations.</p> <p>Prepare and publish annual status report on climate change,</p> <ul style="list-style-type: none"> • Maintain a database and coordinate efforts to improve future cycle of vulnerability assessments and loss and damage associated with climate change. • Design adaptation and mitigation projects and manage climate finance for their implementation • To act as the focal point of international treaties on climate change, • Coordinate and facilitate the work done and to be done by various agencies and organizations on climate change, • Facilitate the planning of the Climate Change Council meeting, • Prepare and implement programs related to climate change adaptation and mitigation • Take the lead in developing climate action plans for both adaptation and mitigation, facilitating the management of climate financing, assisting in the development of climate technology, organizing national and international meetings, and fulfilling international reporting requirements. • Prepare necessary national working papers for climate change talks, • Preparation, monitoring and preparation of periodic reports for greenhouse gases • Prepare and make proposals for mobilizing technical and financial assistance for climate change related programs • Organize seminars, workshops and trainings on climate change, • Mitigate the effects of climate change, to do other things, • Act as the Designated National Authority (DNA) of the Clean Development Mechanism, • Identify areas that increase greenhouse gas emissions and promote clean energy and green productivity. • Provide technical assistance to the REDD implementation center,
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		<ul style="list-style-type: none"> • Prepare and submit national reports including greenhouse gas emissions in line with international commitments, • Carry out other works as assigned to this branch. • Facilitate mitigation measures and carbon trade. • Monitor and evaluate the implementation of national climate change policies and international commitments, in particular, those made under UNFCCC, Kyoto Protocol, and the Paris Agreement on Climate Change
Province	Provincial Environment Protection and Climate Change Management Council (PEPCCMC)	•
	Provincial Climate Change Coordination Committee	•
	Thematic Ministry	<ul style="list-style-type: none"> • Formulate provincial policies, directives, standards and plans in conformity with this Policy and implement or cause to be implemented them; • Carry out or cause to be carried out monitoring and evaluation of climate change mitigation and adaptation programs conducted within the Province; • Coordinate with the Federal and Local Levels to formulate and implement programs and projects related to climate change.
Local	<i>palikas</i> (metropolitans, sub-metropolitans, municipalities, and rural municipalities)	<ul style="list-style-type: none"> • Formulate policies, directives, standards and plans at local level in conformity with this Policy and implement or cause to be implemented them; • Conduct climate change mitigation and adaptation programs in coordination and collaboration with the concerned agencies under the federal and provincial governments, non-governmental organizations, private sector, educational institutions and other stakeholders; • Carry out monitoring, evaluation and documentation of programs and projects conducted within the Local Level; • Raise public awareness on climate change;

		<ul style="list-style-type: none"> • Form and mobilize Youth Volunteer Committees for climate-induced disaster management.
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C7.2 Institutional Structure for Disaster Risk Reduction and Management

The Disaster Risk Reduction and Management Act 2074 (2017) makes provisions for various councils and committees at various levels of governments. According to the Act, at federal level, there is an arrangement for the National Council for Disaster Risk Reduction and Management to be chaired by the Prime Minister. It formulates national disaster management policies and plans. The Act also makes provision for an Executive Committee for Disaster Risk Reduction and Management chaired by the Home Minister. This committee implements policies and plans laid down by the Council, An arrangement also has been made for the National Disaster Risk Reduction and Management Authority headed by an Executive Chief to operate and manage activities related to disaster risk reduction and management in an effective manner. The executive chief of this authority is also the member-secretary of the council and committee.

Similarly, according to the Act, at the province level, there is provision for a provincial disaster management council under the chairmanship of the chief minister. This provincial council formulates policies and plans related to disaster management in the province subject to the national policy and plan approved by the central council. The Act also makes arrangement for a province level Disaster Management Committee chaired by the Interior Minister. This provincial executive committee executes disaster management related activities under the guidance of the provincial disaster management council. Similarly at district level, District Management Committee is formed under the chairmanship of Chief District Officer for implementing disaster management activities; and at local level, Local Disaster Management Committee is formed under the chairmanship of Metropolitan/Sub-Metropolitan/Municipality Mayor and Rural Municipality Chairman to carry out disaster management related activities at local level. The figure below shows the institutional structure and their working mechanism.

The institutional provisions for disaster risk reduction and management at different levels, and their functions are given below.

Level	Institution	Functions
Federal	N a t i o n a l Council for Disaster Risk Reduction and Management (NCDRRM)	<p>Approval of national disaster management policies and plans</p> <ul style="list-style-type: none"> • Provide direction to executive committee and national authority • Policy guidance to province and local level • Management of financial resources for disaster management • Evaluation of disaster management activities
	E x e c u t i v e Committee	<ul style="list-style-type: none"> • Submit the national policies and plans to the council • Implementation of disaster risk reduction, disaster response and rehabilitation and mitigation related policies and programs depending upon the limits of approved policies and plans by the council • Implementation and approval of the disaster risk reduction strategies and programs • Determine the role of public, private and Non-Government Organizations (NGOs) on disaster management • Determine the role and responsibilities of the concerned ministries, departments and other institutions regarding disaster management. • Institutional capacity building of national, province and district and local level on disaster management. • Incorporate disaster management related courses from the school level to higher education. • Vulnerability assessment and hazard mapping
	National Disaster Reduction and Management Authority (NDRMA)	<ul style="list-style-type: none"> • Implement the plans, programs and decisions approved from the council and executive committee • Work as resource centre for disaster reduction and management • Study and conduct research in the issues about causes and mitigation measures of landslide, flood, earthquake, climate change, land-use change and other different hazards and disasters.

		<ul style="list-style-type: none"> • Provide financial and technical assistance to province and local level to prepare periodic plans related to disaster management. • Involve private, NGOs and local community in disaster management • Formation of search and rescue team to national, province and local level and build their capacities to handle disasters • Mobilize security forces, search and rescue team. <p>Awareness creation about disaster management</p>
Province	Province Management (PDMC)	Disaster Council <ul style="list-style-type: none"> • Lay down province level policy and plan on disaster management, • Provide policy guidance, and directives to the Provincial Disaster Management Committee as and when necessary
	Province Management (PDMCom)	Disaster Committee <ul style="list-style-type: none"> • Implement the disaster related medium term and short term policies, plans and programs in the province level based on the approved national policies and plans from the council. • Facilitation and coordination for effectiveness of the preparedness activities of the local disaster management committee • Coordination with national, province and local level to make effectiveness of the activities about search and rescue • Make standards for rescue items management • Management of drinking water, food, clothes and medicines in disaster affected areas • Recommend to GoN for declaration of emergency in disaster affected areas • Move the unsafe people to the safe places • Establishment of disaster management information system and installation of Early Warning System (EWS)
Local	District Management (DDMC)	Disaster Committee <ul style="list-style-type: none"> • Implement the policies, plans and programs approved by council, executive committee and province committee • Preparation and implementation of Disaster Response Plan of the district • Mobilize emergency operation centre (EOC) of the district • Conduct search and rescue works in the affected areas • Management of dead bodies due to disasters

		<ul style="list-style-type: none"> • Management of drinking water, food, clothes and medicines in disaster affected areas • Keep intact security forces • Coordination of national and international assistance during disaster • Information flow about disasters
	Local Disaster Management Committee (LDMC)	<ul style="list-style-type: none"> • Design and implementation of local disaster management plan • Allocation of budget for disaster reduction • Coordination of public, private, NGOs, local volunteers and social mobilizers to conduct disaster management activities • Implementation of building codes and standards/guidelines • Formation of disaster preparedness committee at ward and community level • Training about mock-drill • Management of rescue and relief at affected areas • Establishment of disaster management information system and installation of Early Warning System (EWS) • Activate the emergency operation centre (EOC) at local level

C8. STAKEHOLDER ANALYSIS

C8.1 Analysis of Climate Change Management Stakeholders

The key stakeholders responsible for climate change management at federal, provincial and local levels, and their roles, responsibilities are presented below.

Federal Level Stakeholders

Environmental Protection and Climate Change Management National Council (EPCCMNC): The EPCCMNC, chaired by the Rt Honorable Prime Minister, provides strategic guidance in mainstreaming climate change management and NAP actions into policies, plans and programmes at all levels of government.

Inter-Ministerial Climate Change Coordination Committee (IMCCCC): The IMCCCC, lead by the Forests and Environment Minister, is responsible for the overall coordination and technical aspect of climate change management and NAP implementation with sectoral ministries, government and non-governmental institutions along with the communication of climate change management and NAP priorities to the three levels of government.

Ministry of Forest and Environment (MoFE): The MoFE is responsible for the overall NAP process, and for policies, laws, and strategies for climate adaptation. MoFE provides guidance and technical support to provincial and local governments; monitoring, reporting and review of adaptation actions; reporting on adaptation actions on an annual basis; and approval of adaptation projects funded through international sources.

Climate Change Management Division (CCMD), MOFE: The CCMD, MoFE, is responsible for the development, coordination, and implementation of the climate change policy and NAP. As the convening agency on adaptation, CCMD engages with sector ministries at the federal level, and provincial and local governments. It is responsible for coordinating the NAP process within MoFE; mainstreaming adaptation in sectoral, provincial and local policies, plans, and programmes; leading studies and research on adaptation; reporting annually on adaptation; serving as the focal point for the UNFCCC; coordinating all adaptation-related projects and supporting coordination across working groups.

Climate Change Data Management, Monitoring and Reporting Centre (CCDMMRC): The CCDMMRC is envisioned under the MoFE at the federal level to facilitate regular monitoring of the NAP implementation that is guided by the NPC, EPCCMNC, IMCCCC, PECCMC, PPC, DCCCC for its effectiveness. This centre will collect and

compile all the data related to climate change adaptation implementation from sectoral ministries, intra-governmental agencies, development partners, non-governmental organizations, private sector working at the all tiers of government through a dedicated system of online portal and or platform for data sharing mechanism. Periodic adaptation status report, monitoring report will be prepared by this centre so as to understand the overall implementation of the NAP.

Development Partners and Agencies: The role of the development partners and agencies, international and national non-governmental organizations, private sector, academia, networks and associations is crucial in climate change management and NAP implementation in Nepal. A cross-sectoral learning and experience sharing among all the stakeholders of the climate change and NAP led by the MoFE will be periodically organized utilizing the existing and or new coordination mechanisms and through cooperation with different sectors.

Thematic and Cross-Cutting Working Groups: The sectoral ministries at the federal level are responsible for establishing climate change units to mainstream the climate change and NAP in sectoral policies, planning and activities. Relevant ministries are responsible for coordinating thematic working groups and cross-cutting working groups, and lead the mainstreaming of adaptation into sectoral policies and plans. The joint secretary of the concerned ministry is the coordinator of the working group.

Ministry of Finance: The Ministry of Finance, as the focal point to the Green Climate Fund and Global Environmental Facility, works to increase access to domestic and international financial resources related to adaptation and helps to coordinate climate finance through a dedicated climate finance unit within the ministry.

National Planning Commission: The National Planning Commission leads the federal government's planning process, coordinates efforts to achieve the SDGs, assists with the mainstreaming of climate change adaptation in planning processes.

Province Level Stakeholders

Provincial Environment Protection and Climate Change Management Council (PEPCCMC): The PEPCCMC is chaired by the Chief Minister

Provincial Climate Change Coordination Committees (PCCCC): The PCCCC have been established in each of the seven provinces with responsibility to integrate and

mainstream climate adaptation into policies, plans, strategies, programmes, and projects. This includes vertical linkages with the federal government, integrated approaches across provinces, and coordination of capacity building for provincial governments.

Province Ministry related to Forest, Environment and Climate Change: This ministry is the focal ministry for climate change affairs at the provincial level and is responsible for implementing and coordinating climate adaptation actions; sharing of adaptation information with sector ministries and local governments; and monitoring the implementation of adaptation planning and budgeting.

Local Level Stakeholders

District Climate Change Coordination Committee (DCCCC): The DCCCC, chaired by the DCC chief, helps to facilitate climate change adaptation and resilience work at the district level where the mayor/chairperson remains the member to roll out climate change management and NAP implementation.

Municipal Executive Board: The Executive Board at the local level oversees and provides strategic guidance to coordinate implementation of climate change adaptation actions outlined in the NAP document at the local level.

Forest, Environment and Disaster Management Section: A Forest, Environment and Disaster Management Section at the local level is responsible for facilitating climate adaptation activities; monitoring and review of adaptation action: raising public awareness on adaptation: implementing adaptation projects in areas under local jurisdiction (such as environmental conservation, biodiversity, agriculture and livestock, watershed management, and wildlife) and integrating adaptation into local level services (such as health, sanitation, agricultural extension, and drinking water).

C8.2 Analysis of DRRM Stakeholders

The key stakeholders of DRRM at the three levels of governments, and their interests, roles and responsibilities are summarized below.

DRRM stakeholders at federal level

National Disaster Risk Reduction and Management Council: This council chaired by the Prime Minister is the highest policy making body for DRRM at the federal level.

Disaster Risk Reduction and Management Executive Committee: The Minister for Home Affairs heads the executive committee, and it is the apex body responsible for the implementation of plans, policies and programs approved by the National Council. This committee is composed of the Ministers for the Urban Development, Health and Federal Affairs; Secretaries for all the Ministries including Cabinet Office; Lieutenant General of Nepali Army, Chief of Police Forces, Director of the National Bank, Member Secretary from the Social Welfare Council, Chairpersons from the Telecom Authority, Nepal Chamber of Commerce, Nepal Red Cross Society, Federations of Nepalese Chamber of Commerce and Industries and the Executive Chief of the NDRRMA as the member secretary for the committee.

Ministry of Home Affairs: Ministry of Home Affairs (MoHA) acts as National Focal Agency on Disaster Management and lead agency responsible for implementation of the Disaster Risk Reduction and Management Act 2017. The MoHA is also responsible for rescue and relief work, data collection and dissemination, as well as collection and distribution of funds and resources. It is also the leading agency for logistics management in case of the disaster beyond the capacity of the provincial and local governments. The ministry has a separate division for Disaster and Conflict Management (DCMD) with Disaster Study, Risk Reduction and Recovery Section within. The roles of DCMD are: develop national DRR policies and plans, monitor the implementation of DRR policies, prepare DRR reports, carry out cluster coordination and lead logistic cluster, carry out national and international DRR stakeholders coordination.

Ministry of Federal Affairs and General Administration: Ministry of Federal Affairs and General Administration (MoFAGA) is the nodal ministry for the local governments. It deals and coordinates all the aspects of disaster management issues at the local level for their functions as per the local governance act 2017. It is responsible for early recovery activities after huge disaster.

Line Ministries:

- Ministry of Urban Development is the lead ministry responsible for recovery and shelter.
- Ministry of Energy, Water Resource and Irrigation is the responsible for energy, dam, embankment, irrigation and related other disaster management activities including hydrology and meteorology.

- Ministry of Defense is the lead ministry responsible for search and rescue, multinational military coordination and assistance.
- Ministry of Physical Infrastructure and Transportation is the lead ministry responsible for related risk reduction, response and recovery.
- Ministry of Education, Science and Technology is the lead ministry responsible for related activities of DRRM cycle.
- Ministry of Health and Population is responsible for emergency medical care and nutrition.
- Ministry of Agriculture and Livestock Development is the lead ministry responsible for food security and related other activities of the DRRM cycle.
- Ministry of Forest and Environment is the lead ministry responsible for forest, timber supply and land related disaster management activities. It also deals with climate crisis.
- Ministry of Communication and Information Technology is the lead ministry responsible for emergency communication.
- Ministry of Water Supply is the lead ministry responsible for water, sanitation and hygiene.
- Ministry for Women, Children and Senior Citizens is responsible for protection activities.
- Relief and Treatment Sub-Committee, headed by federal affairs and local development minister and Supply, Shelter and Rehabilitation Subcommittee headed by urban development minister as two major sub-committees directly working with the CNDRC

- Department of Hydrology and Meteorology deals with the related study, information and the dissemination of those information including early warnings to the authorities and public.
- Department for Water Induced Disaster Prevention deals for related DRR and mitigation.
- Department of Mines and Geology works for Earthquakes study and related for DRRM.

Other Ministries and Departments of the Government of Nepal are also responsible for disaster crisis management at their capacities

National Disaster Risk Reduction and Management Authority (NDRRMA): A dedicated entity to address disaster issues in Nepal was first time legislated in DRRM Act in 2017 and it is now established as the National Disaster Risk Reduction and Management Authority after the endorsement of National Disaster Risk Reduction and Management Regulation, 2019. The primary role of this authority is to operationalize the disaster risk and management functions, making necessary arrangements for regular coordination with stakeholders, carry out response operations, search and rescue, relief, early recovery, recovery plan and implement disaster related programs. This authority is also responsible to regulate risk reduction related activities and will have an incident commander in emergency.

DRRM Stakeholders at Province Levels

Province Governments: As per the existing legal provisions on DRR, the provincial governments have taken charge of managing disasters as a primary task. Some of the provincial governments (Province No. 1, Madhesh Province, and Bagmati Province) have developed their own disaster management act, while others are still under consultation and progressing towards finalization. Provincial governments in coordination with District Disaster Management Committees (DDMC) are coordinating, facilitating and guiding the local levels in risk reduction initiatives, and the mainstreaming the development efforts by applying mitigating and preventive measures.

Province Disaster Management Council: Chaired by the Chief Minister, the Province Disaster Management Council (PDMC) is responsible for plan policy approval, guidance and direction, monitoring as well as evaluation to the lower levels at their capacity.

Province Disaster Management Executive Committee:

The Province Minister for Internal Affairs and Law leads the execution of disaster management activities at province level. A 15 membered Province Disaster Management Executive Committee (PDMEC) is present in each seven provinces of Nepal and chaired by the Province Minister for Internal Affairs and Law. The composition of the committee and members is as per the Province Law. Generally, it comprises related government agencies and security agencies (law and order, emergency response and development institutions) along with voluntary organizations such as Red Cross. It is responsible for formulating the policies and plans for the respective provinces within the umbrella of National policies and laws. The implementation is done in coordination of District Disaster Management Committee (DDMC) and Local Disaster Management Committee (LDMC).

DRRM Stakeholders at Local Levels

District Disaster Management Committee (DDMC): The DDMCs in all 77 districts , are responsible for district level disaster preparedness and response planning and implementation. They are also responsible for all the activities related to DRR Cycle including search and rescue (SAR) and immediate relief. The chairperson of the DDMC is the Chief District Officer (CDO), who is the highestlevel government official to take disaster-related decisions at the district level. This committee comprises of the Mayors from the local levels, various line agencies such as law and order, emergency response (police and armed police), district chapter of Nepal Red Cross Society (NRCS) and critical facilities such as irrigation, road, livestock, health etc. That's why it is also a main coordinating body amongst all level of governments for the district level.

Local Disaster Management Committee (LDMC): The LDMC is a 15 membered committee in all 753 local levels of Nepal. This committee is headed by the Mayor or Chief of the local level and its composition will be as per local law. This committee is responsible for disaster risk reduction and management at the local level, such as risk mapping, resettlements, disbursement of funds during and after emergencies, and rescue, identification and transport of the injured to hospitals. This committee is guided by the DRRM Act, 2017 and local laws. As per the Local Governance Operation Act, 2017. the local level has the right to exercise the disaster risk reduction, mitigation, response, relief and recovery activities. So, the LDMC works for all the local level activities for DRR cycle including curriculum development and community mobilizations with their own plans within the national guidelines.

PART-D: CONCLUSION AND RECOMMENDATIONS

D.1 CONCLUSIONS

Dalits in Nepal are more vulnerable to climate-induced disasters compared to non-*Dalits* due to their marginalized social position; the location of their homes, usually the periphery of settlements in marginal lands ; their risky occupations, such as rubbish and sewerage disposal, and casual farm labour; and the nature of their housing (usually mud-built, thatched roof houses) and extreme poverty (most of them are landless or with only little land).

The gaps and inequalities caused due to the vulnerability of excluded persons and groups can be effectively addressed through humanitarian initiatives when needs of excluded persons and groups are specifically taken into account and rightly directed . (IDSN, 2013) .Those who are most vulnerable and marginalized need primary attention when a disaster strikes, both because the impact of the disaster is likely to be higher on them than others, and because of the likelihood that they find themselves excluded from response and recovery efforts.

Disasters do not affect everyone equally. People who are most vulnerable and exposed to natural hazards are hit the hardest when disaster strikes. There is differential impacts of climate change. *Dalit* communities have suffered the most due to climate change.

(Global Platform for Disaster Risk Reduction, 2022)

Dalits are the victims of climate injustice. The study reflects that the humanitarian assistance, such as rescue, relief, rehabilitation, recovery and response initiatives have, in many instances, favored the non-*Dalits* who although suffered less, were able to influence and access the resources. The assistances tend to ignore caste dynamics and related power-structure, or simply remain “caste blind”; and this blanket approach often undermines equity in aid and even exacerbate caste-based mechanism of exclusion.

The existing laws and policies do not adequately deal with the issues differential climate impacts and climate injustice.

Existing institutional structures are not able to address the issues of differential impacts and climate injustice.

Stakeholders are currently not well informed about the issues of differential impacts and climate injustice.

D.2 RECOMMENDATIONS

- Reforms are needed in Laws/Policies/and Institutional Structure to address the issues of differential impacts and climate injustice
- Stakeholders require to be sensitized and informed about these issues
- More in-depth, qualitative as well as quantitative researches are needed to generate evidences, facts and figures on differential climate impacts and climate injustice

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Attachments

Attachment-1: List of Project Palikas

Attachment-2: Questionnaire used for Household Level Survey

Attachment-3: Checklist used for Key Informant Interview

Attachment-4: Checklist used for Focus Group Discussion

Attachment-5: List of Project CBOs and their Details

Attachment-6: List of Respondents of Household Level Survey

Attachment-7: List of the Participants of Focus Group Discussion

Attachment-8: List of Key Informants

Attachment-9: Orientation/Training Schedule

Attachment-10: Participants of Orientation/Training

Attachment-1: List of Project Palikas

S. N	Name of Palika	District	Province
1	Puthauttarganga RM	Rukum East	Lumbini
2	Bhume RM	“	“
3	Sisne RM	“	“
4	Rolpa Municipality	Rolpa	“
5	Lungri RM	“	“
6	Sunilsmriti RM	“	“
7	Sunchhahari RM	“	“
8	Lahan Municipality	Siraha	Madhesh
9	Aurahi RM	“	“
10	Bhagwanpur RM	“	“
11	Sakhuwanarkatti RM	“	“
12	Tiruhut RM	Saptari	“
13	Tilathikoiladi RM	“	“
14	Rajgadh RM	“	
15	Agnisaier Krishnasarban RM	“	
16	Surunga Municipality	“	

Attachment-2: Questionnaire used for Household Level Survey

Samata Foundation Climate change and its impact on Dalit communities

Informed Consent:

Namaste, my name is I have come to collect information as enumerator from Samata Foundation, Kathmandu. Samata Foundation is a social organization and conducts research on Dalit and marginalized communities. The purpose of this survey is to study the impact of climate change on Dalit and marginalized communities. The results of this study will be used for the advocacy for rights of the Dalit community and help the state to formulate policies for building an equitable and inclusive society without discrimination in the future. I want to get information from you on various topics related to your personal, family and environmental impact and will ask questions for that. This interview is completely voluntary. If you don't want to answer any question, please let me know, I will move on to another question. The details provided by you will be completely confidential according to the Nepal Statistics Act 2015 and those details will be used for research purposes only.

Questionnaire for Household Survey

1. *Existing Social Structure and Conditions of Dalits*

1. Details of family members

S. N	Personal Details		
1	Name		
2	Age		
3	Province		
4	District		
5	Rural Municipality/Municipality		
6	Ward No.		
7	Caste group		
8	Contact Number		
		Options	Code No.
	Gender	Female	1
		Male	2
		Other	3
	Language	Maithali	1
		Nepali	2
		Bhojpuri	3
		Hindi	4
		Awadhi	5
		Bajika	6

		Other.....	7
	Religion	Hindu	1
		Budhist	2
		Christian	3
		Muslim	4
		Other.....	5

S. N	Family detail	Options	Code No.
101	How many members are there in your family?	..... Nos.	1
102	Type of the family	single family	1
		joint family	2
103	Marital Status of the respondent	Unmarried	1
		Married	2
		Divorced	3
		Single	4
104	Any person in the family with physical disability?	Yes	
		No	
105	Any person in the family with mental disability?	Yes	
		No	

Details of Family Members

Name	Relation to the respondent	Age	Gender (Female/Male & other)	Education

2. Land ownership?

S. N	Land	Options	Code No.
201	How much land do you have?	..... Dhor	1
		..... Kattha	2
		..... Bigha	3
		..... Ropani	4

		Others.....	5
		No	6
202	Do you have the land ownership certification of those land?	Yes	1
		No	2
203	If not why?	Being Ilani	1
		Being in the name of another member of the household	2
		Other	3
204	How much of land you possess is used for cultivation?		
205	How much of land owned by others is cultivated by you?		
206	How much your land cultivated by others?		

3. Food Security Situation

SN	Condition of Food security	Options	Code No.
301	What are the major crops you grow in your land?	Rice	1
		Wheat	2
		Maize	3
		Millet	4
		Buchwheat	5
		Oats	6
		Other	7
302	For how long will your agricultural production be sufficient for your family?	More than 12 months	1
		9-12 months	2
		6-9 months	3
		3-6 months	4
		less than 3 months	5
#)\$	where is your house located?	riverbank	1
		Steep hill	2
		inundated area	3
		Other.....	4
305	what type of house do you have?	Hut	1
		thatched house	2
		Mud house	3
		Tinned house	4
		Tiled house	5
		casted house (cemented)	6
306	Is the space in your house adequate for your family members?	Yes	1
		No	2

307	Condition of the location of your house?	Extremely risky area	1
		Very risky area	2
		Moderately risky area	3
		Less risky area	4
		Risk free area	5

4. Source of Earning/Livelihood

S. N	Source of Earning/Livelihood	Options	Code No.
401	How many members in your family earn (make income)?	1 Person	1
		2 Person	2
		3 Person	3
		Other	4
402	What kinds of jobs do your family members do to earn?	A job with regular monthly salary	
		Daily labor	
		Remittance	
		India, Central Asia, Malaysia	
		Others.....	
403	Approximate earnings from above jobs?		
406	Is your family depended on the traditional occupation?	Yes	1
		No	2
		Other.....	3
	Has anyone from your family or have you faced caste-based discrimination?	Yes	
		No	
	Does your family have dignified relationship with neighbors or the society?	Yes	
		No	
	Does your family members get respectful behavior from the society you are living in?	Yes	
		No	

5. Educational status

S. N	Educational status	Options	Code No.
501	Have you received any formal education?	Yes	1
		No	2
502	If not why?	No family support	1
		Poverty	2
		distant school]	3
		physical disability	4
		Other.....	5

503	Have you undergone any academic course on climate change?	No	2
		Yes	1
504	Have you undergone any training on climate change?	Yes	2
		No	1

6. Local Experiences on Climate Change Trends

S. N	Local Experiences on Climate Change Trends	Options	Code No.
601	What kind of change have you found in summer temperature in last 30 years?	Increased	1
		decreased	2
		no change at all	3
		don't know	4
602	What kind of change have you found in winter temperature in last 30 years?	Increased	1
		decreased	2
		no change at all	3
		don't know	4
603	You agree, in last 30 years, there has been change in pattern of rainfall?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
604	You agree that there has been increase in early rainfall?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
605	You agree that there has been increase in monsoon rainfall?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
606	You agree that there has been increase in rainfall post monsoon?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5

607	You agree that there has been increase in overall annual rainfall?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5

7. Local Perspective on Climate Change Future Scenario

S. N	Local Perspective on Climate Change Future Scenario	Options	Code No.
701	Do you agree the temperature in summer go on increasing?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
702	Do you agree the temperature in winter go on increasing?	fully disagree	1
		fully disagree	2
		moderate	3
		disagree	4
		fully disagree	5
703	Do you agree that pattern of rainfall will continue to change in future?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
704	Do you agree that early monsoon will be continued in future?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
705	Do you agree, rain will go on increasing in future?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5
706	Do you agree that the post-monsoon rain will go on increasing in future?	fully agree	1
		agree	2
		moderate	3
		disagree	4

		fully disagree	5
701	Do you agree, the overall rainfall will go on increasing in future?	fully agree	1
		agree	2
		moderate	3
		disagree	4
		fully disagree	5

Existing Climate-Induced Risks/Hazards

S. N	What kinds of hazards/risks have you faced in last 30 years?	Options	Code No.
801	Rapid-onset risks	flashflood	1
		Landslide	2
		other	3
802	Slow-onset risks	drought	1
		desertification	2
		epidemics	3
		diseases	4
		Insect infestation	5
		Other	6

Impacts of Climate Change

- What were the effects of these climate changes on your family/community?

Hazard Type	Impact	Rating on				
Drought	Low food production	1	2	3	4	5
	Drying of water sources					
	Human health affected					
Flood	Erosion of river bank settlements					
	Damage to infrastructure					
	Damage to ecosystem					
	Loss of crops					
	Land desertification					
	Loss of human lives					
	Loss of property					
	Loss of livestock					
	Outburst of epidemic diseases					
Landslide	Damage to settlements					
	Damage to infrastructure, roads					
	Damage to ecosystems					
Human Health Issues	Increased mortality rate					
	Lower food availability					
	Limit to worker productivity					

Note 1= not at all, 2 = to some extent, 3= moderate, 4= too some extent, 5= to a large extent.

Coping Strategies adopted by Dalits

Hazard Type	Impact	Local Coping Strategies
Drought	Low food production	
	Drying of water sources	
	Human health affected	
Flood	Erosion of river bank settlements	
	Damage to infrastructure	
	Damage to ecosystem	
	Loss of crops	
	Land desertification	
	Loss of human lives	
	Loss of property	
	Loss of livestock	
Landslide	Outburst of epidemic diseases	
	Damage to settlements	
	Damage to infrastructure, roads	
	Damage to ecosystems	
Human Health Issues	Increased mortality rate	
	Lower food availability	
	Limit to worker productivity	

<i>Perspectives in relation to Climate Justice</i>			
905	Did you receive necessary rescue, relief, rehabilitation supports during the hazards?	Yes	1
		No	2
906	Who helped?	Government agency	3
		I/NGO	4
		Individual Support	1
		Others....	2
907	Do you think, you being a member of Dalit community, have received adequate attention/support from these actors during the climatic hazard?	Yes	1
		No	2
908	If not, why could you not receive the needed attention/support?		
909	What would you suggest to ensure that the Dalit communities receive the needed attention/support during the climatic hazards?		
1001	In your opinion, how vulnerable are you to the risks/hazards of climate change?	Extremely Much (5 or more disaster in last 20 years)	1
		Moderate (3 or more disaster in last 20 years)	2
		less (less than 3 disaster in last 20 years)	3

		No (no disaster in last 20 years)	4
1002	In your opinion, what are drivers of climate vulnerability to you and your family?	poverty	1
		Voicelessness	2
		lack of access to resources	3
		Weak political influence	4
		caste-based discrimination	5
		Other.....	6

3. Causes of Climate Related Conflict Dynamics

S. N	Causes of Climate Related Conflict Dynamics	Options	Code No.
801	What sort of climate-related conflicts occur in your community/village?	regarding water sources	1
		regarding livelihood	2
		regarding the condition of displacement	3
		regarding food and shelter	4
		regarding inadequate rescue/relief	5
		regarding distribution of relief materials	6
		regarding health	7
		regarding safety and security	8
		Other.....	9
802=	What are the causes of these conflicts?	scarcity	1
		prejudice	2
		non-transparency	3
		mental stress	4
		Exclusion	5
		caste-based discrimination	6
		other	7
803	How do you resolve these conflicts?		
804	Do you receive any external assistance/supports to resolve the conflicts?	Yes	1
		No	2
805	If yes, who provide assistance/supports to resolve the conflicts?	Disaster management committee	1
		judiciary committee	2

		ward office	3
		other	4
806	Do you think, your issues as member of a Dalit community, receives adequate attention?	Yes	1
		No	2
		moderate	3
807	Do you think, they have adequately resolved your issues?	Yes	1
		No	2
808	If not, why it is so?	not informed	1
		lack of awareness	2
		inability	3
		not given importance	4
		lack of information channel	5
		lack of access to stakeholders	6
		lack of access	7
		Neglecting Dalits	8
		other	9
809.	What do you suggest to ensure that your climate-related conflict issues are duly addressed?		

1101	Do you have any example/evidence to support the premise that Dalits have suffered the most from climate change?	
1102	Do you have any example/evidence to support that Dalits have faced climate injustice during rescue, relief and rehabilitation measures provided by state and non-state actors?	

4. Existing Climate Induced Risks

901.	What climate-induced risks/hazards have you faced during the last 30 years?	flashfloods	1
		landslides	2
		Earthquake	3
		Volcano	4
		Drought	5
		Communicable diseases	6
		insect infestation in crops	7
		Excessive rainfall	8
		Other.....	9
902	What is your perception on the future scenarios of climate change?		

903	What were the impacts of these climate-induced hazards to your family/community?	Cold wave	1
		Heatwave	2
		Flood	3
		Landslide	4
		Excessive rain	5
		Drought	6
904	What strategies did you adopt to cope with these climatic hazards/risks?		

10 Causes of Climate vulnerability

S. N	<i>Causes of Climate Vulnerability</i>	Options	Code No
1001	In your opinion, how vulnerable are you to the risks/hazards of climate change?	Extremely Much (5 or more disaster in last 20 years)	1
		Moderate (3 or more disaster in last 20 years)	2
		less (less than 3 disaster in last 20 years)	3
		No (no disaster in last 20 years)	4
1002	In your opinion, what are drivers of climate vulnerability to you and your family?	poverty	1
		voicelessness	2
		less access to resources	3
		weak political influence	4
		caste-based discrimination	5
		other	6

In your opinion how vulnerable are you to the risks/hazards of climate change?

Exposure:	types of risk/hazards	1	2	3	4	5
	Are you and your family members are affected by hazards created by climate change?					
	Is your residence in landslide prone area?					
	Is your residence is in flooded area?					
	Is there an excessive rainfall in your area?					
	Is there less rainfall in your area?					
	is there drought in your area?					
	Is there risk of epidemic in your area?					
	is there insect infestation in crops in your area?					

Note 1= not at all, 2 = to some extent, 3= moderate, 4= too some extent, 5= to a large extent.

Sensitivity:	You and your family members are rapidly infected by diseases.					
	You and your family members are faster infected by diseases as compared to others.					
	You and your family members are more mentally stressed than non-Dalits during the disaster.					
	You and your family members have more possibility of being displaced during disaster.					
	During disaster, you and your family has more possibility of having physical damages than non-Dalits during disaster.					

Note 1= not at all, 2 = to some extent, 3= moderate, 4= too some extent, 5= to a large extent.

Adaptive Capacity/	Type of adaptability	Rating on		
		Yes	No	
Economic condition/	Stable source of income (Farming, trading,)			
	Person(s) in the family employed			
	The family has access to local level financial facilities (micro finance/credits, banks)			
Social Capital	Member(s) from the family is/are educated			
	Good Social relationship in the neighborhood			
	Both male and female members are present in the family			
	Family member(s) are reputed in the society. (Free from discrimination and stigma based on caste)			
Physical capital/	Family owns a house			
	Family owns a land*			
	Have luxury at home such TV, refrigerator, oven etc)			
	Have a toilet nearby, convenient			
	Own a vehicle for travelling			
Human capital	Grown male member(s) in the family			

	Family has members are with sound mental health			
	None of the family member(s) has physical disability			
Infrastructure	Availability of electricity			
	Availability of communication device (mobile set, landline set)			
	Availability of open yard खुला सुरक्षित चौरहेको अवस्था			
Note 1= not at all, 2 = to some extent, 3= moderate, 4= too some extent, 5= to a large extent.				

<i>Specificities of Social Structure leading to Differential Impacts</i>		
1201	In your opinion, what specificities of existing social structure and conditions of diverse groups are leading to differential impacts?	

Attachment-3: Checklist used for Key Informant Interview

Checklist for Key Informant Interviews

Differential Impacts of Climate Change

- Do you agree that the impacts of climate change are different to differential sect of people in Nepal?
- If yes, do you agree that Dalits are victimized the maximum by climate change?
- If yes, why in your opinion are Dalits most affected by climate change? (e.g., because they have less resilience- low adaptive/absorptive capacities, and they lack resources)

Perspectives in relation to Climate Justice

- Do you agree that the plight of Dalits to adapt to climate change, recover from climatic
 - shocks and stresses, and access rescue and relief amenities during climatic disaster, are largely unaddressed?
 - Do you think, climate injustice with regard to Dalit communities prevails in the country while executing rescue, relief, rehabilitation measures for the victims of climatic hazards?
- (i) What, in your opinion, could be the root causes of this climate injustice? (i) Voicelessness, (ii) Low access to resources, (iii) Poor political influence, (v) Caste based discrimination, (vi) inadequate targeting through legal provisions, (v) lack of institutional infrastructure to plead for climate justice

Causes of Differential Climate Vulnerability of Dalits

- While everyone is affected by the adversities of climate change, do you agree that the climate change vulnerabilities of different sects of population is different?

- Do you think, Dalits are more vulnerable to climate change compared to other castes/ethnic groups? If yes, why do you think so?

Greater exposure: They have greater exposure to climate change because of Marginal location of your homes (usually in marginal lands in the periphery of settlements), Nature of your housing, location of houses in highly fragile land – unstable sloppy land,

Greater sensitivity: They are more sensitive to climate change because of their marginalized social position, nature of occupation such as rubbish and sewerage disposal.

Lower adaptive capability: Their adaptive capability is lower because they have little or no land, they are casual farm labor, they lack of knowledge, they lack of resources

What are the drivers of climate vulnerability of Dalit communities?

- (i) Poverty, (ii) Voicelessness, (iii) Low access to resources, (iv) Poor political influence, (v) Caste based discrimination, (vi) others

Differential Impacts of Climate Change

- Do you agree that the impacts of climate change are different to differential sect of people in Nepal?
- If yes, do you agree that Dalits are victimized the maximum by climate change?
- If yes, why in your opinion are Dalits most affected by climate change? (e.g., because they have less resilience- low adaptive/absorptive capacities, and they lack resources)

Perspectives in relation to Climate Justice

- Do you agree that the plight of Dalits to adapt to climate change, recover from climatic shocks and stresses, and access rescue and relief amenities during climatic disaster, are largely unaddressed?
- Do you think, climate injustice with regard to Dalit communities prevails in the country while executing rescue, relief, rehabilitation measures for the victims of climatic hazards?
- (ii) What, in your opinion, could be the root causes of this climate injustice? (i) Voicelessness, (ii) Low access to resources, (iii) Poor political influence, (v) Caste based discrimination, (vi) inadequate targeting through legal provisions, (v) lack of institutional infrastructure to plead for climate justice

Existing Climate Related Laws and Policies

- What Laws and Policies related to climate change exist are you familiar with?
- Do these laws/policies adequately deal with climate injustice?
- What weaknesses/shortcomings have you observed in these laws/policies for promotion of climate justice?

Recommendations

- What sort of improvements/reforms do you suggest in existing laws and policies to ensure climate justice for all?

- What are your concrete recommendations for improved implementation of laws and policies that can strengthen resilience and protect and promote climate justice for Dalit communities?

Existing Climate Related Institutional Structure

- What institutional structure exist to address the issue of climate justice at local level?
- In your opinion, do you think the existing institutional structures are adequate to address the issues of climate injustice which these voiceless poverty-stricken social groups are confronted with in their day-to-day lives? (i) Yes, and (ii) No
- If no, what suggestion would you like to make to improve institutional structure for addressing the issue of climate injustice?

Causes of Climate Related Conflict Dynamics at Local Level

- What type of conflicts take place in Dalit communities and with other non-Dalit communities in the context of climate change (e.g., local resource conflicts or conflicts resulting from corruption in state disaster relief)
- What are the causes of climate related conflicts at local level?
- How are the climate-induced conflicts resolved?

Implications of Climate Change on Economic, Social and Cultural Rights of Dalits

- What are the implications of climate change on economic rights of Dalits?
Rights to work
Rights to receive a fair wage
Rights of a safe working condition
Rights to form and join trade unions
- What are the implications of climate change on social rights of Dalits?
Rights to social security
Rights to protection of the family
Rights to an adequate standard of living (freedom from hunger, access to clean water, adequate housing, protection of property)
Rights to mental and physical health
- What are the implications of climate change on cultural rights of Dalits?
Rights to education
Rights to take part in cultural life
Rights to enjoy the benefits of scientific progress
Rights to copyright and trademark protection

Recommendations

- How could civil society be strengthened to protect and promote the rights of marginalized groups affected by climate change?
- How could the economic and social resilience of poorest communities (Dalit communities) affected by consequences of climate change be significantly increased?

Stakeholder Analysis

- Who are the stakeholders (state and non-state actors) involved in addressing climate-induced shocks, disasters and conflicts?

at palika level: municipality/rural municipality
Local Emergency Operation Center (LEOC) Civil Society
Organization, Nepal Police, Nepal Army

at district level: CDO, Red Cross, DEOC, NGO, DCC, Nepal Police Nepal
Army

- What are the roles of the above stakeholders within the causal complexes and conflicts in addressing the climate-induced shocks, disasters and conflicts?

Existing Climate Related Laws and Policies

- What Laws and Policies related to climate change exist are you familiar with?
- Do these laws/policies adequately deal with climate injustice?
- What weaknesses/shortcomings have you observed in these laws/policies for promotion of climate justice?

Recommendations

- What sort of improvements/reforms do you suggest in existing laws and policies to ensure climate justice for all?
- What are your concrete recommendations for improved implementation of laws and policies that can strengthen resilience and protect and promote climate justice for Dalit communities?

Existing Climate Related Institutional Structure

- What institutional structure exist to address the issue of climate justice:
 - at palika level
 - at district level
 - at provincial level
 - at national level
- In your opinion, do you think the existing institutional structures are adequate to address the issues of climate injustice which these voiceless poverty-stricken social groups are confronted with in their day-to-day lives? (i) Yes, and (ii) No
- If no, what suggestion would you like to make to improve institutional structure for addressing the issue of climate injustice?

Causes of Climate Related Conflict Dynamics at Local Level

- What type of conflicts take place in Dalit communities and with other non-Dalit communities in the context of climate change (e.g., local resource conflicts or conflicts resulting from corruption in state disaster relief)
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 - Rights to form and join trade unions
- What are the implications of climate change on social rights of Dalits?
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 - Rights to protection of the family
 - Rights to an adequate standard of living (freedom from hunger, access to clean water, adequate housing, protection of property)
 - Rights to mental and physical health
- What are the implications of climate change on cultural rights of Dalits?
 - Rights to education
 - Rights to take part in cultural life
 - Rights to enjoy the benefits of scientific progress
 - Rights to copyright and trademark protection

Recommendations

- How could civil society be strengthened to protect and promote the rights of marginalized groups affected by climate change?
- How could the economic and social resilience of poorest communities (Dalit communities) affected by consequences of climate change be significantly increased?

Stakeholder Analysis

- Who are the stakeholders (state and non-state actors) involved in addressing climate-induced shocks, disasters and conflicts?
 - at palika level: municipality/rural municipality, Local Emergency Operation Center (LEOC), Civil Society Organization, Nepal Police, Nepal Army
 - at district level: CDO, Red Cross, DEOC, NGO, DCC, Nepal Police, Nepal Army
 - at provincial level/at national level: Ministry of Home Affairs, Ministry of Forest and Environment, Nepal Police, Nepal Army, NEOC, NGO, INGO
- What are the roles of the above stakeholders within the causal complexes and conflicts in addressing the climate-induced shocks, disasters and conflicts?

Influence Map

- How influential are the stakeholders in key decision-making?
- What sort of influence map could be produced to depict the decision-making scenario at local level, provincial and national levels?

Recommendations

- What sort of action plans could be prepared for advocacy works aiming to foster climate justice to Dalit communities at local, provincial and national levels?
- What could be the possible strategies to strengthen the resilience of Dalit communities?
- What would be a visible/effective advocacy strategy through concrete measures at local and national level?

General Questions

- Marginalized groups are unable to confront the economic problems exacerbated by climate change and the destruction of ecological resources because of their political powerlessness. The same applies to the increasing violations of right in the context of climate change. – do you agree? Please explain.
- Even if marginalized groups develop strategies and solutions for adapting to the changed situation, they cannot successfully integrate them into social processes because their voice is suppressed on local level – Do you agree? Please explain.
- Civil society actors, who are important for conveying the local perspective, come under increasing pressure – Do you agree? Please explain.
- Marginalized communities lack experience and perspectives in the development, design and implementation of local and national adaptation and social protection measures to cope with the consequences of climate change – Do you agree. If yes, please explain.
- As a result, they do not benefit from such measures, and bad planning in the design of these measures further increase their vulnerability – Do you agree. Please explain

Role of Women

- What will be the potential role of women in addressing the causes of climate vulnerability of Dalit communities?
- What will be the potential role of women in implementing appropriate advocacy strategies to address the issues of differential climate impacts?

Attachment-4: Checklist used for Focus Group Discussion

Checklist for Focus Group Discussion

Existing Climate-Induced Risks/Hazards

1. What climate-induced risks/hazards have you faced during last 30 years?
 - (i) Rapid onset risks/hazards (flash floods, landslides, others)
 - (ii) Slow onset risks/hazards (drought, desertification, epidemic diseases, insect infestation, others)

Impacts of Climate Change

What were the effects of these climate changes on your family/community?

Hazard Type	Impact
Drought	Low food production
	Drying of water sources
	Human health affected
Flood	Erosion of river bank settlements
	Damage to infrastructure
	Damage to ecosystem
	Loss of crops
	Land desertification
	Loss of human lives
	Loss of property
	Loss of livestock
	Outburst of epidemic diseases
Landslide	Damage to settlements
	Damage to infrastructure, roads
	Damage to ecosystems
Human Health Issues	Increased mortality rate
	Lower food availability
	Limit to worker productivity

Coping Strategies adopted by Dalits

Hazard Type	Impact	Local Coping Strategies
Drought	Low food production	
	Drying of water sources	
	Human health affected	
Flood	Erosion of river bank settlements	
	Damage to infrastructure	
	Damage to ecosystem	
	Loss of crops	
	Land desertification	
	Loss of human lives	
	Loss of property	
	Loss of livestock	
	Outburst of epidemic diseases	
Landslide	Damage to settlements	
	Damage to infrastructure, roads	
	Damage to ecosystems	
Human Health Issues	Increased mortality rate	
	Lower food availability	
	Limit to worker productivity	

Perspectives in relation to Climate Justice

1. Did you receive necessary rescue, relief, rehabilitation supports during the hazards?
2. Who provided these supports?
3. Do you think, you being a member of Dalit community, have received adequate attention/support from these actors during the climatic hazard?
4. If not, why could you not receive the needed attention/support?

5. What would you suggest to ensure that the Dalit communities receive the needed attention/support during the climatic hazards?
6. What are the experiences and perspectives of you all as members of Dalit communities at grass roots level with regard to climate change and climate justice?
7. Do you have any example/evidence to support the premise that Dalits have suffered the most from climate change?
8. Do you have any example/evidence to support that Dalits have faced climate injustice during rescue, relief and rehabilitation measures provided by state and non-state actors?

Causes of Climate Related Conflict Dynamics

1. What sort of climate-related conflicts occur in your community/village? (local resource conflicts or conflicts resulting from corruption in state disaster relief)
2. What are the causes of these conflicts?
3. How do you resolve these conflicts?
4. Do you receive any external assistance/supports to resolve the conflicts?
5. If yes, who provide assistance/supports to resolve the conflicts?
6. Do you think, your issues as member of a Dalit community, receives adequate attention?
7. Do you think, they have adequately resolved your issues?
8. If not, why it is so?
9. What do you suggest to ensure that your climate-related conflict issues are duly addressed?

Causes of Climate Vulnerability

- In your opinion, how vulnerable are you to the risks/hazards of climate change?
 - (i) High (5 or more disasters in 20 years), (ii) Moderate (3 or more disasters in 20 years), (iii) Low (less than 3 disasters in 20 years), (iv) None (no disaster in 30 years)
- In your opinion, what are drivers of climate vulnerability to you and your community?
 - (i) Poverty, (ii) Voicelessness, (iii) Low access to resources, (iv) Poor political influence, (v) Caste based discrimination, (vi) others

1. In your opinion, what are the causes of climate vulnerability of your community?

Exposure: Marginal location of your homes (usually in marginal lands in the periphery of settlements), Nature of your housing, location of houses in highly fragile land – unstable sloppy land,

Sensitivity causes: Marginalized social position, Nature of occupation such as rubbish and sewerage disposal,

Local Adaptive Capability: Little or no land, casual farm labor, lack of knowledge, lack of resources

Specificities of Social Structure leading to Differential Impacts

1. In your opinion, what specificities of existing social structure and conditions of diverse groups are leading to differential impacts?

Causes of Differential Climate Vulnerability of Dalits

- While everyone is affected by the adversities of climate change, do you agree that the climate change vulnerabilities of different sects of population is different?
- Do you think, Dalits are more vulnerable to climate change compared to other castes/ethnic groups?
- If yes, why do you think so?

Greater exposure: They have greater exposure to climate change because of Marginal location of your homes (usually in marginal lands in the periphery of settlements), Nature of your housing, location of houses in highly fragile land – unstable sloppy land,

Greater sensitivity: They are more sensitive to climate change because of their marginalized social position, nature of occupation such as rubbish and sewerage disposal.

Lower adaptive capability: Their adaptive capability is lower because they have little or no land, they are casual farm labour, they lack of knowledge, they lack of resources

What are the drivers of climate vulnerability of Dalit communities?

- (iii) Poverty, (ii) Voicelessness, (iii) Low access to resources, (iv) Poor political influence, (v) Caste based discrimination, (vi) others

Differential Impacts of Climate Change

- Do you agree that the impacts of climate change are different to differential sect of people in Nepal?
- If yes, do you agree that Dalits are victimized the maximum by climate change?
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Perspectives in relation to Climate Justice

- Do you agree that the plight of Dalits to adapt to climate change, recover from climatic
 - shocks and stresses, and access rescue and relief amenities during climatic disaster, are largely unaddressed?
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Causes of Climate Related Conflict Dynamics at Local Level

- What type of conflicts take place in Dalit communities and with other non-Dalit communities in the context of climate change (e.g., local resource conflicts or conflicts resulting from corruption in state disaster relief)?
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 - Rights to an adequate standard of living (freedom from hunger, access to clean water, adequate housing, protection of property)
 - Rights to mental and physical health
- What are the implications of climate change on cultural rights of Dalits?
 - Rights to education
 - Rights to take part in cultural life
 - Rights to enjoy the benefits of scientific progress

Recommendations

- How could civil society be strengthened to protect and promote the rights of marginalized groups affected by climate change?
- How could the economic and social resilience of poorest communities (Dalit communities) affected by consequences of climate change be significantly increased?

Stakeholder Analysis

- Who are the stakeholders (state and non-state actors) involved in addressing climate-induced shocks, disasters and conflicts?

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at district level: CDO, Red Cross DEOC, NGO, DCC, Nepal Police, Nepal Army

- What are the roles of the above stakeholders within the causal complexes and conflicts in addressing the climate-induced shocks, disasters and conflicts?

Influence Map

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- What could be the possible strategies to strengthen the resilience of Dalit communities?
- What would be a visible/effective advocacy strategy through concrete measures at local and national level?

Role of Women

- What will be the potential role of women in addressing the causes of climate vulnerability of Dalit communities?
- What will be the potential role of women in implementing appropriate advocacy strategies to address the issues of differential climate impacts?

Attachment-5: List of CBOs and their Details

S. N	Name of CBO	No. of Members	Gender Pattern	Caste Pattern	Palika-Ward	District
1	Puthha Samuh	23	3 Male 20 Female	Sunam, B.K, Pariyar	12-Kol, Puthauttarganga RM)	Rukum East
2	Dalit Chetanasil Sanstha	25	5-Male 20-Female	B.K, Sunar	05-Serbang Sisne	Rukum East
3	Ujyalo Dalit Mahila Samuh	15	15-Female	Sarki, B. K	Sisne RM	Rukum East
4	Nava Pragatishil Dalit Yuwa Samuh	23	23-female	B. K	Sisne RM	Rukum East
5	Dalit Utthan Ekta Samuh	20	3-Male 17-female	Pariyar, Sarki	Sisne RM	Rukum East
6	Sisne Pragatisil Mahila Samuh	25	5 Male 20 Female	B.K, Pariyar	08-Ala Sisne RM	Rukum East
7	Barichaur Dalit Sanjal Samuh	17	3-Male 14-Female	Sunar	01-Barichaur, Rolpa Municipality	Rolpa
8	Thulo Namja Dalit Sanjal	27	8-Male 19-Female	Sunar, Pariyar, B. K	4-Thulonamja, Lungri RM)	Rolpa
9	Ekta Dalit Samuha	30	14-Male 16-Female	Nepali, B.K, Pariyar	Sunilsmriti RM	Rolpa
10	Dalit Adhikar Manch	17	2-Male 15-Female	B. K	Rolpa Municipality)	Rolpa
11	Phagam Dalit Adhikar Manch	24	2-Male 22-Female	B. K	6-Phagam Sunchhahari RM	Rolpa

12	Barman Thakur baba Krishak Samuh	25	25-female	Ram	20-Lahan Municipality	Siraha
13	Rajdevi Mahila Krishak Samuh	20	20-Female	Rajak, Mandal, Yadav	Aurahi RM	Siraha
14	Ma Bhagwati Mahila Krishak Samuh	25	25-Female	Ram, Sada	Bhagwanpur RM)	Siraha
15	Dinabhadri Batabaran Samuh	27	27-female	Saday	15- Lahan Municipality	Siraha
16	Batabaran Sanrakchhan Samuh	20	20-Female	Ram	Sakhuwanarkatti RM	Siraha
17	Sribaba Banaskhandi Samuh	22	20-Female 2-Male	Ram, Mandal	Tiruhut RM)	Saptari
18	Jay Ganesh Mahila Samuh	30	7-Male 23-Female	Mandal	Tilathikoiladi RM)	Saptari
19	Sri Bajarangabali Mahila Samuh	25	25 Female	Ram	Rajgadh RM)	Saptari
20	Sri Bajarangabali Samuh	25	2-Male 23-female	Ram, Saday	Agnisaier Krishnasarban RM	Saptari
21	Sri Balanmai Samuh	27	3-Male 24-Female	Mandal	Surunga Municipality	Saptari

Attachment-6: List of the Respondents of Household Level Survey

S. N.	Name	Age	Province	District	Rural Municipality	Municipality	Ward N.	Caste	Gender	Language	Religious
1	Nirmala Devi Ram	35	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
2	Prem Devi Ram	38	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
3	Dasani Devi Ram	56	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
4	Kusamoi Devi Ram	50	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
5	Kumari Ram	45	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
6	Urmila Devi Ram	40	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
7	Amirkala Devi Mahara	45	Madesh	Siraha	Sakhuwana rkatti RM		1	Chamar	Female	Maithili	Hindu
8	Dhanama Saday	40	Madesh	Siraha	Sakhuwana rkatti RM		1	Musahar	Male	Maithili	Hindu
9	Murti Devi RAM	45	Madesh	Siraha	Sakhuwana rkatti RM		1	Musahar	Female	Maithili	Hindu
10	Naina Kumari Saday	35	Madesh	Siraha	Sakhuwana rkatti RM		1	Musahar	Female	Maithili	Hindu
11	Sukhilala Saday	78	Madesh	Siraha	Sakhuwana rkatti RM		1	Musahar	Male	Maithili	Hindu
12	Biltaun Devi Saday	36	Madesh	Siraha	Sakhuwana rkatti RM		1	Musahar	Female	Maithili	Hindu

13	Shree Dev Mandal	61	Madesh	Siraha	Bgagwanpur		1	Khatwe	Male	Maithili	Hindu
14	Sunita Devi Mandal	40	Madesh	Siraha	Bgagwanpur		1	Khatwe	Female	Maithili	Hindu
15	Lakhan Mandal	54	Madesh	Siraha	Bgagwanpur		1	Khatwe	Male	Maithili	Hindu
16	Aaso khang	46	Madesh	Siraha	Bgagwanpur		1	Khatwe	Female	Maithili	Hindu
17	Sobhiya Khang Mandal	56	Madesh	Siraha	Bgagwanpur		1	Khatwe	Male	Maithili	Hindu
18	Binadevi Mandal	33	Madesh	Siraha	Bgagwanpur		1	Khatwe	Female	Maithili	Hindu
19	Bhutti Devi sady	35	Madesh	Siraha		Lahan Municipality	10	Musagar	Female	Maithili	Hindu
20	Rame Saday	42	Madesh	Siraha		Lahan Municipality	15	Musahar	Male	Maithili	Hindu
21	Nemo Devi Saday	45	Madesh	Siraha		Lahan Municipality	15	Musahar	Female	Maithili	Hindu
22	Baidha Saday	65	Madesh	Siraha		Lahan Municipality	15	Musahar	Male	Maithili	Hindu
23	Shiva Sankhar Saday	39	Madesh	Siraha		Lahan Municipality	15	Musahar	Male	Maithili	Hindu
24	Siya ram Saday	42	Madesh	Siraha		Lahan Municipality	15	Musahar	Male	Maithili	Hindu
25	Sukdev Saday	75	Madesh	Siraha		Lahan Municipality	15	Musahar	Male	Maithili	Hindu
26	Nasib Safi	73	Madesh	Siraha	Aurahi RM		5	Dhobi	Male	Maithili	Hindu
27	Shila Devi Safi	54	Madesh	Siraha	Aurahi RM		5	Dhobi	Female	Maithili	Hindu
28	Palli Paswan	71	Madesh	Siraha	Aurahi RM		5	Paswan	Female	Maithili	Hindu
29	Amoliya Devi sady	42	Madesh	Siraha	Aurahi RM		5	Mahasur	Male	Maithili	Hindu
30	Rajendra Paswan	65	Madesh	Siraha	Aurahi RM		5	Paswan	Male	Maithili	Hindu
31	Rajaai Safi	68	Madesh	Siraha	Aurahi RM		5	Dhobi	Male	Maithili	Hindu

32	Sonita Devi Ram	35	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
33	Dorik Mochi	46	Madesh	Siraha		Lahan Municipality	20	Chamar	Male	Maithili	Hindu
34	Kosila Devi Ram	36	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
35	Ram Ku. Mochi	54	Madesh	Siraha		Lahan Municipality	20	Chamar	Female	Maithili	Hindu
36	Ram Narayan Mahato	40	Madesh	Siraha		Lahan Municipality	20	Pasi	Male	Maithili	Hindu
37	Sangita Saday	25	Madesh	Siraha		Lahan Municipality	10	Masahur	Female	Maithili	Hindu
38	Prashad Damai	60	Madesh	Rolpa		Rolpa Municipality	6	Damai	Male	Nepali	Hindu
39	Lal BDR Damai	60	Madesh	Rolpa		Rolpa Municipality	6	Damai	Male	Nepali	Hindu
40	Birsha Damai	70	Madesh	Rolpa		Rolpa Municipality	6	Damai	Female	Nepali	Hindu
41	Feste Damai	73	Madesh	Rolpa		Rolpa Municipality	6	Damai	Male	Nepali	Hindu
42	Sanu Kami	56	Madesh	Rolpa		Rolpa Municipality	6	Kami	Male	Nepali	Hindu
43	Tirtha Kameni	45	Madesh	Rolpa		Rolpa Municipality	6	Kami	Female	Nepali	Hindu
44	Takman Sunar	64	Madesh	Rolpa	Lungri RM		4	Kami	Female	Nepali	Hindu
45	Bina Kami	60	Madesh	Rolpa	Lungri RM		4	Kami	Female	Nepali	Hindu
46	Devikala Sunar	46	Madesh	Rolpa	Lungri RM		4	Kami	Female	Nepali	Hindu
47	Bhagilal Kmai	65	Madesh	Rolpa	Lungri RM		4	Kmai	Male	Nepali	Hindu
48	Ghanashyam BK	35	Madesh	Rolpa	Lungri RM		4	Kami	Male	Nepali	Hindu
49	Blaram Kami	72	Madesh	Rolpa	Lungri RM		4	Kami	Male	Nepali	Hindu

50	Dane Kmai	44	Madesh	Rolpa	Lungri RM		4	Kmai	Male	Nepali	Hindu
51	Shobha Sarkee	61	Madesh	Rolpa	Sunilsmriti RM		1	Sarkee	Female	Nepali	Hindu
52	Prabati Gaayen	54	Madesh	Rolpa	Sunilsmriti RM		1	Gandar b	Female	Nepali	Hindu
53	Bharat Sarkee	50	Madesh	Rolpa	Sunilsmriti RM		1	Sarkee	Male	Nepali	Hindu
54	Chitra BDR Sarkee	45	Madesh	Rolpa	Sunilsmriti RM		1	Sarkee	Male	Nepali	Hindu
55	Kaluram Sarkee	52	Madesh	Rolpa	Sunilsmriti RM		1	Sarkee	Male	Nepali	Hindu
56	Balu Kami	60	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Male	Nepali	Hindu
57	Maite Kami	55	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Male	Nepali	Hindu
58	Dil BDR Sarkee	18	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Male	Nepali	Hindu
59	Amba BDR Sarkee	56	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Male	Nepali	Hindu
60	Khim Sunar	58	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Male	Nepali	Hindu
61	Khadk BDR BK	38	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Male	Nepali	Hindu
62	Mamata BK	42	Madesh	Rolpa		Rolpa Municipality	1	Sarkee	Female	Nepali	Hindu
63	Sita Sunar	24	Madesh	Rolpa	Sunchhahari RM		6	Sarkee	Female	Nepali	Hindu
64	Junkumari BK	28	Madesh	Rolpa	Sunchhahari RM		6	Sarkee	Female	Nepali	Hindu

65	Sunita Bishwokarma	32	Madesh	Rolpa	Sunchhahari RM		6	Kami	Female	Nepali	Hindu
66	Prakash Sarkee	49	Madesh	Rolpa	Sunchhahari RM		6	Sarkee	Male	Nepali	Hindu
67	Suku BK	27	Madesh	Rolpa	Sunilsmriti RM		6	Kami	Female	Nepali	Hindu
68	Ramlal Sunar	32	Madesh	Rolpa	Sunchhahari RM		6	Kami	Male	Nepali	Hindu
69	KharilalBK	25	Madesh	Rolpa	Sunilsmriti RM		6	Kaami	Male	Nepali	Hindu
70	Tara Devi Ram	65	Madesh	Saptari	Agnisaier Krishnasarban RM		5	Chamar	Female	Maithili	Hindu
71	Damar Khang	50	Madesh	Saptari	Agnisaier Krishnasarban RM		5	Khathwe	Male	Maithili	Hindu
72	Rambabu Sada	50	Madesh	Saptari	Agnisaier Krishnasarban RM		5	Musahar	Male	Maithili	Hindu
73	Binod Kumar ram	38	Madesh	Saptari	Agnisaier Krishnasarban RM		5	Chamar	Male	Maithili	Hindu
74	Domi Ram	55	Madesh	Saptari	Agnisaier Krishnasarban RM		5	Chamar	Male	Maithili	Hindu
75	Sanichari Devi Marik	30	Madesh	Saptari	Agnisaier Krishnasarban RM		6	Dom	Female	Maithili	Hindu
76	Nirmala Devi Ram	36	Madesh	Saptari	Tiruhut RM		2	Chamar	Female	Maithili	Hindu
77	Durai Mochi	50	Madesh	Saptari	Tiruhut RM		9	Chamar	Male	Maithili	Hindu

78	Girdhar Mandal	25	Madesh	Saptari	Tiruhut RM		5	Khathwe	Male	Maithili	Hindu
79	Jhadilal Khang	48	Madesh	Saptari	Tiruhut RM		5	Khathwe	Male	Maithili	Hindu
80	Masta Devi Mandal	26	Madesh	Saptari	Tiruhut RM		5	Khathwe	Female	Maithili	Hindu
81	Binu Devi Sada	45	Madesh	Saptari	Rajgadh RM		5	Musahar	Female	Maithili	Hindu
82	Shajani Devi Ram	45	Madesh	Saptari	Rajgadh RM		5	Chamar	Female	Maithili	Hindu
83	Domi Ram	56	Madesh	Saptari	Rajgadh RM		5	Chamar	Male	Maithili	Hindu
84	Jitan Sardar	56	Madesh	Saptari	Rajgadh RM		5	Batar	Male	Maithili	Hindu
85	Manrup Sada	42	Madesh	Saptari	Rajgadh RM		5	Musahar	Male	Maithili	Hindu
86	Sita Kumari Ram	29	Madesh	Saptari	Rajgadh RM		5	Chamar	Female	Maithili	Hindu
87	Kasindra Mandal	35	Madesh	Saptari	Tilathikoiladi RM		2	Khathwe	Male	Maithili	Hindu
88	Inardevi Khang	40	Madesh	Saptari	Tilathikoiladi RM		2	Khathwe	Female	Maithili	Hindu
89	Phul Kumari Devi Ram	45	Madesh	Saptari	Tilathikoiladi RM		2	Chamar	Male	Maithili	Hindu
90	Daropati Devi Ram	36	Madesh	Saptari	Tilathikoiladi RM		2	Chamar	Female	Maithili	Hindu
91	Raj Kumar Marik	40	Madesh	Saptari	Tilathikoiladi RM		2	Dom	Male	Maithili	Hindu
92	Ramesh Marik	18	Madesh	Saptari	Tilathikoiladi RM		2	Dom	Male	Maithili	Hindu
93	Ram Babu Ram	43	Madesh	Saptari		Surunga Municipality	2	Chamar	Male	Maithili	Hindu
94	Amirka Ram	35	Madesh	Saptari		Surunga Municipality	2	Chamar	Female	Maithili	Hindu

95	Asha Kumari Ram	30	Madesh	Saptari		Surunga Municipality	2	Chamar	Male	Maithili	Hindu
96	Sita Kumari Ram	30	Madesh	Saptari		Surunga Municipality	2	Chamar	Male	Maithili	Hindu
97	Anita Kumari Ram	35	Madesh	Saptari		Surunga Municipality	2	Chamar	Male	Maithili	Hindu
98	Anita Kumari Ram	40	Madesh	Saptari		Surunga Municipality	2	Chamar	Male	Maithili	Hindu
99	mamata kami	40	Madesh	Rukum East	Puthauttarga nga RM		12	kami	Female	Nepali	Hindu
100	gaudhan sunar	33	Madesh	Rukum East	Puthauttarga nga RM		12	kami	Male	Nepali	Hindu
101	ramesh sunam	27	Madesh	Rukum East	Puthauttarga nga RM		12	damai	Female	Nepali	Hindu
102	himal sunam	27	Madesh	Rukum East	Puthauttarga nga RM		12	damai	Male	Nepali	Hindu
103	bihuman sunar	21	Madesh	Rukum East	Puthauttarga nga RM		12	kami	Male	Nepali	Hindu
104	dalsur kami	73	Madesh	Rukum East	Sisne RM		4	kami	Male	Nepali	Hindu
105	kamlal bk	27	Madesh	Rukum East	Sisne RM		4	kami	Male	Nepali	Hindu
106	tirthabir kami	82	Madesh	Rukum East	Sisne RM		4	kami	Male	Nepali	Cristian
107	kal b kami	59	Madesh	Rukum East	Sisne RM		4	kami	Male	Nepali	Hindu
108	sarbajit kami	46	Madesh	Rukum East	Sisne RM		4	kami	Male	Nepali	Cristian
109	balkumari nepali	58	Madesh	Rukum East	Sisne RM		4	dalit	Female	Nepali	Hindu

11 0	dil kumari nepali	50	Madesh	Ruku m East	Sisne RM		5	damai	Male	Nepali	Hindu
11 1	gana bahadur damai	55	Madesh	Ruku m East	Sisne RM		5	damai	Male	Nepali	Hindu
11 2	mangale damai	62	Madesh	Ruku m East	Sisne RM		5	damai	Male	Nepali	Hindu
11 3	bal bahadur nepali	50	Madesh	Ruku m East	Sisne RM		5	damai	Male	Nepali	Hindu
11 4	surya nepali	61	Madesh	Ruku m East	Sisne RM		5	damai	Male	Nepali	Hindu
11 5	karna bd damai	71	Madesh	Ruku m East	Sisne RM		5	damai	Male	Nepali	Hindu
11 6	datte kami	58	Madesh	Ruku m East	Sisne RM		6	kami	Male	Nepali	Hindu
11 7	naresh bk	34	Madesh	Ruku m East	Sisne RM		6	kami	Male	Nepali	Hindu
11 8	saman bk	35	Madesh	Ruku m East	Sisne RM		6	kami	Male	Nepali	Hindu
11 9	chudamani nepali	39	Madesh	Ruku m East	Sisne RM		6		Male	Nepali	Hindu
12 0	ram bd bk	33	Madesh	Ruku m East	Sisne RM		6	kami	Male	Nepali	Hindu
12 1	upendralal kami	43	Madesh	Ruku m East	Sisne RM		6	kami	Male	Nepali	Hindu
12 2	rubda singh damai	42	Madesh	Ruku m East	Sisne RM		8	damai	Male	Nepali	Hindu
12 3	gopiram sarki	32	Madesh	Ruku m East	Sisne RM		8	sarki	Male	Nepali	Hindu
12 4	ruplal sarki	25	Madesh	Ruku m East	Sisne RM		8	sarki	Male	Nepali	Hindu
12 5	harka bd kami	70	Madesh	Ruku m East	Sisne RM		8	kami	Male	Nepali	Hindu

12 6	hom bd sunar	38	Madesh	Ruku m East	Sisne RM		8	kami	Male	Nepali	Hindu
12 7	gopi damai	45	Madesh	Ruku m East	Sisne RM		8	damai	Male	Nepali	Hindu
12 8	dhati damai	73	Madesh	Ruku m East	Bhume RM		5	damai	Female	Nepali	Hindu
12 9	mankari kami	60	Madesh	Ruku m East	Bhume RM		5	kami	Female	Nepali	Hindu
13 0	Bhikmari Kami	74	Madesh	Ruku m East	Bhume RM		5	kami	Female	Nepali	Hindu
13 1	Chaiti Kami	72	Madesh	Ruku m East	Bhume RM		5	kami	Female	Nepali	Hindu
13 2	Sarsari kami	73	Madesh	Ruku m East	Bhume RM		5	kami	Female	Nepali	Hindu
13 3	khadke kami	31	Madesh	Ruku m East	Bhume RM		5	kami	Male	Nepali	Hindu

Attachment-7: List of the Participants of Focus Group Discussion

S.N	Name of Participant	Age	Gender	Caste	Mobile No.	CBO	Palika	District
1	Mira Devi Sada	38	Female	Madhesh i Dalit		Dinabhadrai Batawarna Samraxan Samuh	15-Dhorna, Lahan Municipality	Siraha
2	Rame Sada	42	Male	“		“	“	“
3	Mahindra Sada	40	Male			“	“	“
4	Asha Devi Sada	38	Female			“	“	“
5	Palsh Devi Sada	55	Female			“	“	“
6	Asiya Devi Sada	32	Female			“	“	“
7	Devki Devei Sada	52	Female			“	“	“
8	Sukh Dev Sada	62	Male			“	“	“
9	Devendra Sada	42	Male			“	“	“
10	Mohani Devi Sada	41	Female			“	“	“
11	Geeta Devi Sada	26	Female			“	“	“
12	Shivshankar Sada	32	Male			“	“	“
13	Murti Devi Ram	40	Female	“	9819975033	Batawarna Samraxachan Samuha	1-Mauwahi, Sakhuwanankarkatti RM	Siraha
14	Palas Devi Sada	37	Female		9826772726	“	“	“
15	Arhuliya Devi Sada	35	Female			“	“	“
16	Manjuliya Devi Sada	30	Female		9805913591	“	“	“
17	Urmila Devi Sada	32	Female			“	“	“
18	Naina Kumari Sada	36	Female		9819940610	“	“	“
19	Lalita Devi Sada	24	Female			“	“	“
20	Jugeshwori Devi Sada	39	Female		9827708964	“	“	“
21	Amirikala Devi Sada	32	Female		9804748496	“	“	“
22	Arati Devi Ram	35	Female		9807743572	“	“	“
23	Rita Devi Ram	35	Female		9807708946	“	“	“
24	Manju Devi Ram	27	Female			“	“	“

25	Rekha Devi Mandal	31	Female	Madhesh i Dalit	9815770551	Rajdevi Mahila Krishak Samuha	5-Aurahi Rural Municipality	Siraha
26	Shanti Rajak	29	Female		9811710425	“	“	“
27	Sajan Devi Safi	34	Female			“	“	“
28	Ganita Devi Yadav	32	Female	Madhesh i		“	“	“
29	Bibha Devi Yadav	27	Female	“		“	“	“
30	Sanjila Devi Safi	29	Female	Madhesh i Dalit		“	“	“
31	Mohan Safi	30	Male	“		“	“	“
32	Birendra Safi	26	Male	“		“	“	“
33	Sita Devi Safi	48	Female	“		“	“	“
34	Sonita Devi Safi	30	Female	“		“	“	“
35	Tetari Devi Safi	36	Female	“		“	“	“
36	Shanti Paswan	29	Female	“		“	“	“
37	Mandrila Devi Mandal	22	Female	Madhesh i Dalit	9807744091	Sribaba Banskhandi Samuh	5-Tirhut RM	Saptari
38	Aasha Devi Mandal	35	Female		9826764182			
39	Bacchiya Devi Mandal	40	Female		9827791993			
40	Sumidhra Devi Mandal	44	Female					
41	Babita Devi Mandal	40	Female		9825792774			
42	Karo Devi Mandal	43	Female		9813906631			
43	Mamta Devi Mandal	26	Female		9821773269			
44	Ashok Kumar Sharma	31	Male		9805935001			
45	Surendra Mandal	34	Male		9827795923			
46	Ram Bhagat Mandal	34	Male		9803051585			
47	Om Narayan Mandal	30	Male		9822350410			
48	Rahul Mandal	28	Male		9818155769			
49	Sita Kumari Ram	29	Female	Madhesh i Dalit	9826716925	5-Sri Bajarangabali Mahila Samuh	Rajgadh RM	Saptari
50	Parmila Devi Sada	50	Female					

51	Sunita Devi Sada	24	Female					
52	Nirmala Devi Marik	33	Male					
53	Rubi Devi Marik	25	Male					
54	Sunita Devi Marik	35	Male					
55	Shrijana Kumari Ram	29	Female		9815717905			
56	Biita Kumar Ram	21	Female		9826781359			
57	Sangita Kumari Ram	20	Female		9804708502			
58	Kalpana Kumari Ram	21	Female		9814785843			
59	Sangita Devi Ram	24	Female		9815758922			
60	Anita Devi Ram	30	Female					
61	Kusmi Devi Ram	45	Female	Madhesi Dalit	9805997301	Baba Barmahan Thakur Krishak Samuha	20-Lahan Municipality	Siraha
62	Rita Kumari Mahara	30	Female					
63	Prem Devi Ram	41	Female		9818207200			
64	Nirmala Devi Ram	40	Female					
65	Palti Devi Ram	59	Female					
66	Dasan Dev Ram	60	Female					
67	Sita Devi Ram	43	Female					
68	Sita Devi Ram	43	Female					
69	Shiv kumara Devi	44	Female					
70	Urmila Devi ram	39	Female					
71	Sonita Devi Ram	33	Female					
72	Aasha Devi Ram	47	Female					
73	Anoj Kumar Ram	21	Male	Madhesh i Dalit	9812017922	Jay Ganesh Mahila Samuh	03- (Tilathikoiladi RM)	Saptari
74	Laxmi Ram	45	Male					
75	Fulkuamri Devi Ram	40	Female					

76	Roj Ram	62	Male					
77	Daropati Devi Ram	40	Female					
78	Ramesh Marik	35	Male					
79	Bina Devi Marik	50	Female					
80	Manaki Devi Marik	60	Female					
81	Raj Kumari Marik	40	Male					
82	Sundar Kumar Ram	34	Male		9823231267			
83	Jyoti Devi Mukhiya	23	Female					
84	Saraswati B.K	28	Female	Hill Dalit		Dalit Adhikar Manch	06-Sunachari RM	Rolpa
85	Kamala B.K	32	Female					
86	Anisara B.K	30	Female					
87	Asmita B.K	31	Female					
88	Anjana B.K.	21	Female					
89	Manisha B.K.	21	Female					
90	Aasha B.K.	20	Female					
91	Sangita B.K.	25	Female					
92	Suku B.K.	26	Male					
93	Asamali B.K.	28	Female					
94	Shyaapa B.K	29	Female					
95	Junukumari B.K.	30	Female					
96	Bimala Devi Mandal	55	Female	Madhesh i Dalit	9822345005	Maa Bhagwati Krishak Samuha	01-Kalyanpur, Bhagwanpur RM	Siraha
97	Janaki Devi Mandal	36	Female					
98	Urmila Devi Mandal	33	Female					
99	Saabhu Devi Mandal	40	Female					
100	Sita Devi Mandal	42	Female					
101	Nundevi Mandal	51	Female					

102	Saraswati Devi Mandal	30	Female					
103	Sonita Devi Mandal	40	Female					
104	Aasha Devi Mandal	30	Female					
105	Bisesari Mandal	33	Female					
106	Aashan Devi Mandal	52	Female					
107	Ranju Kumari Mandal	29	Female		9823707847			
108	Dil Maya Sunar	40	Female	Hill Dalit	9868687580	Barichaur Dalit Sanjal Samuh	01-Rolpa Municipality	Rolpa
109	Sukala Sunuwar	40	Female		98648020379			
110	ramita Sunuwar	30	Female		9845854692			
111	Durga Sunuwar		Female					
112	Rakmati Sarkee	40	Female					
113	Chandra Sunuwar	32	Female					
114	Bimala B.K.	46	Female					
115	Dipa B.K.	36	Female		9868040648			
116	Sita Sunar	22	Female		9866172414			
117	Kamala Sunar	26	Female					
118	Rekha Sunar	35	Female		9847996512			
119	Tukumaan BK	31	Male		9866903366			
120	Dhomi Ram	55	Male		9814717429	Sri Bajarangabali Samuh	06- Agnisair Krishnasarban RM	Saptari
121	Ram Prashad Sada	52	Male		9826759681			
122	Sita Devi Sada	28	Female					
123	Gita Kumari Ram	20	Female					
124	Sita Devi Ram	30	Female		9818858165			
125	Pramila Devi Sada	22	Female		9815701252			
126	Saraswati kumari Sada	14	Female					
127	Rita Devi Ram	30	Female					
128	Radha Ram	25	Female		9804726975			

129	Sureshpat		-		9827791598			
130	Ram Kumar Ram	32	Male		9819949923			
131	Rabika Pariyar	50	Female		9829794077			
132	Manju Devi Ram	36	Female	Madhesh i Dalit		Sri Balanmai Samuh	02-)Surunga Municipality)	Saptari
133	Ram Kumari Ram	39	Female					
134	Dilip Kumar Ram	32	Male		9815783047			
135	Gita Devi Ram	43	Female					
136	Devki Devi Ram	40	Female		9825721308			
137	Anita Devi Ram	37	Female					
138	Asha Devi Ram	47	Female					
139	Pramila Devi Ram	43	Female					
140	Sabitri Devi Ram	40	Female					
141	Punam Devi Ram	28	Female					
142	Amrika Devi Ram	34	Female					
143	Sita Devi Ram	44	Female					
144	Anita Devi Ram (B)	31	Female		9817763727			
145	Mamata BK	40	Female			Puthha Samuh	12-)Puthauttarganga RM)	Rukum East
146	Gudhan BK	33	Male		9863346755			
147	Parbina BK	37	Female		9748774634			
148	Sunita Bk	33	Female					
149	Biumaan BK	21	Male		9861661101			
150	Tule BK	29	Female					
152	Manji Sunar BK	40	Female					
153	Dilkumari Sunar BK	35	Female					
154	Gaupura BK	45	Female					
156	Tirmala BK	68	Female					
157	Dote BK	51	Male	Hill Dalit		Dalit Chetanasil Sanstha	05- (Bhume RM)	Rukum East

158	Bal Bdr Bk	39	Male					
159	Tej Bdr BK	50	Male					
160	Bir Bdr Bk		Male		9843888416			
161	Dhanpura BK	41	Female					
162	Maya BK	27	Female					
163	Binod BK	16	Male		9840367321			
164	Sunil BK	16	Male		9746413669			
165	Ramadan BK	36	Male		9841236158			
166	Himal Sunar BK	27	Male		9862963855			
167	Ramesh Sunar BK	27	Male		9863545305			
168	Bijay BK	45	Male		9805547388	Ekta Dalit Samuha	01-Sunil Smriti RM	Rolpa
169	Radha Nepali	39	Female		9806240641			
170	Basanti Nepali	59	Female		9841889797			
171	Padma Nepali	51	Female		9829800387			
172	Moti Nepali	43	Female		9846964772			
173	Tule Sarkee	58	Male		9810834203			
174	Deepa Nepali	28	Female		9822826746			
175	Muna Nepali	48	Female		9809525056			
176	Shashiram Nepali	50	Male		9829540020			
177	Bahadure Sunar	74	Male		9862653866			
178	Bharat BK	22	Male		9845498470			
179	Subash BK	32	Male		984782734			
180	Shob Nepali	32	Male		9810711350			
181	Surendra Thapa (Garti)	57	Male	Janjati	9857822085	Dalit Adhikar Manch	06, Kotgaun, Rolpa Municipality	Rolpa
183	Mahendra Jhapali	39	Male	Janjati	985785134			
184	Tula Bdr Ghartimagar	43	Male	Janjati	9857879006			
185	Mankumari Ghartimagar	47	Female	Janjati	9866505118			
186	Damodar BK	37	Male	Hill Dalit				

187	Tilmati BK	47	Female					
188	Dhansi BK	34	Male					
189	Krishna BA. BK	31	Male					
190	Abharaj Pariyar	28	Male					
191	Tek BK	48	Male					
192	Dhaniya BK	58	Male		9866818281			
193	Bina Kami	60	Female	Hill Dalit	9866525220	Thulo Namja Dalit Sanjal	04-Thulonamja, Lungri RM	Rolpa
194	Keri Kami	43	Female		9844900700			
195	Man Kumari BK	41	Female		9842234305			
196	Nibha Sunar	30	Male		9866525244			
197	Birama Sunar	28	Female		9840531537			
198	Puspa Sunar	25	Female		9866525210			
199	Susmita BK	24	Female		984702834			
200	Sita BK	28	Female		9869242264			
201	Mina Sunar	40	Female		9804589604			
202	DAne Kami	44	Male		9866172676			
203	Mamakali	53	Female		9863126500			
204	Lalita Sunar	45	Female		9843568294			
205	Arjun Sarki		Male			08-Syalapakha, Sisne RM	Ujyalo Dalit Mahila Samuh	Rukum East
206	Thal Bdr. Sarki	43	Male					
207	Bhawana Basyal	34	Female					
208	Rita B.K	29	Female					
209	Mohan Bir Pariyar	37	Male					
210	Dambar Bdr. B.K	45	Male					
211	Tirtha Kami	49	Male					
212	Kabiram Kami	52	Male					
213	Mankumari B.K	51	Female					
214	Nainsingh Pun Magar	38	Female					

215	Dhankala B.K	30	Female			Aala	Sisne Pragatisil Mahila Samuh	Rukum East
216	Indra Sunar	32	Male					
217	Meena Sunar	35	Female					
218	Seema B.K	35	Female					
219	Sita Nepali	38	Female					
220	Durga B.K	27	Female					
212	Kamala B.K	31	Female					
213	Mankumari B.K	40	Female					
214	Gita Nepali	34	Female					
215	Rupa K.C (B.K)	27	Female					
216	Sanjana Gharti Magar	45	Female					
217	Putali B.K	32	Female					
218	Balaram Kami	72	Male			Namuna Dalit Basti	Dalit Uthan Ekta Samuha	Rukum East
219	Harka Bdr Sunar	45	Male					
220	Arjun BK	23	Male					
221	Tankarkhayeli		Male					
222	Soyeli BK		Female					
223	Anjali BK	23	Female		9845756914			
224	Sokhiram Sunar	36	Male					
225	Ajay Sunar	45	Male					
226	Tek Bdr Sunar	61	Male		9844950149			
227	Ganesh Sunar	35	Male					
228	Asari Sunar	61	Female		9809879089			
229	Bal Kami	65	Female					
230	Damodar BK	37	Male	Hill Dalit		Rumal Bara	Nava Pragatishil Dalit Yuwa Samuh	Rukum East
231	Tilmati BK	47	Female					
232	Dhansi BK	34	Male					
233	Krishna BA. BK	31	Male					

234	Abharaj Pariyar	28	Male					
235	Tek BK	48	Male					
236	Pratimaan Bk	29	Male					
237	Dil BK	41	Female					
238	Dhaniya BK	58	Male		9866818281			
239	Hari BK	51	Female					
240	Bhesh Bdr BK	25	Male					
241	Puspa BK	29	Female					
242	LAXmi BK	30	Female					
243	Kabiraj BK	50	Male					
244	Indra Pariyar	51	Male					
245	Pratimaan Bk	29	Male					
246	Dil BK	41	Female					
247	Hari BK	51	Female					
248	Bhesh Bdr BK	25	Male					
249	Puspa BK	29	Female					
250	LAXmi BK	30	Female					
251	Kabiraj BK	50	Male					
252	Indra Pariyar	51	Male					

Attachment-8: List of Key Informants

S. N	Date	Name	Contact	Organization	Designation	District
1.	6th August	Jogendra Bhagat	9852820121/9815745321	Nepal Red Cross Society	District Chairperson	Saptari-Rajbiraj
2.	7th August	Madhav Kafle		Nepal Police	DSP	Saptari-Rajbiraj
3.	7th August	Bisheshwor Rajak		Madhesi Dalit Forum	Chairperson	Saptari-Rajbiraj

4.	7th August	Chiranjibi Giri		District Adminstration Office	Associate CDO	Saptari-Rajbiraj
5.	7th August	Ishrat Pravin		Rajbiraj Municipality	Deputy Mayor	Saptari-Rajbiraj
6.	7th August	Devnarayan Yadav		Koshi Victim Society	Chairperson	Saptari-Rajbiraj
7.	7th August	Brahamdev Yadav		Nepal Red Cross Society	Administrative Officer	Saptari-Rajbiraj
8.	8th August	Umesh Bisunke		Dalit Jankalyan Youth Club	Chairperson	Siraha-Lahan
9.	8th August	Anand Poudel		District Administration Office	Associate CDO	Siraha- Sirahamadar
10.	8th August	Rajdev Yadav	9852830023	Nepal Red Cross Society	Chairperson	Siraha- Sirahamadar
11.	8th August	Nilkamal Acharya		Armed Police Force	DSP	Siraha- Sirahamadar
12.	9th August	Satrudhan Mahato		Ministry of Industry, Tourism & Forest	Minister	Madhesh Province
13.	9th August	Bharat Prasad Sah		Ministry of Home Affairs & Communication	Minister	Madhesh Province
14.	9th August	Dr. Bhogendra Jha		National Planning Commission	Deputy Chairperson	Madhesh Province
15.	9th August	Naresh Yadav		Nepal Red Cross	District Chairperson	Dhanusha
16.	9th August	Yog Bahadur Pal		Nepal Police	SSP	Madhesh Province

17.	9th August	Kailash Das		Samachar Dainik	Journalist	Dhanusha
18.	9th August	Bir Bahadur Budha Magar		National Human Right Commission	Head of Office	Madhesh Province
19.	11th August	Surendra Hamal		Ministry of Forest, Environment & Soil Conservation	Minister	Lumbini Province
20.	11th August	Naryandev Bhattarai		Ministry of Forest, Environment & Soil Conservation	Mahasakha Pramukh, Forest Management	Lumbini Province
21.	11th August	Premlala Udas		Nepal Red Cross	District Chairperson	Rupendehi
22.	11th August			National Human Right Commission		Lumbini Province
23.	11th August				Chairperson	Butwal
24.	11th August					
25.	12th August	Tilakram Sharma		Ministry of Internal Affairs & Communication	Minister	Lumbini Province
26.	14th August	Nawraj Sapkota	9857827777	District Administration Office	CDO	Liwang-Rolpa
27.	14th August	Prakash Bhusal		Nepal Police	Inspector	Rolpa, District Office
28.	14th August	Mahesh Neupane	9866903284	Journalist		Liwang-Rolpa
29.	14th August	Sarwati Acharya	9866934444	Community Forest	Chairperson	Liwang-Rolpa
30.	14th August	Bhim Bdr. Budha Magar	986440036	Nepal Red Cross Society	Chairperson	Liwang-Rolpa
31.	14th August	Surendra Thapa (Gharti Magar)		Rolpa Municipality	Mayor	Liwang-Rolpa
32.	14th August	Bharat BC		Armed Police Force	DSP	Liwang-Rolpa

33.	16th August	Lilamani Gautam	9851101121	NGO Federation Rukum East	Chairperson	Rukumkot
34.	16th August	Mohan K.C	9848372361	Nepal Red Cross Rukum East	Coordinator	Rukumkot
35.	16th August	Bamdev Gautam	9844873840	Nepal Red Cross Rukum East	Treasurer	Rukumkot
36.	16th August	Kushmakar Khadka	9866901449	Nepal Red Cross Rukum East	Administrative Officer	Rukumkot
37.	16th August	Mr. Thapa		APF	ASI	Rukumkot
38.	16th August	Tularaj Sunuwar	9857867777	District Administration Office	CDO	Rukumkot
39.		Ugra Narayan Yadav	9807700041	Bhagwanpur Rural Municipality	Mayor	Siraha
40.		Rekha Kumari Yadav		Bhagwanpur Rural Municipality	Deputy Mayor	Siraha
41.		Bechan Prasad Yadav		Bhagwanpur Rural Municipality	Former Mayor	Siraha
42.		Mira Devi Yadav	9814707787	Bhagwanpur Rural Municipality ward no 1		Siraha
43.		Jibachha Yadav	9814772322	Bhagwanpur Rural Municipality , Department of Education		Siraha
44.		Ramsebak Mahara	9804725211	Bhagwanpur Rural Municipality, Department of Agriculture		Siraha

45.		Abhinandan Yadav	9829777069	Bhagwanpur Rural Municipality ward no 1	Secretary	Siraha
46.		Kedarnath Yadav	9817714923	Sakhuwanankarkatti Rural Municipality	Mayor	Siraha
47.		Sanjay Kumar Yadav	9801038555	Sakhuwanankarkatti Rural Municipality	Ward Chairperson	Siraha
48.		Nilam Yadav	98182550725	Sakhuwanankarkatti Rural Municipality	Deputy Mayor	Siraha
49.		Rajiv Jha	9852860708	Sakhuwanankarkatti Rural Municipality	Administrative Officer	Siraha
50.		Bhogendra Yadav	9814735273	Sakhuwanankarkatti Rural Municipality	Education Coordinator	Siraha
51.		Mahesh Prasad Chaudhary	9852831238	Lahan Municipality	Mayor	Siraha
52.		Ganesh Prasad Chaudhary	9803389225	Lahan Municipality	Ward Chairperson	Siraha
53.		Prameshwari Chaudhary	9842842127	Lahan Municipality	Disaster Management officer	Siraha
54.		Jagadesh Mandal	9842824584	Lahan Municipality	Department of Health	Siraha
55.		Binod Bisunke	9842851160	Lahan Municipality	Local Organization	Siraha
56.		Tek Narayan Chaudhary	9801540411	Lahan Municipality Ward no 1	Ward Chairperson	Siraha
57.		Upendralal Kami		Sisne Rural Municipality-6		Rukum Purba
58.		Suman BK		Sisne Rural Municipality-6		Rukum Purba
59.		Datte Kami		Sisne Rural Municipality-6		Rukum Purba

60.		Naresh BK		Sisne Rural Municipality-6		Rukum Purba
61.		Mana Jhankri		Sisne Rural Municipality-6		Rukum Purba
62.		Mamata BK		Sisne Rural Municipality-12		Rukum Purba
63.		Gaudhan BK Malla		Sisne Rural Municipality-12		Rukum Purba
64.		Ramesh Sunam		Sisne Rural Municipality-12		Rukum Purba
65.		Himal Sunam		Sisne Rural Municipality-12		Rukum Purba
66.		Nagendra Sunam		Sisne Rural Municipality-12		Rukum Purba
67.		Mangle Damai		Sisne Rural Municipality-5		Rukum Purba
68.		Surya Bahadur Nepali		Sisne Rural Municipality-5		Rukum Purba
69.		Chetaram Nepali		Sisne Rural Municipality-5		Rukum Purba
70.		Gana Bahadur Nepali		Sisne Rural Municipality-5		Rukum Purba
71.		Karna Bahadur Nepali		Sisne Rural Municipality-5		Rukum Purba
72.		Surendra Gharti Thapa	9857822085	Rolpa Municipality	Mayor	Rolpa
73.		Khum Bahadur Thapa	9841547756	Rolpa Municipality - 1	Ward Chairperson	Rolpa
74.		Mahesh Neupane	9866903284	Rolpa Municipality	Journalist	Rolpa
75.		Gita Acharya	9844939964	Rolpa Municipality	Deputy Mayor	Rolpa
76.		Bharat Nepali	9847868040	Rolpa Municipality	Dalit leader	Rolpa

77.		Saraswati Acharya	9866939999	Community Forest Department	Treasurer	Rolpa
78.		Mahendra Parajuli	9857851234	Rolpa Municipality	Administrative Officer	Rolpa
79.		Sher Bahadur Kunwar	9847850297	Department of Disaster management	Secretary	Rolpa
80.		Gopal Pun	9840099587	Sisne Rural Municipality	Ward Chairperson	Rukum Purba
81.		Thal Bahadur Sarki	9866919674	Sisne Rural Municipality	Office Executive Member	Rukum Purba
82.		Mohan Bahadur K.C	9848372361	Red Cross Society	Chairperson	Rukum Purba
83.		Krishna Regmi	9863955142	Sisne Rural Municipality	Ward Chairperson	Rukum Purba
84.		Bikash Bikram Shah	9849285740	Sisne Rural Municipality	Head Administration Officer	Rukum Purba
85.		Bhupendra Budha	9851187744	Putha Uttarganga Rural Municipality	Vice Chairperson	Rukum Purba
86.		Tika Shahi Gharti	9857824251	Putha Uttarganga Rural Municipality	Spokesperson	Rukum Purba
87.		Namendra Sunam	9846481221	Putha Uttarganga Rural Municipality	Youth Leader	Rukum Purba
88.		Nabaraj Khadka	9857859084	Putha Uttarganga Rural Municipality	Accountant	Rukum Purba
89.		Shivaji Yadav	9811756338	Aurali Rural Municipality	Chairperson	Siraha
90.		Renu Kumari yadav	9818311461	Aurali Rural Municipality	Vice Chairperson	Siraha
91.		Ramprat Yadav	9814730365	Aurali Rural Municipality-5	Chairperson	Siraha

92.		Siddartha Yadav	9816728098	Aurali Rural Municipality	Former Chairperson	Siraha
93.		Ramesh Narayan Sharma	9807772191	Aurali Rural Municipality	Head Administration Officer	Siraha
94.		Chandra Bahadur Shrestha		Bhume Rural Municipality - 5	Head Administration Officer	Rukum Purba
95.		Sabina Budha Magar		Bhume Rural Municipality - 5	Vice Chairperson	Rukum Purba
96.		Rupdhan Kami		Bhume Rural Municipality - 5	Dalit leader	Rukum Purba
97.		Bhim Prasad Nepali	9867288070	Bhume Rural Municipality - 5	Ward Secretary	Rukum Purba
98.		Mulyan Kami	9860602600	Bhume Rural Municipality - 5	Dalit Group Advisor	Rukum Purba
99.		Arun Kumar Mandal	9804715680	Tilathi Koiladi Rural Municipality	Mayor	Saptari
100.		Fhul Kumari Sah	9803411615	Tilathi Koiladi Rural Municipality	Deputy Mayor	Saptari
101.		Kamal Mandal	9815749810	Tilathi Koiladi Rural Municipality	Ward Chairperson	Saptari
102.		Pramanda Yadav		Tilathi Koiladi Rural Municipality	Former Mayor	Saptari
103.		Puspamala Mandal		Tilathi Koiladi Rural Municipality	Former Deputy Mayor	Saptari
104.		Laxmi Narayan Thakur	9817750030	Tilathi Koiladi Rural Municipality	Former Chairperson	Saptari
105.		Jiban Sardar	9823163754	Tilathi Koiladi Rural Municipality	Intellectual	Saptari

106.		Dhirendra Kumar Yadav		Tilathi Koiladi Rural Municipality	Head Administration Officer	Saptari
107.		Dinanath Chaudhary	9824745971	Agnisair Krishnasavaran Rural Municipality	Mayor	Saptari
108.		Kalpana Chaudhary	9841883541	Agnisair Krishnasavaran Rural Municipality	Deputy Mayor	Saptari
109.		Ashok Acharya	9852820648	Agnisair Krishnasavaran Rural Municipality	Ward Chairperson	Saptari
110.		Suresh Pariyar	9804726975	Agnisair Krishnasavaran Rural Municipality	Dalit Representative	Saptari
111.		Mina Chaudhary	9813392240	Agnisair Krishnasavaran Rural Municipality	Former Mayor	Saptari
112.		Tul Bahadur Gharti Magar	9857879006	Rolpa Municipality - 6	Ward Chairperson	Rolpa
113.		Man Kumari Gharti	9866505118	Rolpa Municipality - 6	Former Chairperson	Rolpa
114.		Karma Lal Pariyar	98404594315	Rolpa Municipality - 6	District Vice Chairperson	Rolpa
115.		Bharat Kumar Thapa	9857824436	Lungri Rural Municipality	Chairperson	Rolpa
116.		Dil Kumari Gurung	9746232603	Lungri Rural Municipality	Vice Chairperson	Rolpa
117.		Badri Prasad Sharma	9857824566	Lungri Rural Municipality	Head OF Administration	Rolpa

118.		Bhesh Bahadur Bista		Lungri Rural Municipality	Head of Education Department	Rolpa
119.		Lependra Budhathoki	9857855022	Lungri Rural Municipality	Head of Health Department	Rolpa
120.		Bikhal Khadka	9848763371	Lungri Rural Municipality-4	Ward Chairperson	Rolpa
121.		Shiva Prasad K.C	9869103461	Lungri Rural Municipality	Former ward chairperson	Rolpa
122.		Tek Bahdur Sunar	9844950149	Lungri Rural Municipality	Former Executive member	Rolpa
123.		Bijay Kumar Yadav	9801176255	Tirhut Rural Municipality - 5	Mayor	Saptari
124.		Bina devi Yadavni	9819761333	Tirhut Rural Municipality - 5	Deputy Mayor	Saptari
125.		Ramananda Chaudhary	9804707159	Tirhut Rural Municipality - 5	Ward Chairperson	Saptari
126.		Ram Chandra Mandal	9807740033	Tirhut Rural Municipality - 5	Public Representative	Saptari
127.		Tirthamaya Khang Khatweni	9807397976	Tirhut Rural Municipality - 5	Former Deputy Mayor	Saptari
128.		Dhan Bahadur Pun Magar	9866248328	Sunchhahari Rural Municipality	Chairperson	Rolpa
129.		Nankala Gharti	9866744668	Sunchhahari Rural Municipality	Vice Chairperson	Rolpa
130.		Amarjit Pun Magar	9857935035	Sunchhahari Rural Municipality	Ward Chairperson	Rolpa
131.		Ramlal BK	9866920379	Sunchhahari Rural Municipality	Dalit leader	Rolpa
132.		Bhumika Thapa	984493964	Rolpa Municipality	Deputy Mayor	Rolpa

133.		Maniram Budhathoki	9857824066	Sunil Smriti Rural Municipality-1	Chairperson	Rolpa
134.		Mina Thapa	9857824818	Sunil Smriti Rural Municipality-1	Deputy Chairperson	Rolpa
135.		Pawan Kumar Kunwar	9857832265	Sunil Smriti Rural Municipality-1	Ward Chairperson	Rolpa
136.		Tulsi Sunar	9822830249	Sunil Smriti Rural Municipality-1	Dalit leader	Rolpa
137.		Dinesh Poudel		Sunil Smriti Rural Municipality-1	Head Administration Officer	Rolpa
138.		Muktinath Chaudhary			Former Mayor	Saptari
139.		GajendraNath Sharma			Secretary	Saptari
140.		Tiliya Devi Ram			Dalit leader	Saptari
141.		Bhola Ram	9841993380		Dalit Activist	Saptari
142.		Bhola Paswa	9849485331	Chairperson	Dalit Sarokar Manch	Saptari
143.		Arun Ram	9840215595		DAO, Rajbiraj	Saptari
144.		Archana Pariyar	9801673497	Journalist		Saptari
145.		Chandan Yadav	9801577918	Joint secretary	Patrakar Sangh	Saptari
146.		Indra Ram	9842827203	Chairperson	Dalit Chetana Sangam	Saptari
147.		Gita Kumari Chaudhary			Mayor	Saptari

Attachment-9: Orientation/Training Schedule

SAMATA FOUNDATION TESCAI-PROJECT					
Training on Research Methodology					
Time	Topic	Sessions Objectives	Time	Methods	Materials
<i>Day One</i>					
Breakfast			7:30 -8:30 A.M		
1.45 Hours	Opening/Introduction (Ram Pukar/Pradip Pariyar)	Introduction & Welcome	9:00 - 9:30 A.M	Opening remarks by the Chairperson, Participants introduce themselves based on certain parameter, set workshop rules	
	Set training objectives and modality (Ujjwal Sundas)	Explain the training objectives	9:30 - 10:00 A.M	A walk-through of the agenda	Meta Card, Markers, Masking Tape, Chart Paper
Introduction To Research Methodology					
3 Hours	Introduction to Research (Gopal Nepali)	Explain the basic concept of in relation to climate change, and the basic concept of FGD, Survey & KII	10:00 -11:30 A.M	Individual brainstorming on the concept of 'Research & Methodology' and 'objectives' followed by presentation	Projector and laptop

	15 Minutes Break (Tea Break)				
	Introduce Questionare (Gopal Nepali)	Explain about the concept of Survey, FGD & KII	11:45 - 13:00 P.M	Share survey questionare form	Pen, Notebook
Lunch Break					
3 Hours	Discussion on Household Survey Questinare (Ram Pukar/Gopal Nepali/Ujjwal Sundas)	Introduce survey questionare & receive feedbacks	14:00 -15:30 P.M	Discussion, followed by experience sharing & incidents, cases observed in communities	Pen, Pencil, Eraser, Sharpner, Printed survey form, Projector, Laptop
	15 Minutes Break (Tea Break)				
	MOCK Survey Session (Gopal Nepali)	Demonstrate techniquet to conduct survey	15:45 - 17:30 P.M	Practical, Group work	Pen, Pencil, Eraser, Sharpner, Printed survey form, Projector, Laptop
Refreshment Time					
Dinner (19:30 -20:30 P.M)					

SAMATA FOUNDATION TESCAI-PROJECT					
Training on Research Methodology					
Time	Topic	Sessions Objectives	Time	Methods	Materials
Day Two					
Breakfast			7:30 -8:30 A.M		
1.45 Hours	Reflection of Day One	Ram Pukar Mahara	9:00 - 9:15 A.M	Discussion, followed by sharing learning form Day	Meta Card, Markers, Masking Tape, Chart Paper

	Introduce FGD (Gopal Nepali)	Explain the concept of FGD	9:15 - 9:45 A.M	A walk-through techniques, methods to conduct FGD (Theoretical)	Meta Card, Markers, Masking Tape, Chart Paper, Note book
Demonstration Session of FGD					
4 Hours	Demonstrate how to conduct FGD (Gopal Nepali)	Introduce the techniques, skills and ideas needed to carry out FGD	9:45 -11:30 A.M	Group work, Practical Session	Meta Card, Markers, Masking Tape, Chart Paper, Note book
	15 Minutes Break (Tea Break)				
	Continue the practical session of FGD (Gopal Nepali & Ram Pukar Mahara)	Enhance the knowledge on FGD	11:45 - 13:00 P.M	Group work, Practical Session	Pen, Notebook, Question for FGD
Lunch Break (13:00-14:00 P.M)					
3.45 Hours	Discuss on KII (Ujjwal Sundas & Gopal Nepali)	Introduce concept of KII, demonstrate the skill to carry on KII	14:00 -16:00 P.M	Discussion, followed by group work and practical session	Pen, Pencil, Eraser, Sharpner, Printed survey form, Projector, Laptop, KII questions,
	15 Minutes Break (Tea Break)				
	CVCA (Ramsebak Ram)	Demonstrate technique to conduct survey	16:15 - 17:45	Practical, Group work	Pen, Pencil, Eraser, Sharpner, Printed survey

					form, Projector, Laptop
Refreshment Time					
Dinner (19:30 -20:30 P.M)					

SAMATA FOUNDATION TESCAI-PROJECT					
Training on Research Methodology					
Time	Topic	Sessions Objectives	Time	Methods	Materials
Day Two					
Breakfast			7:30 -8:30 A.M		
1.45 Hours	Reflection of Day One	Ram Pukar Mahara	9:00 - 9:15 A.M	Discussion, followed by sharing learning form Day	
	Oreintation on "Things to be consider while conducting survey, FGD and KII"	Gopal Nepali & Ujjwal Sir	9:15 - 10:45 A.M		
Settlement and closing					
4 Hours	Financial Settlement	Umesh Sapkota	10:45 -11:30 A.M		Vehicles Hiring Contract, Attendance Sheet
	Closing				
	Closing	Pradip Pariyar, Madan Pariyar, Ujjwal Sundas	11:30 - 12:30 P.M	Speech	
Lunch Break (12:30-1:00 P.M)					
Check Out					

Attachment-10: List of Participants of Orientation/Training

S.No.	Name of Participant	Position	Affiliated CBO/CSO	Mobile No.	Palika	District
1	Bishal Giri	DHRD	Puthha Samuh	9864710577	Kol (Puthauttarganga RM)	Rukum East
2	Durga B.K	DHRD	Dalit Chetanasil Sanstha	9845203861	Serabang) Bhume RM)	Rukum East
3	Ramita Pariyar	DHRD	Ujyalo Dalit Mahila Samuh	9813253822	Sayapakha) Sisne RM)	Rukum East
4	Bikram Pariyar	DHRD	Nava Pragatishil Dalit Yuwa Samuh	9869983228	Rumal Bara (Sisne RM)	Rukum East
5	Nirajan BK	DHRD	Dalit Utthan Ekta Samuh	9812868480	Namuna Dalit Basti)Sisne RM	Rukum East
6	Ramesh K.C	CSO, Representative	Pragatisil Mahila Samuh Shrijanshil Yuwa Sanjal	9844840335	Ala Sisne RM	Rukum East
7	Tukman B.K	DHRD	Barichaur Dalit Sanjal Samuh	9866903366	Bamruk Gaun (Rolpa Municipality)	Rolpa
8	Khum Br. Sunar	DHRD	Thulo Namja Dalit Sanjal	9841875167	Thulonamja (Lungri RM)	Rolpa
9	Subash B. K	DHRD	Ekta Dalit Samuha	9847982734	Ghoda Gaun (Sunilsmriti RM)	Rolpa
10	Bhesh Bdr. BK	DHRD	Dalit Adhikar Manch	9866818281	Kotgaun (Rolpa Municipality)	Rolpa
11	Bishnu BK	DHRD	Phagam Dalit Adhikar Manch	9867955935	Phagam (Sunchhahari RM)	Rolpa
12	Rekha Sunar	CSO Representative	Dalit Mahila Sachetana Kendra	9847996512	Liwang (Rolpa Municipality)	Rolpa

13	Rita Kumari Ram	DHRD	Barman Thakur baba Krishak Samuh	9816703345	Bramha (Lahan Municipality)	Siraha
14	Jibachha Paswan	Enumerator	Rajdevi Mahila Krishak Samuh	9863561007	Aaurahi (Aurahi RM)	Siraha
15	Nandita Mijhar	Enumerator	Ma Bhagwati Mahila Krishak Samuh	9842125549	Kalyanpur (Bhagwanpur RM)	Siraha
16	Usha Karn	DHRD	Batabaran Sanrakchha n Samuh	9814733885	Mauwahi (Sakhuwanarkatti RM)	Siraha
17	Ramsebak Ram	Enumerator	Dinabhadri Batabaran Samuh	9804725211	Menharwa Lahan Municipality	Siraha
18	Santosh Bisunkhe	CSO Representative	Dalit Jankalyan Yuwa Club	9811782917	Bramha (Lahan Municipality)	Siraha
19	Lalit K Mandal	DHRD	Sribaba Banaskhand i Samuh	9824718418	Bharya (Tiruhut RM)	Saptari
20	Shambhu Ram	CSO Representative	Jay Ganesh Mahila Samuh	9807786158	Tilathi(Tilathikoil adi RM)	Saptari
21	Dhirendra Ram	DHRD	Sri Bajarangab ali Mahila Samuh	9816788204	Malekpur (Rajgadh RM)	Saptari
22	Sonam Das	DHRD	Sri Bajarangab ali Samuh	9826744755	Mahuli (Agnisaier Krishnasarban RM)	Saptari
23	Chandan Ram	DHRD	Sri Balanmai Samuh	9816722528	Kamalpur (Surunga Municipality)	Saptari

ⁱ . Kami is one of the the sub-castes of Dalit community whose traditional occupation is to work with metals

ⁱⁱ Dom is one of the sub-castes of Dalit community from Terai region

ⁱⁱⁱ Musahar is one of the sub-castes of Dalit community from Terai region