



State of Gender Equality and Climate Change in Nepal

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Foreword

Climate change is a major global threat to the achievement of sustainable development. Given its differentiated impacts on women and men, all efforts to address climate change must be inclusive and pay due consideration to gendered vulnerabilities and capabilities.

The Hindu Kush Himalaya region in Asia is a climate hotspot. Increasingly, it is experiencing warmer temperatures and extreme levels of precipitation. The implications of these changes are immense for Nepal, with its fragile geological structure and sensitive ecosystems. The country's socio-economic situation, characterized by poverty, illiteracy, social disparity, and the high dependence of community livelihoods on natural resources compound these sensitivities.

As the country takes its national development plans forward, gender-responsive climate action continues to be an urgent concern. In recent years, the Government of Nepal has made noteworthy progress in integrating gender into climate change policies and plans. This has been done through sectoral and provincial plans, policies, strategies, programmes, and institutional mechanisms. The Nepal Climate Change Policy of 2019, for instance, identifies gender equity and social inclusion (GESI) as a cross-cutting thematic area in sectoral strategies and working policies. Its objective is to mainstream GESI into adaptation and mitigation programmes. Additionally, the updated Nationally Determined Contributions (NDCs) of December 2020 call for the integration of GESI into Nepal's climate commitments and the development of a corollary action plan. Clear mechanisms and structures have been provisioned to integrate climate change and GESI at the provincial and local levels.

We are glad to be presenting "The State of Gender Equality and Climate Change Assessment Report for Nepal" as a fresh attempt to analyze gendered impacts. This report looks at four priority climate change adaptation and mitigation sectors identified by the Nepal Climate Change Policy of 2019 – forestry, agriculture, energy, and water – to identify areas of concern as well as progress.

A lack of functional linkages between the federal, provincial, and local levels – which may be compounded by changes in government – is seen as a concern for Nepal. Despite the existence of clear GESI institutional mechanisms, such changes may hamper the implementation of GESI guidelines. Another major issue is the disempowerment of women and marginalized groups. Despite being primary stakeholders and agents of change (with knowledge and experiences to contribute to the creation of climate solutions), women continue to be monolithically viewed as a vulnerable group.

Gaps such as the above prevent policies from adequately addressing gendered vulnerabilities and utilizing the knowledge, skills, and capacities of all groups for mitigation and adaptation. The current report – prepared by the International Centre for Integrated Mountain Development (ICIMOD), the UN Environment Programme (UNEP), and UN Women – aims to help fill some of these gaps by sharing information on the status of gender mainstreaming, identifying good practices, and planning out further policy work, capacity building, coordination, and research.

By incorporating gender equality into climate action, we can forge a path towards a truly sustainable recovery. We hope this publication will support Nepal's efforts in achieving its climate change goals inclusively.



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Acronyms and Abbreviations

ACOFUN	Association of Collaborative Forest Users Nepal	IPs	Indigenous Peoples
ADB	Asian Development Bank	IWMI	International Water Management Institute
ADS	Agriculture Development Strategy	LGA	Local Governance and Operational Act 2017
CEDAW	Convention on All Forms of Discrimination Against Women	M&E	Monitoring & Evaluation
AEPC	Alternative Energy Promotion Centre	MoALD	Ministry of Agriculture and Livestock Development
BLC	Business Literacy Class	MoEWRI	Ministry of Energy, Water Resources and Irrigation
CBS	Central Bureau of Statistics	MoF	Ministry of Finance
CCMD	Climate Change Management Division	MoFAGA	Ministry of Federal Affairs and General Administration
CFUG	Community Forest Users Group	MoFE	Ministry of Forests and Environment
CRI	Climate risk index	MoFSC	Ministry of Forests and Soil Conservation
CSO	Civil Society Organization	MoAD	Ministry of Agriculture Development
DoF	Department of Forests	MoHA	Ministry of Home Affairs
DoFSC	Department of Forests and Soil Conservation	MoLJPA	Ministry of Law, Justice and Parliamentary Affairs
DoI	Department of Irrigation	MoWCSW	Ministry of Women, Children and Social Welfare
DPSIR	Driver, Pressure, State, Impact and Response	MoUD	Ministry of Urban Development
DWRI	Department of Water Resources and Irrigation	NAPA	National Adaptation Plan of Action
FCPF	Forest Carbon Partnership Facility	NDC	Nationally Determined Contribution
FECOFUN	Federation of Community Forest Users Nepal	NGO	Non-Government Organization
FFN	Female Foresters Nepal	NPC	National Planning Commission
FY	Fiscal Year	PIF	Poverty Inclusion Fund
GDI	Gender Development Index	PLGSP	Provincial and Local Governance Support Programme
GESI	Gender Equality and Social Inclusion	REDD	Reducing Emissions from Deforestation and Forest Degradation
GFP	Gender Focal Point	REDD-IC	REDD-Implementation Centre
GII	Gender Inequality Index	SDG	Sustainable Development Goal
GIZ	German International Development Agency	SNV	Netherlands Development Organization
GoN	Government of Nepal	ToR	Terms of Reference
GRB	Gender Responsive Budget	UNDP	United Nations Development Programme
GRBC	Gender Responsive Budget Committee	UNFPA	United Nations Population Fund
HDI	Human Development Index	UNFCCC	United Nations Framework Convention on Climate Change
HIMAWANTI	Himalayan Grassroots Women's Natural Resource Management	VDC	Village Development Committee
HKH	Hindu Kush Himalaya	WASH	Water, Sanitation and Hygiene
HVAP	High Value Agricultural Product	WB	World Bank
ICIMOD	International Centre for Integrated Mountain Development	WOCAN	Women Organizing for Change in Agriculture and Natural Resource Management
IDPG	International Development Partners Group	WUA	Water Users Association
INDC	Intended Nationally Determined Contribution		
INGO	International Non-Government Organization		
IOM	International Organization for Migration – United Nations		

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Executive Summary

Nepal is a signatory to and party to various international conventions such as the CEDAW, SDGs-Agenda 2030, and UNFCCC and is legally obligated to ensure gender equality and social inclusion. The Constitution of 2015 also guarantees non-discrimination of people based on origin, religion, race, caste, tribe, sex, economic condition, language, region, or ideology. The Government of Nepal (GoN), in partnership with international development organizations, has implemented numerous policies and programmes in line with its national and international commitments. The recent progress assessment report on SDGs by the National Planning Commission (NPC 2020) states that there have been improvements in gender empowerment measures and that major parameters for reducing inequalities show significant progress. Still, gender inequality persists in most sectors, as seen in the wage gap between men and women, women's limited access to productive resources, gender based violence, and low participation of women in the labour force.

The Government of Nepal has made substantial progress in integrating gender in climate change policies and plans through sectoral and provincial plans, policies, strategies, programmes and institutional mechanisms. The National Adaptation Programme of Action to Climate Change 2010 identifies livelihood, governance, gender and social inclusion as crosscutting themes. Similarly, the Climate Change Gender Action Plan was developed in 2012 with the aim to operationalize gender concerns in climate change efforts for better implementation and promotion of gender focused and gender integrated activities in Nepal. The plan proposed the formation of a Stakeholder Forum comprised of donors, INGOs, Networks, Federations and Alliances, and NGOs, who would also be members of the Ministerial Climate Change and Gender Clusters. The annual budget of the fiscal year 2012/13 also introduced a climate budget code to track climate public expenditure (NPC 2012).

As a signatory to the Paris Agreement, the GoN formulated the first intended Nationally Determined Contribution (INDC) with 14 targets in 2016 (Sharma 2019). However, none of the 2016 INDC targets were directly gender sensitive; nor did they make specific reference to gender. This was rectified in the second NDC published on 8 December 2020 (GoN 2020), which addressed GESI concerns more distinctly both in the mitigation and adaptation components by identifying GESI as a crosscutting area. Further, the second NDC also stressed the need to integrate GESI in the NDC targets and to develop an action plan for such integration. The Nepal Climate Change Policy 2019 has recognized the need to integrate GESI through its objective of mainstreaming GESI into adaptation and mitigation programmes, and as a crosscutting thematic area in the eight sectoral¹ strategies and working policies. There are provisions for clear mechanisms and structures for integrating climate change and GESI at the provincial and local levels.

Although the Nepal Climate Change Policy 2019 recognizes the need to integrate GESI into adaptation and mitigation programmes, the policy does not have an intersectional approach. Furthermore, the policy (GESI chapter) focuses on addressing the vulnerabilities of women and marginalized groups but does not consider these groups as contributors and agents of change (Gurung 2020).

The national Climate Change Gender Action Plan outlined the institutional mechanisms for integrating gender in climate change in Nepal. However, it has lost its relevance since the introduction of the new federal structure in 2017. Consequently, although there have been efforts to increase the participation of women in sectoral institutional structures, women are still vastly under-represented in key decision-making bodies.

Climate change and gender have links and overlaps, but often climate and gender programmes tend to operate in isolation at the district and local levels (MoALMC 2018). Despite the existence of GESI guidelines and a clear mechanism for GESI implementation at the provincial and local levels, the functional linkages between the three levels of government (federal, provincial, and local) remain unclear, resulting in a lack of coordination and a lot of ambiguities surrounding GESI-related roles and responsibilities, particularly with the recent administrative changes (Shrestha and Gurung 2020). Thus, gaps within and between institutions persist, and these institutions have not yet been able to engage meaningfully (GoN 2016; MoALMC 2018). Further, assessment of policies related to gender and climate change shows that women and marginalized groups are viewed only as vulnerable groups (GoN 2016) and not as primary stakeholders or agents of change with knowledge and experience that can help address the impacts of climate change.

Major Findings at the Sectoral Level

Forestry: Forestry was one of the first sectors in Nepal to come up with sectoral GESI policies, and a strategy and action plan. Nepal's community-based forest management systems have laid the groundwork for integrating gender-inclusive strategies and policies (FAO and RECOFTC 2015). Several progressive steps for GESI integration are being taken. However, these processes are not fully institutionalized and are subject to individual staff's motivation and passion (WOCAN 2017). Further, the organizational culture and attitudes within the sector still reflect gender biases, making it difficult for women staff and women community leaders to be accepted as professionals and leaders (Ibid).

Agriculture: Over time, Nepal's agricultural policy has become more progressive in terms of addressing gender and inclusion issues. It lays emphasis on improving access to agricultural resources, leadership and decision making, and benefits for women, the poor and the excluded. At the policy, planning and implementation level there are provisions to establish mechanisms for ensuring gender equity and social and geographic inclusion. Capacity development of relevant institutions at the central and local level is a key component. Importantly, there are also budgetary provisions for activities aimed at empowering women and improving their access to and control over productive resources. The sector has set a goal of bringing 50% of farmland under women's ownership by 2035 as compared to 10% in 2010. However, supportive legislation for increasing women's land ownership is still absent (MoALD 2016/2017). Further, such GESI-focused provisions are often found only on paper, with very limited actual implementation on the ground (FAO 2019).

Energy: GoN's goals as outlined in its energy policy do not match Nepal's GESI policy commitments. The policy framework of the energy sector hardly takes GESI into consideration. None of the Five Year Plans of the energy sector (except the Three Year Interim Plan 2013/14–2015/16) address GESI. Recent subsidy related policies, such as the Renewable Energy Subsidy Policy 2016, try to address income gaps and location-based exclusion. But even the 2016 energy policy was formulated without the inclusion of women, poor, and other marginalized groups (ADB 2018). Consequently, existing energy policies do not fully recognize the differential needs of different gender and social groups, and the different barriers they face in participation and access to benefits. Nor have there been efforts to institutionalize GESI principles, as is evidenced by the glaring absence of women in key decision-making positions in the Ministry of Energy and other energy organizations.

Water: Most stakeholders recognize the need to address GESI issues in the water sector. But the key water policies (Water Resources Act 1992 and Regulation 1993, Environment Protection Act 1997 and Regulation 1997) are silent on gender issues. Sectoral policies and plans related to irrigation, drinking water and sanitation do incorporate gender and equity concerns through a provision of quotas for women and an equity and inclusion framework. A major criticism is that gender equality provisions in the water sector focus mostly on local level institutions without giving due consideration to patriarchal norms entrenched in the



broader society (Shrestha and Clement 2019). Consequently, social and gender hierarchies persist and limit women's participation in the decision-making process. Policies and strategies in the water sector, particularly irrigation, do not recognize women as legitimate stakeholders, and as a result women's specific needs related to water are repeatedly overlooked (Shrestha and Gurung 2020).

During interviews and data collection for this assessment, it was found that except for the Ministry of Agriculture and Livestock Development (MoALD), none of the four selected ministries carry out annual monitoring and reporting of GESI integration. Climate policies and strategies of all four ministries regard women merely as a vulnerable group, beneficiary group, or target group. Women and marginalized groups' contributions and ability to become agents of change are not taken into consideration.

Thus, despite mechanisms and structures to integrate climate change and GESI, there is still substantial work needed to equip and strengthen these structures. Due to unclear functional linkages between federal, provincial and local governments, it is difficult for provincial governments to formally receive technical support and likewise for the federal government to monitor progress and guide provincial governments (Shrestha and Gurung 2020). In a country like Nepal with historically entrenched patriarchy and other inequities, it is important to understand the power relations that result in the exclusion of certain groups from decision-making processes.

Based on our sectoral analysis, we have made the following recommendations for enhancing Nepal's capacity for climate adaptation and mitigation as well as for promoting gender equality and social inclusion:

- (a) Reframe the portrayal of women and marginalized groups in sectoral and climate change discourses, and recognize them not merely as a vulnerable group but as key contributors and agents of change, (b) develop gender-responsive climate financing mechanisms for promoting gender-sensitive and gender-responsive practices and innovations, (c) develop a comprehensive capacity development package to help build women's agency and recognize the contributions of women and marginalized groups in dealing with the impacts of climate change, and (d) Support the development of GESI integrated monitoring, evaluation and learning systems for knowledge production, and generate disaggregated data based on sex, gender, social and economic groups.



I. Introduction

1.1 Background

Climate change is one of the biggest threats facing the world today and it poses serious risks to social development and human well-being. Notwithstanding decades of warnings about alarming increase in greenhouse gas emissions and their visible impacts on ecosystems, emissions are still on the rise (Nightingale et al. 2019). Climate change contributes to, and compounds, the already existing social, political and economic vulnerabilities of people, damaging livelihoods and negating development efforts (Souza et al. 2015, Ribot 2009, Ruth 2009).

The timing and degree of climate change impacts vary among countries, with the poorer countries more likely to experience the impacts earlier and to a greater degree. (Mertz et al. 2009, Smit and Pilifosova 2003, Stern 2006). Consequently, impacts of climate change can have more extreme effects on the poor and marginalized sections of society (Goodrich et al 2017a). Climate change is “not gender neutral as women and men’s decisions differ on risk taking lines, use and type of coping strategies, adaptability and advice taking and information seeking behaviors” (Nurse-Bray 2015:1). Climate change will have greater negative effects on women because of their limited, or often lack of, rights, assets, resources and power, which results in their exclusion from decision-making processes that affect their lives (Aguilar 2009, Alston 2014, Kapoor 2011, Bartels et al. 2013, Mehta 2009, Nurse-Bray 2015, Okali and Naess 2013, Skinner 2011, Vincent et al. 2010, Goodrich et al 2017a, 2019a., Resurrección et al. 2019). Climate change “[must also be recognized as] a social, economic and political phenomenon with profound implications for social justice and gender equality” (Skinner 2011:1).

Given its mountainous terrain and fragile geology, Nepal will experience significant impacts of climate change. The Hindu Kush Himalaya (HKH) is a climate hotspot that has been warming at a rate of 0.2°C per decade over the past six decades with increased extremes in warming and precipitation. Climate projections indicate increased rates of warming in the future and increases in precipitation with more extreme temperatures and precipitation (Krishnan et al. 2019, Bolch et al. 2019). These have huge implications for Nepal because of its physical features such as fragile geology, sensitive ecosystems and diverse climate and micro-climate zones, as well as its socioeconomic situation, viz. poverty, illiteracy, social disparity, and high dependence of communities on natural resources for livelihood. Climate change impacts include glacial melt and river hydrology, ground water resources, cloud bursts, etc. that lead to floods, landslides and droughts, affecting agricultural production and endangering human lives and property. A recent report by the World Bank and the Asian Development Bank suggested Nepal risks losing 2.2% of its annual GDP due to climate change by 2050 (WB and ADB 2021).

In recent decades, climate change has compounded the multilayered challenges associated with rapid population growth, fast-paced urbanization, increasing migration, and economic development in Nepal. With the high rate of outmigration of men, women and girls are facing the brunt of climate change and socioeconomic changes. Women are now left to shoulder the responsibilities of their households and communities, as well as manage natural resources for daily survival; yet, they are often excluded from decision making processes (Goodrich et al. 2017a). Given all this, it is imperative to recognize women’s critical role in adaptation and involve them in planning and implementing climate-related programmes.

1.2 Objectives

The assessment report has five main objectives:

1. Present evidence on the linkages between gender equality and climate change
2. Show the extent of gender integration in climate change-related policies, institutions and programmes in key sectors
3. Contribute to national-level processes and reporting on the above aspects
4. Recommend areas for further policy work and research, and ways to enhance gender analysis and integrate gender concerns in climate policy
5. Assist agencies and institutions in creating new gender-responsive climate finance projects that provide equitable benefits

1.3 Methodology and Tools

We selected four sectors – forest, agriculture, water, and energy – for the assessment for four reasons: (a) high dependence of communities on natural resources for livelihood; (b) these sectors are most directly impacted by climate change, (c) Nepal’s Second National Communication to the UNFCCC identifies these sectors, along with the health sector, as being most vulnerable to climate change, and (d) these sectors are among the eight sectors identified by the Nepal Climate Change Policy 2019 as priority sectors.²

We conducted the assessment using the Driver-Pressure-State-Impact-Response (DPSIR) framework (EEA 1999, Kristensen 2004), along with the gender analysis framework to assess gender integration at the policy, institutional and local level. At the policy level, we examined how and to what extent gender is integrated in national policies and sectoral policies. At the institutional level we looked at three broad aspects of selected institutions: (i) technical aspects (policies, strategies, human resources, budgets, capacities, M&E systems, etc.); (ii) political aspects (policy influence, decision-making, room for innovation, etc.); and (iii) cultural aspects (norms, values, level of cooperation, attitudes, etc.). At the local level, our analysis focused on women’s material conditions or wellbeing (access to livelihood assets and services) and social status (voice, decision-making, recognition, representation, etc.).

The driver and pressure components of the DPSIR were assessed together for all four sectors to avoid duplication and repetition. The state, impact and response components were assessed separately for the four sectors. The state of gender and climate change was assessed as a crosscutting theme across the four sectors at the national level, after which separate sector-specific assessments were carried out at the policy, institutional and local level. As Nepal replaced a unitary government with a federal system of government in 2017, we carried out the assessment with the changed context in mind.

The assessment relied on a qualitative method and analysis. Literature review was the main data collection tool. A host of relevant government, non-government and academic publications were reviewed to collect data and information. In addition, key informant interviews through telephone and emails were conducted with selected stakeholders from the government, NGOs, INGOs and local community (Annex).



II. National Circumstances, Legal Framework and Institutional Arrangements Relating to Gender Equality and Climate Change

2.1 National Circumstances

2.1.1 Socioeconomic Situation

Nepal is known for its cultural and linguistic diversity. As per Census 2011, the total population of Nepal is about 30 million, with 126 caste/ethnic groups who speak 123 different languages, and follow different religious³ practices. The country's population includes 62 indigenous groups (UNFP, 2017). From 1991 to 2001 the country witnessed a population growth of about 2.25 percent but between 2001 and 2011, the growth rate was reduced to 1.35 due to absentee population (CBS 2014; UNFP, 2017). Increased outmigration of men has led to an increase in female-headed households; 25.73% of total households were female headed in 2011 as compared to 14.87% in 2001 (CBS, 2014).

Nepal's average Human Development Index (HDI) value for 2018 was 0.579, an increase of 52.6% since 1990 but it is still below the average HDI value for South Asian countries (0.642). The Gender Development Index (GDI), which measures gender inequalities in three dimensions of human development – health, education, and control over economic resources⁴ – is valued at 0.549 for female and 0.612 for male population, resulting in a GDI value of 0.897 in 2018. The Gender Inequality Index (GII) reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic activity⁵; with a GI value of 0.476, Nepal ranks 115 out of 162 countries (UNDP 2019).

Social inequalities in Nepal manifest differently in different geographical regions – mountain, hill and Terai (Bajracharya 2012). These regions vary in culture, economic opportunities, access to resources, and climatic conditions. The mountain region makes up 35% of the country while the hill and Terai regions cover 42% and 23% respectively (Malla 2008). Over half of the population (50.3%) live in the Terai region, 43% live in the hills and 6.7% in the mountain region (CBS 2013).

Development efforts in Nepal, particularly efforts to address the exclusion of women and other marginalized groups, are hindered by deep-rooted sociocultural norms. Therefore, although the Constitution of Nepal has provisions for social and economic inclusion of marginalized groups, translating such commitments into reality will take time (UN WOMEN and MOWCSW, 2017). The 2020 progress report on SDGs by the National Planning Commission stated that there has been significant progress on major parameters on reducing inequalities. The Gini coefficient of consumption inequality is 0.30 in 2018/2019 as compared to 0.33 in 2015, suggesting reduced inequality (NPC 2020). Indicators of social, economic and political empowerment, consumption and income of the bottom 40% of the population have improved. Despite signs of pro-poor growth and improvements in many social indicators, the Nepal Social Inclusion Survey (NSIS) 2018 revealed evidence of exclusion based on linguistic, caste, ethnic, religious, regional, and gender identity. The survey shows "how these various 'dimensions of difference' – such as language, region, ethnicity, caste, religion and gender – have acted as barriers to full economic, social and political inclusion for certain social groups and how for many groups, intersectionality or overlapping dimensions of identity have led to multiple barriers" (Tribhuvan University and USAID 2018, pp. xii-xiii). It reports increased women's representation in elected positions at the national and local level, and increase in women entrepreneurs and women's ownership of property. However gender inequalities persist, as manifested in the wage gap between men and women, gender-based violence, and lower participation of women in the labour force compared to men. In the sphere of education it is reported that the Gender Parity Index for primary and secondary school enrollment has improved, at 1.05 and 0.95 respectively. There has been progress in enrollment in primary school (97.2%), ratio of girls to boys enrolled in grade one and who reached grade eight is 1.04 and those who have reached grade twelve is 1.1 (NPC 2020). The GPI in higher education in year 2018/19 is 1.09, the GPI of Gross Enrolment Ratio (GER) is 0.8, the GPI for the bachelor's level is 1.15, and the master's level is 0.7.

A higher proportion of girls are enrolled in the education faculty (63.73%), medicine (61.56%), humanities (50.84%), and management (55.98%) (UGC 2019). In STEM subjects girls continue to lag behind: in science and technology (0.3%), engineering (0.12%), and medicine (0.84%) (UN Women and MOWCSW 2017). The NPC report 2020 presents similar findings – that the ratio of girls' enrolment in technical and vocational schools in 2015 was still low (0.53), well below the target (0.66). The report rightly concludes that progress on gender equality has "remained moderate" and progress related to climate action "has remained slow and needs to be expedited" (NPC 2020: XVII).

The Nepal government has launched the slogan "Prosperous Nepal, Happy Nepali" and set a goal of graduating from the Least Developed Country status by 2022 and achieve the SDGs by 2030. The Fifteenth Plan (2019/20–2023/24) provided a clear roadmap for prosperity, but the COVID-19 pandemic brought an unprecedented situation in the country. The GDP growth rate projected by the World Bank in FY2020 was 1.8% as compared to 7% in FY2019 (World Bank 2020).

Table 1. Key indicators of gender equality and climate change in Nepal

	1991	2001	2011	2015	2018	2019
Population						
Female (%)	50.13	50.50	51.50	51.52	51.51	51.50
Male (%)	49.87	49.95	48.50	58.48	48.49	48.50
Urban (%)	9.00	12.20	17.07	18.60	19.30	19.70
Rural (%)	91.00	85.80	82.93	81.70	80.70	80.30
Unemployment rate						
Female unemployment (%)	45.2	43.8			43.7	
Labour force participation (15 years and older)						
Female (%)	81.15	81.16	79.73	79.7	81.7	82.8
Male (%)	79.79			86.8	84.4	

	1991	2001	2011	2015	2018	2019
Literacy						
Female (%)	25	42.8	57.4	64.5	70.5	72.6
Male (%)	54.5	65.5	75.1	79.3	82.6	83.8
Percentage of parliamentary seats held by women		7.9	33.17	29.5	33.5	32.73
Human Development Index	0.386	0.447	0.534	0.568	0.579	
Gender Inequality Index			0.525	0.497	0.476	
GDP (PPP USD billions)		30.90	50.50	70.62	87.37	94.419 (PPP2019)
GDP per capita (PPP USD)		1310	2031	2464	2842	3318 (PPP2019 est.)
Total GHG emissions without LULUCF (Mt CO ₂ eq) +	0.94	3.47	5.20	6.46	11.03 (2017)	
GHG emissions per capita (Mt CO ₂ eq)++	56.4 (1990)	63.9 (2000)	39.1 (2010)	44.1 (2014)		
GHG emissions (kg CO ₂ eq per 2010 USD of GDP)*	0.152	0.282	0.334	0.316		
GHG emissions (kg CO ₂ eq per PPP USD of GDP)**	0.069	0.108	0.102	0.088		

Sources:

Central Bureau of Statistics. (2001). Population Census Results in Gender Perspective, Vol. II.

Shrestha, D. P. (2003). "Trends, Patterns and Structure of Economically Active Population", Population Monograph of Nepal, Vol. II, Kathmandu: Central Bureau of Statistics.

Parliamentary seats hold by women (%): <https://data.worldbank.org/indicator/SG.GEN.PARL.ZS?locations=NP>

Female Unemployment rate: https://www.theglobaleconomy.com/Nepal/Female_unemployment/

Female Labor force participation: <https://data.worldbank.org/indicator/SL.TLFC.ACT.FE.ZS?locations=NP>

Male Labor force participation: <https://data.worldbank.org/indicator/SL.TLFC.ACT.MA.NE.ZS?end=2018&locations=NP&start=1971>

GDP and GDP per capita: Report for Selected Countries and Subjects. World Economic Outlook Database, April 2018. IMF

+ Climate Watch Historical GHG Emissions. 2020. Washington, DC: World Resources Institute. Available online at: <https://www.climate-watchdata.org/ghg-emissions>

++ Data for the GHG Emissions per capita, source: Piya et al., 2019

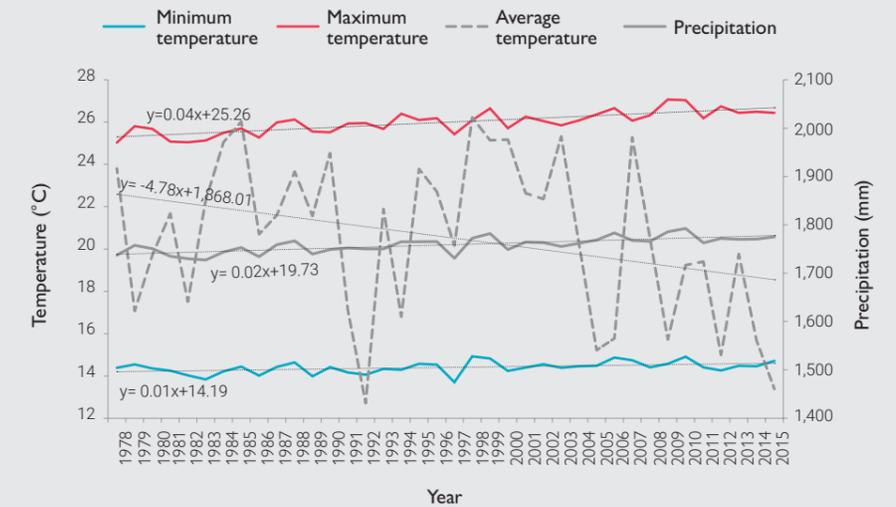
* World Bank Data Available at: <https://data.worldbank.org/indicator/EN.ATM.CO2E.KD.GD?end=2013&locations=N-P&start=1960&view=chart>

**World Bank Data Available at: <https://data.worldbank.org/indicator/EN.ATM.CO2E.KD.GD?end=2013&locations=N-P&start=1960&view=chart>

2.1.2 Climate Change Trend and Impacts

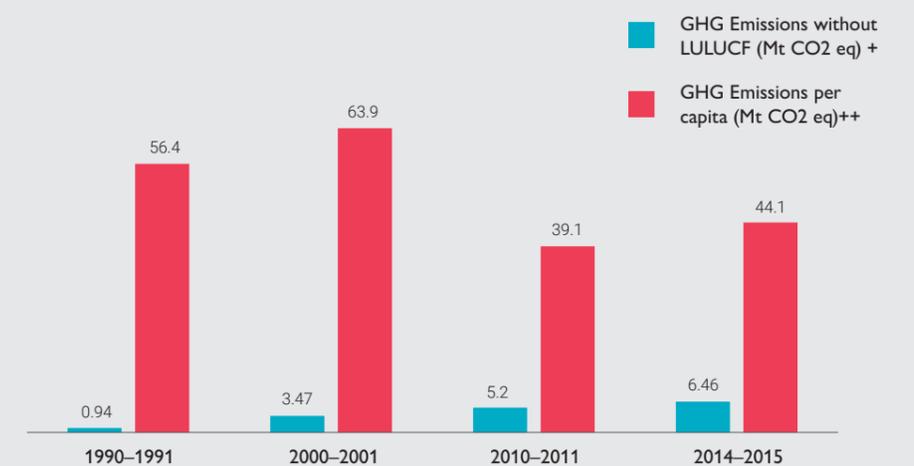
Climate records in Nepal lack long-term historical data (Bartlett et al. 2010, Gum et al. 2009, Lohani 2007, Piya et al. 2019). However, the long-term climate risk index (CRI) of 31.50 makes Nepal the ninth most affected country during the period of 1998 to 2018 (MoFE 2020). Scientific evidence from Nepal indicates an increase in temperature and reduced seasonal rainfall with increasing events of heavy rainfall (Acharya & Bhatta 2013, Bista et al. 2013, Malla 2008, GoN 2010, Piya et al. 2019). A recent study by Piya et al. (2019) found the average annual maximum temperature in Nepal is increasing at 0.04°C and the average annual minimum temperature is increasing at 0.01°C (Fig. 1). On the emissions front, the 2014–2015 GHG emission data suggests that Nepal's total GHG emissions is about 0.09% of the world's total (Fig. 2).

Figure 1. Climatic trend of average annual weather variables in Nepal



Source: Piya et al. 2019

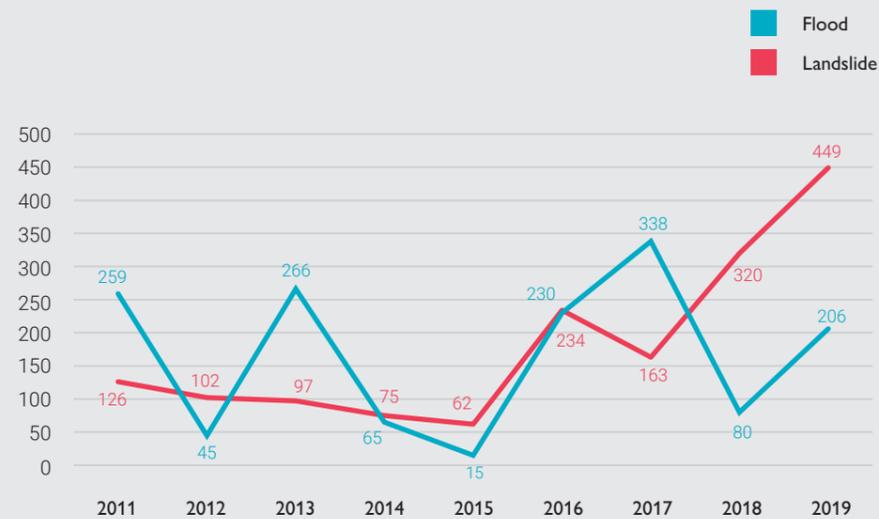
Figure 2. Greenhouse gas emissions in Nepal



Source: WRI, 2020

Although Nepal has high climate variability, ranging from subtropical to alpine weather, over the years food production has sharply declined with changes in rainfall patterns and temperatures. (Bista et al. 2013, Piya et al. 2019). Nepal is highly prone to disasters such as floods, droughts, and earthquake and is ranked 31st on the 2019 INFORM Risk Index (European Commission 2019). The changing precipitation and higher temperatures affect the stability of the terrain, making the area susceptible to mudflows, avalanches, GLOFs and landslides (WB and ADB 2021). Hydro-climatic hazards following an earthquake can compound the damages (Gill and Malamud 2017, Gautam and Dong 2018). The decadal data on disasters presented in Figure 3 shows an increase in the incidence of landslides and floods.

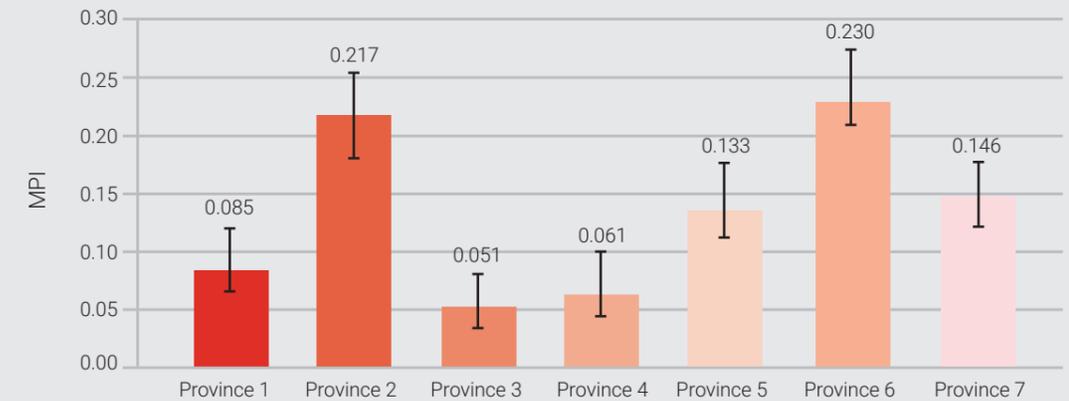
Figure 3.
Disaster trends



Source: GoN, 2020

As in all countries, in Nepal climate change impacts are not evenly distributed among communities. Poor and marginalized sections of society are suffering disproportionately. Gender is a major attribute that shapes a person's person's life experiences. In a country like Nepal, where patriarchy is deep-rooted, impacts of climate change disproportionately affect women because of inequitable distribution of rights, assets, resources and power. In addition, women's lives are affected by repressive cultural norms. As a result, women are poorer and less educated than men and excluded from political and household decision-making processes. Climate change along with socioeconomic changes are adversely affecting gender division of labour and access to and control over resources while also intensifying existing gendered vulnerabilities. High rates of male outmigration have increased women's workload, resulting in lower school enrollment and higher dropout rates among girls, and health implications for women (Gurung and Bisht 2014, Bastola et al. 2015, Nibanupudi and Khadka 2015, Goodrich et al 2017a, Goodrich et al 2019b., Resurrección et al 2019, Udas et al 2019). It is important to consider the intersection of gender, class and caste when looking at male outmigration and its impacts. For example, in Chitwan district it was found that both internal and long-distance outmigration due to falling agricultural productivity was confined to lower-caste Hindu and non-Hindu groups (FAO 2019; Onta and Resurrección 2011).

Figure 4.
Multidimensional Poverty Index by province, 2014



Source: Nepal Multidimensional Poverty Index 2018: Analysis Towards Action

Poverty does not only mean lack of money; it has multiple dimensions. Since there is no single indicator that captures all the various elements of poverty, many countries, including Nepal, complement the national monetary poverty measure with a national multidimensional poverty index (MPI). As shown in Figure 4, the MPI includes deprivations associated with the following: cooking fuel, sanitation, nutrition, child mortality, years of schooling, school attendance, water, electricity, flooring and roofing, and assets not captured by consumption poverty (NPC 2018).

2.2. Policy and Legal Framework

The Government of Nepal is a signatory to many international agreements related to gender equality and climate change, and has developed national policies and legislation on these issues. Some key policies and legal frameworks are briefly described below:

2.2.1. Climate Change

Since becoming a Party to the United Nations Framework Convention on Climate Change (UNFCCC) in 1994, the GoN has been developing policies, strategies, and programmes to take urgent action to tackle the effects of climate change and slow its impacts through mitigation and adaptation measures. The Millennium Development Goals, 2001 and Sustainable Development Agenda, 2003 addressed climate change concerns directly or indirectly. In 2009 the government came up with the National Adaptation Programme of Action (NAPA) under which climate adaptation projects have been prepared and implemented at the national, local and community level.⁶ Nepal's Climate Change Policy was formulated and implemented in 2011. An implementation framework for the Local Adaptation Plan for Action (LAPA) was also developed in 2011 with the objective of integrating climate change into local development plans. Local Adaptation Plan has been introduced in various vulnerable areas as per this framework. At the community level, Community Based Adaptation Plan is being implemented. The National Climate Change Policy 2019 was formulated based on lessons learned during the implementation of the

2011 policy. The Nepal National REDD+ Strategy 2018 is another significant initiative that seeks to reduce greenhouse gas emissions from deforestation and forest degradation. As a signatory to the Paris Agreement, the GoN formulated the first intended nationally determined contribution (INDC) with 14 targets in 2016 and the second NDC in 2020, which addresses GESI concerns more distinctly. Apart from all these, specific policies related to climate change have been developed in eight sectors.⁷

However, it is reported that lack of awareness has slowed down progress in addressing climate issues in development policies and programmes. Further, the database of the socioeconomic impacts of climate change remains limited and needs to be strengthened (NPC 2020).

2.2.2. Gender Equality

The GoN has numerous policies, plans, strategies, and programmes aimed at promoting gender equality. The key document in this regard is the Constitution of 2015, which guarantees non-discrimination of people based on origin, religion, race, caste, tribe, sex, economic condition, language, region, or ideology. Following this, the government has adopted various policy measures and programmes to promote social inclusion and gender equality through its Fourteenth Three-Year Plan (2016/17–2019/20), which regards gender equality, social inclusion, and gender mainstreaming as key cross-cutting goals. The plan lays emphasis on targeted programmes such as equitable distribution of resources, and social security for addressing gender inequality and poverty among “backward” regions and excluded groups. The document has a separate chapter devoted to gender equality, women’s empowerment and inclusion, and recognizes these as cross-cutting themes (NPC 2017). The current Fifteenth Three-Year Plan (2020/21–2023/24) aims to end all kinds of discrimination, poverty and inequality by developing the capacity of individuals and groups to access resources and opportunities (NPC 2019). The Plan document states that gender related policies and programmes shall be developed for every sector and that 50 percent women participation shall be ensured in all government bodies. The Plan also states that gender responsive budgeting shall be institutionalized at every level of government.

The GoN has introduced a national Gender Equality and Social Inclusion (GESI) policy to ensure active participation of women, the poor, Dalits, Adivasi Janajatis, Madhesis, Muslims and members of other historically excluded groups in the formulation, implementation, monitoring and evaluation of the plans, policies and programmes that affect them. For impact at ground level, sector-specific GESI policies have been adopted by eight ministries⁸ (Tribhuvan University and USAID 2018).

2.2.3. Gender and Climate Change

The gender component of climate change policies is geared towards addressing women’s vulnerabilities (MoF 2017) rather than recognizing them as leaders and innovators who adapt to the changing environment, promote nature-based solutions and bring social change. The Climate Change Adaptation and Disaster Risk Management in Agriculture policy recognizes women’s role in agriculture and their challenges, but most other policies and programmes see women merely as a target beneficiary group (Paudyal et al. 2019). Although GESI concerns are taken into consideration at the policy level, there is limited understanding of specific vulnerabilities of women and marginalized groups (CAMRIS 2020).



Table 2. Key policies on gender equality and climate change

	Nepal’s international commitments, SDGs and the UN Resolution 70/1 to gender equality and climate change
2009	National Adaptation Programme of Action (NAPA) was implemented with the involvement of sectoral ministries and civil society members
2011	National Framework on Local Adaptation Plans of Action (LAPA) developed to integrate climate change into local development plans
	Nepal Climate Change Policy formulated
	Nepal National REDD Strategy introduced to reduce greenhouse gas emission from deforestation and forest degradation
	The National Planning Commission provided the climate resilient framework for implementing development plans.
	Local Disaster Risk Management Planning Guidelines
2012-2013	The Climate Change Budget code was included in the national budget of the fiscal year 2012/2013 for tracking climate expenditure
2015	The Constitution of 2015 states that a special opportunity provision will be implemented as part of the fundamental rights of women (Article 47).
2016	First Nationally Determined Contribution (NDC) does not address GESI concerns.
	Gender Equity and Social Inclusion Strategy Framework
	WASH Sector Development Plan (2016-2030) specified that along with 50 percent women’s representation in the executive body, the post of chairperson or secretary should be filled by a woman.

2017	Disaster Risk Reduction and Management Act defines climate change related disasters as natural disasters.
	Local Government Operation Act recognizes local level climate adaptation needs and the need for meaningful participation of women and men.
	Climate Change Financing Framework highlights the need to evaluate the effectiveness of the climate budget from a gender perspective.
2018	National REDD+ strategy endorsed to regulate REDD+ initiatives in Nepal. GESI concerns are spelled out more clearly in the national strategy. It focuses on equitable access to resources, decision making, and benefits, and highlights exclusion of women and marginalized groups in government bodies, programmes and activities.
	Disaster Risk Reduction National Strategic Plan of Action 2018-2030 strongly recommends meaningful participation of women and men across all groups to effectively manage disaster risk.
2019	National Climate Change Policy mainstreamed GESI into climate change mitigation and adaptation programmes as an inter-thematic area. The Policy document highlights the need to look at gender concerns through an intersectional lens and gives space to concepts that are relatively new to Nepal such as climate justice.
	Local Adaptation Plan of Action (LAPA) Framework drafted
	Environmental Protection Act does not mention the term 'gender' but it does mention that women have been victims of, or are vulnerable to, the effects of climate change.
2020	Second Nationally Determined Contribution (NDC) makes a strong commitment to developing the 'GESI and Climate Change Strategy and Action Plan'.

The GoN has been allocating separate budgets for gender equality and climate action over the years, showing its commitment to taking action on these fronts. Table 3 provides information on budget allocations.

Table 3. Allocated budget (in NPR billion) for SDGs 5 (Gender Equality) and 13 (Climate Action)

SDG	2016/17	%	2017/18	%	2018/19	%	2019/20	%
5	2.22	0.2	1.99	0.2	3.14	0.3	4.86	0.3
13	2.79	0.3	3.80	0.3	2.94	0.2	5.21	0.3

Source: Nepal's Sustainable Development Goals. Progress Assessment Report 2016–2019. National Planning Commission, Government of Nepal.



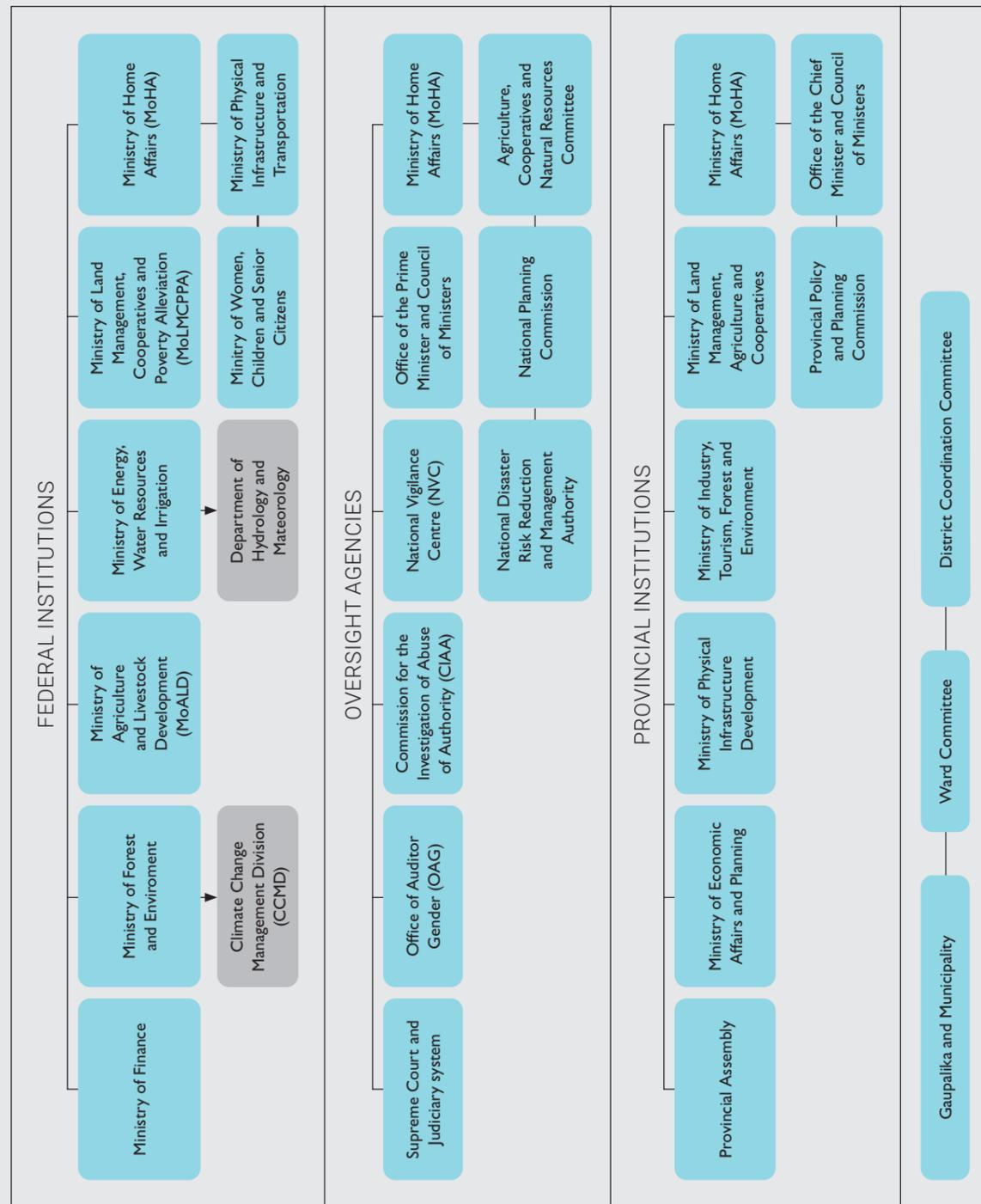
2.3. Institutional Arrangements

2.3.1. Climate-related Institutional Arrangements

There are several climate related policies and action plans at the national and local level. However, with the implementation of the recent National Climate Change Policy (NCCP), 2019 and the new Constitution of Nepal, 2015, the institutions responsible for implementing climate activities are being restructured and there is ambiguity about what the new institutional structure might look like (MOFE, 2018a). The constitution provides federal, provincial and local institutions with a) exclusive jurisdiction, and b) concurrent jurisdictions for implementing development programmes and climate activities. These institutions spread across the eight sectors (see footnote in section 3.2.2) and their ministries, departments, and agencies at all levels of government (federal, provincial and local). The NCCP, 2019 identifies cross-cutting areas such as GESI, livelihood and good governance and provide a guiding framework to identify government agencies and other organizations engaged in implementing climate activities. Figure 5 shows the institutions and departments responsible for implementing climate activities from the local to federal level. Each ministry has different departments, divisions, or centres responsible for implementation and coordination of climate activities. For example, the Ministry of Forests and Environment has the Department of Forests and Soil Conservation, Department of Plant Resources, Forest Research and Training Centre, Department of National Parks and Wildlife Conservation, Department of Environment, and REDD Implementation Centre, all of which have different roles and responsibilities for the implementation and coordination of climate activities. Showing all these institutions in the figure was not possible.

At the federal level there are Oversight Agencies, also known as constitutional bodies, that do not directly implement climate activities but carry out functions such as legal adjudication, vigilance, corruption control, ombudsperson and audit to implement climate activities in a transparent, accountable and participatory manner.

Figure 5. Institutions responsible for implementing climate action



Institutions responsible for climate action under the new Constitution 2015 and national Climate Change Policy 2019

Source: MoFE, 2020

The NCCP 2019 commits to mobilizing 80% of climate funds at the local level, giving the local governments (Gaupalika/Municipality, Ward Committee, District Coordination Committee) exclusive jurisdiction. For smooth implementation of activities, these local bodies are governed by the Local Government Operation Act, 2017. Each of these local bodies is assigned different powers and roles with regard to implementing climate activities. These bodies have been restructured as part of the implementation of the NCCP and they will likely undergo further changes as part of the federal restructuring process (MoFE 2020, MOFE 2018a).

2.3.2 Gender Equality-related Institutional Arrangements

The Constitution of Nepal, 2015, Gender Equality and Social Inclusion (GESI) Policy, 2019 and the Fifteenth Three-Year Plan document (2020/21–2023/24) provide an institutional framework for implementing the GESI action plan. The Ministry of Women, Children and Senior Citizens (MoWCSC) is the focal entity responsible for fostering gender equality and empowerment of women (Table 4).

Table 4. Institutional mechanisms for promoting gender equality and social inclusion in Nepal

Level	Agency and departments	Responsibility
Federal	Ministry of Women, Children and Senior Citizens (MoWCSC) Department of Women and Children (DWC)	Empower women, children and senior citizens, especially those who are economically disadvantaged, socially deprived, or otherwise underserved.
	Ministry of Federal Affairs and Local Development (MoFALD)	Enhance access of socially and economically disadvantaged groups and regions to services and facilities.
	Dalit and Adivasi/Janajati Coordination Committee	Empower Dalits, indigenous peoples, Madhesi, Muslims, persons with disability (PWD), and ultra-poor people through social mobilization. Ensure inclusive development by enhancing people's participation in decision-making and planning
	National Commissions for Women (NCW), Dalits, Indigenous Nationalities, Madhesi, Muslims, Tharus	Responsible for gender equality, empowerment, and research on women-related legal provisions, and strengthening of the rules and regulations and promotion of women's rights.
	National Inclusion Commission	Mandated to protect the rights of Khas Arya, "backward" class, persons with disabilities, senior citizens, labourers, peasants, minorities and marginalized communities, and people of Karnali.
	Gender/GESI focal points in ministries: Agriculture, Education, Forests and Soil Conservation, Health, Federal Affairs and General Administration, Urban Development, Water Supply and Sanitation, and NPC	Responsible for coordination with MoWCSC, DWC, NPC, donor agencies, monitoring of implementation of GESI guidelines, making arrangements for collection of sex-disaggregated data, GESI-related monitoring & evaluation, and implementation of GRB, and submission of GESI-related reports.

Level	Agency and departments	Responsibility
Provincial	Ministry of Social Development	Mandated to address GESI-related issues and integrate GESI in provincial level plans, rules, standards, policies, workplan, rehabilitation, monitoring and evaluation, gender-responsible budgeting, and gender audit.
	Health Sector GESI Coordination and Facilitation Committee	Execute provincial level GESI sensitive policy, strategy, action plan and programme in harmony with the national strategy of GoN
Local	Municipality (rural and urban)	Develop and implement programmes for the welfare and overall management of PWD.
	Social Development Section	Design, formulate and prioritize policy and plans Implement GESI-responsive activities, social security schemes, data and information management, and operation and management of care and rehabilitation centres for senior citizens, children and PWDs.

Adapted from the following sources: Gender Equality and Social Inclusion Diagnostic of Selected Sectors in Nepal, ADB 2020; In a Common GESI Framework, IDGP Nepal, 2017; GESI Operational Guidelines of MoHP, 2018; MoUD, 2013.

The National Women Commission (NWC) is entrusted with formulating policy, and reviewing and monitoring implementation of treaties pertaining to women's rights and gender equality and development programmes, but often lacks financial and human resources to operate effectively (SRPC 2018). The parliamentary committee on Women, Children, Senior Citizens and Social Welfare can make special provisions for the protection, empowerment, and development of poor, single, and disadvantaged/marginalized women. The Gender Equality and Environment Section under the Social Development Division of the National Planning Commission (NPC) oversees the formulation of plans and policies. Under the MoWCSC, the Department of Women and Children (DWC) is the implementation wing that performs its functions through a network of district-based offices (ADB 2016).

GESI policy requires ministries to implement sector-specific GESI operational guidelines and coordinate within their respective ministries at different levels. At present eight ministries – Agriculture, Education, Forests and Soil Conservation, Health, Federal Affairs and General Administration, Physical Infrastructure and Transport, Urban Development, Water Supply and Sanitation – have developed their GESI policies and guidelines to mainstream GESI in their sectors (ADB 2020). As per GESI operational guideline, GESI focal points are responsible for ensuring gender mainstreaming at the programmatic level, supported by the MoWCSC for professional capacity building (GoN 2016). These guidelines indicate GESI focal points should be sociologists (MoPIT 2017, MoUD 2013, MoI 2017, NEA 2020), except in the Health sector (MoHP 2018). It was found that the person appointed/delegated to implement GESI actions is considered a GESI focal person/coordinator whether or not they have a gender background. In addition, non-prioritization of GESI activities, frequent transfers of GESI focal persons, and inadequate training in the subject matter makes it difficult to implement GESI policies and objectives of the ministries (CAMRIS 2020).



Since 2007, the Ministry of Finance has incorporated gender-responsive budgeting (GRB) in all sectoral ministries with clear targets for development programmes including climate change adaptation activities. The GRB system includes gender sensitivity indicators such as participation, capacity building, benefit sharing, increased access to employment and income earning opportunities. Each of these indicators is allotted 20 points. Programmes getting 50% or more are classed as being directly supportive of women; those getting 20 to 50% as indirectly supportive; and those getting less than 20% as neutral (Ministry of Education et al. 2010). However, there is no integration of GRB at the provincial and local level (SRPC 2018) and funds are used for other purposes, mainly infrastructure building, rather than for addressing social issues such as gender equality and exclusion (CAMRIS 2020).



III. Sectoral Climate Policies and Assessment of Integration of Gender Equality



3.1 Nationally Determined Contribution

As a signatory to the Paris Agreement of the UNFCCC, the Government of Nepal formulated the first INDC with 14 targets in 2016 (Sharma 2019). None of the 2016 INDC targets were directly gender sensitive or gender specific. Only some of the activities aimed at achieving these targets, such as the formulation of the National Adaptation Plan of Action (NAPA) and the Climate Change Policy, took GESI issues into consideration. However, unlike the first NDC, the second NDC published on 8 December 2020 (GoN 2020) addresses GESI concerns more clearly. The mitigation component of the NDC to be implemented by 2030 in Agriculture, Forestry and Other Land Use includes clear guidelines on GESI: ensure 50% women's representation in community-based forest management groups and proportional representation of Dalits and indigenous people in key positions; set up institutional mechanisms and structures for GESI integration with sufficient budget provision; ensure social and environmental safeguards including Free, Prior and Informed Consent (FPIC); provide forest tenure and access to finance and technology to the local communities, women and indigenous people; and ensure fair and equitable distribution of benefits (carbon and non-carbon) derived from sustainable management of natural resources (forests, watersheds and biodiversity), with special attention to local communities, particularly women and indigenous people.

Under the adaptation component of the second NDC, GESI is identified as a crosscutting area. A key policy priority for adaptation till 2030 is to ensure that all local governments prepare and implement gender-responsive, climate-resilient adaptation plans. These plans will concentrate on adaptation and disaster risk reduction and management measures, with a focus on women, children, senior citizens, youth, differently abled, indigenous peoples, and economically deprived communities and people in climate-vulnerable geographic areas. The NDC recognizes the need to uphold the principles of equity through ensuring equal participation of women, children, youth, indigenous peoples and marginalized groups in decision making and the sharing of benefits derived from NDC implementation. The document states that NDC will be implemented by all levels of government – federal, provincial and local – in collaboration with pertinent stakeholders including youth, women and indigenous peoples.

BOX 1 GESI provisions in the second NDC

The second NDC seeks to achieve the following GESI targets by 2030: develop an action plan to integrate GESI for the achievement of NDC targets; develop specific programmes on GESI with dedicated resources (human and financial) and ensure equal and meaningful participation of women, children, youth, indigenous peoples and marginalized groups in climate policy development; planning, monitoring and implementation at various levels; enhance the leadership and negotiation skills of women, indigenous peoples and youth at climate forums; and ensure collection of gender-disaggregated data for reporting on progress and achievements.

BOX 2 Institutions responsible for implementing climate action

UNDP Nepal, Climate Analytics, GIZ and WWF are supporting partners in the preparation of NDC for Nepal. In this process, UNDP has organized provincial workshops in three provinces – Gandaki province, province 1, and province 2. Consultation workshops in the other four provinces have been postponed due to COVID-19 and other ways are being explored to collect diverse stakeholder inputs by December 2020. A national level consultation was also organized and extra efforts were made to gain maximum participation of diverse stakeholders including various women interest groups and indigenous peoples (IPs).

The draft Guidance for 2020 NDC Framework mentions gender in two places: (i) the planning process states that institutional arrangements, public participation and engagement with local communities and indigenous peoples should follow a gender-responsive approach; (ii) the adaptation component mentions gender responsive adaptation action, traditional, indigenous and local knowledge (MoFE 2020).

NDC implementation in Nepal currently seems to be dominated by technical and technocratic approaches. This was also revealed during interviews with NDC partners, who reported that the priority at the moment has been technical activities, such as testing adaptation technologies, collection of carbon data, etc. In due course the government and NDC partners will hold national consultations on GESI integration with the participation of diverse climate change stakeholders. Also, standard tools for GESI integration in climate action developed by the UNFCCC will be included during NDC implementation.⁹

Based on our interview with the Climate Change Management Division (CCMD) of the Ministry of Forests and Environment (MoFE), Nepal's NDC is being enhanced with the support of Climate Action Enhancement Project (CAEP) project under NDC partnership.

A major critique of the NDC process is that for the government and the NDC partners, GESI integration often only means inviting women and excluded groups to consultation workshops. Although this is a good practice, this may only help the participants gather information rather than influence the process.

UNDP is also preparing a long-term strategy report in coordination with CCMD. Similarly, Climate Analytics (CA), an NGO partner, is going to organize a national consultation and is doing a number of assessments under NDC. At the time of writing, Climate Analytics had submitted an electric-mobility assessment report, electric-cooking assessment report and a provincial risk assessment report, and gender is mentioned only in the electric-cooking assessment report. The general (mis)conception is that only climate projects that directly deal with traditional roles of women (e.g., electric cooking project) have ramifications for women (apart from reducing emissions), whereas other climate projects and programmes are gender neutral. Climate Analytics is also conducting scenario analysis and modelling to fix the targets. In addition, GIZ has reviewed the existing experience in inventory activities in Nepal and has shared the report with MoFE.¹⁰

In the second NDC the priority sectors include energy, industrial processes and product use; agriculture; forestry and other land use; and waste. For some reason, water is not a priority sector in the second NDC. In the three other sectors assessed for this study, i.e., energy, forestry and agriculture, the second NDC has set the following targets to be achieved by 2030:

Energy: Increase clean energy generation from the current capacity of 1,400 MW to 15,000 MW by 2030. Of this, 5,000 MW is an unconditional target while the remaining amount will depend on funding received from international donors. Mini and micro hydropower, solar, wind and bioenergy will contribute 5–10% in this increase, thus ensuring 15% of the total energy demand is supplied from clean energy sources.

Forest: Maintain 45% of the total country under forest cover. This includes 40% of other wooded land, 50% of Tarai and Inner Tarai forests and 25% of middle hills and mountain forests, that are managed through the use of REDD+ initiatives funding.

Agriculture: Attain 3.95% of soil organic matter content in agricultural land; expand mulberry and fruit orchard areas to 6,000 ha; produce and use quality farmyard manure by increasing the number of improved cattle sheds to 500,000; increase the number of organic fertilizer production plants in the country to 100; establish 200 climate-smart villages and 500 climate-smart farms. The document also states that climate change will be integrated in the upcoming revised agriculture policy. In addition it states that the rangeland policy will be updated and sustainable management plans of rangelands will be developed by 2025.

Other agendas under this sector include: (a) promotion of sustainable farming practices such as intercropping, agroforestry, conservation tillage, and livestock and agricultural waste management; (b) protection, promotion and support of climate-resilient indigenous seeds/crop varieties through community seed banks and national gene banks; (c) initiatives for ensuring access to climate-smart agricultural technologies for women, indigenous peoples, smallholder farmers and marginalized groups. The estimated cost of achieving the conditional mitigation targets of the second NDC is USD 25 billion, while that of achieving the unconditional targets is USD 3.4 billion. It should be noted that these estimates only cover the activity-based targets and not the cost of policies, measures and actions.¹¹ Nepal anticipates financial, technological and capacity building support from global initiatives (e.g., Green Climate Fund, Global Environment Facility, Adaptation Fund, Least Developed Countries Fund) and the global community (bilateral/multilateral agencies and development partners) in order to achieve its conditional targets. The activities are to be integrated into the fiscal budgets as subsidy policies, projects or programmes and will be implemented over a ten-year period (2021–2030). The big plus point is the close alignment of these targets with the country's existing policies and plans, which ensures a high level of ownership from all levels of government (GoN 2020).

3.2 Drivers and Pressures

For the purposes of this assessment, 'drivers' mean the underlying causes of gender inequality and 'pressures' are immediate factors that contribute to increasing and/or reinforcing gender inequality in the climate change context. The two may overlap in some instances.

Structural discrimination and its linkage with climate change: Several studies in Nepal show a strong nexus between climate-related risks and hazards and the social identity and economic condition of people impacted by such hazards. Women, particularly those from poor and historically marginalized caste/ethnic groups, are hit hardest by the effects of climate (Gurung and Bisht 2014). The drivers and pressures associated with gender inequality and climate change in Nepal should be understood in relation to deep-rooted social systems, namely the caste system¹² and patriarchy (Pradhan 2014).

Patriarchy favours men, irrespective of caste, class, ethnicity, and religion, making them the centre of power and reducing women to a subordinate position (Dajjuvai 2020). In rural Nepal, patriarchal norms severely limit women's freedom and potential, and they spend most of their lives doing unpaid work for their household (cooking, cleaning, and collecting water, fuel wood and animal fodder, doing farm work, and taking caring of children, sick and the elderly), whereas their male counterparts go out for work, engage in the public sphere, become visible, control the finances and make household decisions.

Nepal's first civil code (1854) incorporated all non-Hindu ethnic groups into the caste system, placing them below the 'high-caste' groups such as Brahmins and Kshatriyas. The Hinduization of ethnic Janajati¹³ groups meant that these groups, despite their relatively egalitarian gender relations, gradually imbibed the patriarchal norms of the dominant groups (Acharya and Bennett 1981). Despite progressive policies and interventions (post 2008 after the Maoist insurgency), women continue to lack opportunities to utilize and expand their skills, knowledge and position in society. A vast majority of households, local interest groups and committees, political bodies and government institutions in Nepal remain dominated by men from the privileged caste groups. Though caste-based discrimination has been outlawed in Nepal, one's status in the caste hierarchy still determines one's experiences and life chances. Women (and men) from historically marginalized groups lack representation, are excluded from decision-making processes and have limited access to resources (Dartmouth University 2020).

Gender bias at policy level: These discriminatory social structures strongly influence national and sectoral policies, strategies and programmes. The influence of patriarchy can be observed in the ways policies and programmes are formulated, interpreted, and



implemented, and in the attitudes of the decision-makers. The Constitution of Nepal proclaims equal rights for men and women and has provisions for the inclusion of historically marginalized communities, including persons with disabilities and LGBTQ,¹⁴ but women face numerous challenges in exercising their rights.

Rural women and their relationship with natural resources: Rural women, especially those who belong to poor and marginalized groups, are directly dependent on natural resources (forest, land, water) and are engaged in the day-to-day management of such resources. As these resources are most impacted by climate change, women are both disproportionately vulnerable to, and at the same time experienced and knowledgeable about the impacts of climate change (WOCAN 2017). However, their experience and knowledge is seldom recognized and utilized in development efforts.

Case studies from different parts of Nepal reveal that patriarchal norms strongly affect how water user associations (WUAs) operate in the irrigation sector. Most often women members of WUAs have no say in decision-making as a few male members informally make the decisions outside of the WUA meetings. Further, women's participation is instrumentalized by male heads of WUAs, who agree to include women in the executive committee not to hear their voices but only to tick the right boxes and meet the criteria for government registration or external funding (Shrestha and Clement 2019).

Participation in decision-making: Sectoral data (discussed in detail later in the report) show that both professional women and community women in the villages are marginalized and excluded from key decision-making positions, opportunities and resources. In the agriculture sector, women have only 11% representation in the federal institutions, and only 9% representation in the gazetted officer positions (MoALD 2016/2017). In the forestry sector, of the 22,531 community forests in Nepal, there are only 1072 (5%) all-women community forest user groups (CFUGs) and 1392 (6%) CFUGs are chaired by women.¹⁵ This despite the fact that community forestry in Nepal is seen as a model of progressive, community-led programme and known to have integrated more women than other sectors. In contrast, in the agriculture sector, women's participation in district and community level activities is found to exceed that of men, at around 59% (MoALD 2016/2017). But this higher number of women does not mean they occupy higher positions; rather it suggests that women are taken more as project beneficiaries 'volunteering' their time for these activities.

Situational vulnerabilities and climate change: Gender norms and values of different social groups inhabiting different regions also vary. In general, the extent of caste and gender discrimination among hill and mountain communities is found to be lower compared to communities in the Tarai¹⁶ (Udas 2014). Various features unique to mountain environments – “inaccessibility (lack of or poor connectivity), fragility (communities’ tightly woven relationship with a natural resource base that is easily put out of balance), and marginality (political, economic and sociocultural)” also shape the nature and extent of gender inequality (Goodrich et al 2017a:12). A recent study found that poor and highly marginalized women and men living in geographically remote and disaster-prone areas, mainly between 25 and 50 kilometres from the glacial lakes in the mountains, benefit the least from development and climate change related resources and opportunities (UNDP 2019).

People with disabilities: Further, people with disability, especially from poor and marginalized groups, and those residing in remote areas are the most excluded. Studies have shown that people with disabilities are most vulnerable to the impacts of climate-induced floods and landslides (MoHA 2019), a point reiterated by the National Federation of Disabled Nepal. A study in the Tarai showed that disabled Tarai Dalit women (Dom) had almost no access to water or sanitation facilities and resources provided by the local government as compared to disabled Yadav (higher caste) women (SNV 2018).

Intersectional differential impacts of climate change: Finally, social drivers and situational vulnerabilities are directly linked and intersect with factors that determine the ability of women and men from different social groups to cope with and adapt to the drivers and pressures of climate change. People with more assets (e.g., high social status, formal and informal leadership position, money, infrastructure, knowledge, equipment, technologies, networks, position, etc.) are better able to cope and adapt than situationally vulnerable women and men. Intersections between these three key drivers and pressures of gender inequality and climate change thus ultimately determine the differential impacts of climate change across gender.

As mentioned in section 2.3., forestry, agriculture, energy and water management sectors were selected for the sectoral assessment out of the eight priority sectors identified by the revised Nepal Climate Change Policy 2019. Besides identifying the key sectors for assessing the gender-climate change nexus in Nepal, it is necessary to understand the overall gender context and intersectionalities that cut across the sectors.

The context and intersectionality may range from socio-cultural, socio-political, such as caste, ethnicity, religion, historical, financial (e.g. tax levied on resources – land, agriculture, forest etc.), power relation, political access or connection, to national to international gender equality policies with which Nepal is obligated to comply. In addition, other dimensions such as the geographical make-up of the country (mountains, hills and Tarai), disability, age, etc. that lead to differential impacts of climate change also need to be understood and assessed.

3.3.1 Overall Situation, National Policies and Institutional Mechanisms

3.3.1.1. National Policies

The Government of Nepal along with other national, regional and international organizations have been developing policies, strategies, and programmes for climate action. However, it is reported that the overall progress in integrating climate change into all development policies and programmes remain slow for lack of requisite awareness and that the database on socio-economic impacts of climate change has to be strengthened (NPC 2020). The Government of Nepal has made some significant progress in integrating gender in climate change policies and plans through sectoral and provincial plans, policies, strategies, programmes and institutional mechanisms. The GoN’s 14th periodic three year plan for FY2016/17–2019/20

BOX 3

People’s perception of climate change and its impacts in Nepal

In 2016, a national Climate Change Impact Survey provided some insights on people’s perception and knowledge of climate change and its impacts in Nepal. The survey grouped the 75 districts¹⁷ into three ecological zones – mountains, hills and Tarai. The survey found that 60.92% of female respondents had no knowledge of or had heard about climate change (CBS 2016).

The survey results further showed that the areas where women and the marginalized groups are highly engaged, such as the collection and management of water, sowing, weeding, care for livestock, pest management, storage of grains, etc. are the most affected by climate change. An overwhelming proportion of households (74.29%) observed changes in water sources, with decrease in the amount of surface water (84.47%). In the mountain region, 74.56% of the households reported depletion of surface water while in the hills 48.81% of the households mentioned the drying up of underground water sources. The survey also revealed the following: new types of crop diseases (60.25% households), new insects (66.09%) and new diseases in livestock (45.98% households). Across the climatic zones, local people say natural vegetation including medicinal herbs, wild animals and birds as well as plants and animals are decreasing while grass and insects are increasing. An overwhelming proportion of households (92.03%) reported increase of invasive creepers in their agricultural land, and they believe that this is a major reason for the decrease in their incomes. Similarly, early flowering/fruitletting in fruit species was observed across all climatic zones, (CBS 2016).

acknowledges that conscious efforts are required to address gender equality and socio-economic issues of the excluded and marginalized groups through: i) focused programmes, equitable distribution of resources, and social security for poverty reduction; ii) setting goals for implementing an environment friendly and climate change adaptive development programme and strategy, and integrate national and international climate finance in the national budget; and iii) increase investment in this sector to minimize climate change impacts.

Similarly, the 15th plan for tFY 2020/21–2023/24 approach paper has a strategy of gender equality and social inclusion (GESI) mainstreaming in forests, biodiversity and watershed management, and for equitable benefit sharing.

There has been progress in the preparation and implementation of adaptation plans (national, local and community level), with 68 local adaptation plans and 342 community level adaptation plans under implementation. In the National Adaptation Programme of Action to Climate Change 2010, livelihood, governance, gender and social inclusion are identified as crosscutting themes. Gender sensitive analysis of climate change impacts on six thematic sectors (water and energy, agriculture and food security, forestry and biodiversity, urban settlement, public health, and climate induced disasters) has been conducted, but the results are not well incorporated in the document and instead are parked as annex.

Similarly, the overall objective of the Climate Change Gender Action Plan 2012 was to operationalize gender concerns in climate change efforts and to strengthen implementation for advancement of gender equality in Nepal. It identified six priority sectors: 1) Agriculture and Food Security; 2) Forests and REDD; 3) Water; 4) Energy; 5) Health; and 6) Urbanization. It required the formation of a stakeholder forum comprised of donors, INGOs, networks, federations and alliances, and NGOs for information sharing and coordination of programmes and projects. The members of the forum are also members of the Ministerial Climate Change and Gender Clusters.

The action plan also proposed formulation of Gender Clusters in the six ministries directly involved in the implementation of NAPA, specifically the Ministry of Agriculture and Cooperatives; Ministry of Health and Population; Ministry of Forests and Soil Conservation; Ministry of Physical Planning and Works; Ministry of Irrigation; and the Ministry of Local Development. At the ministerial level each cluster was to be headed by the Gender Focal Point (GFP). The Ministerial Cluster had the overall supervisory responsibility for the entire process of integrating gender in climate change programmes and projects. However, there was no provision for a mechanism for monitoring the implementation of this action plan (Gurung 2020).

Furthermore, the Nepal National REDD+ Strategy 2018 has three GESI specific objectives on carbon and non-carbon benefits: i) improve resource tenure and ensure fair and equitable sharing of forest benefits among women, indigenous peoples, Madhesis, Dalits, and forest-dependent local communities through effective safeguard measures; ii) increase livelihood assets and diversify employment opportunities of women, indigenous peoples, Madhesis, Dalits, local communities and forest-dependent poor; and iii) improve and synchronize policy and legal frameworks with national and international standards, enhance institutional capability and coordination; and strengthen governance, gender equality and social inclusion of the forestry sector (MoFE 2018b). However, the REDD+ strategy is silent about how the social position of women and socially excluded groups can be strengthened to ensure they benefit from REDD. A review indicates that REDD Implementation Centre is one of the institutions that proactively promotes GESI integration through the provision of a dedicated GESI budget, focal point with a ToR, dialogue platforms such as Gender Working Groups, provision for individual and organizational members in the high-level REDD Coordination Committee, etc. Institutionalization of these responses is very important to sustain these processes (Gurung 2020).

The Nepal Climate Change Policy 2019 has recognized the need to integrate GESI through its objective of mainstreaming GESI into adaptation and mitigation programmes, and as a crosscutting thematic area in the eight sectoral strategies and working policies. However, the policy does not have an intersectional approach. It 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 the GESI policy (inter-thematic area) mentions different vulnerable groups, the sectoral policies within it considers 'the community' a monolithic group and does not take into consideration historical discriminations, situational vulnerabilities, and the differential impacts of climate change on different social groups. This can pose problems in addressing GESI issues through the sectoral policies and isolate GESI policy and strategies.

Overall, it is reported that progress in integrating climate change into all development policies and programmes remains slow for lack of requisite awareness and that the database of socioeconomic climate change impacts has to be strengthened (NPC 2020).

Table 5. Key national policies and GESI provisions

National policy	GESI provisions
The 14th periodic Three-Year Plan for FY2016/17-2019/20	Recognizes the need to improve gender equality and address issues of backward regions, classes and communities.
15th plan for the FY2020/21-2023/24	Includes a strategy of gender equality and social inclusion (GESI) mainstreaming in forests, biodiversity and watershed management, and for equitable benefit sharing.
National Adaptation Programme Action to Climate Change (NAPA) 2010	GESI has been identified as a crosscutting theme. Gender sensitive analysis of climate change impacts on six thematic sectors was done, but the results are not well incorporated in the document and instead are parked as annex.
Climate Change Gender Action Plan 2012	Overall objective was to operationalize gender concerns in climate change efforts. A stakeholder forum comprised of donors, INGOs, networks, federations and alliances, and NGOs has been established for information sharing and coordination of programmes and projects. Also, proposed formulation of Gender Clusters in the six ministries headed by the Gender Focal Point (GFP) within the concerned ministries.
Nepal National REDD+ Strategy 2018	Has three GESI specific objectives. However, the REDD+ strategy is silent about how the social position of women and other excluded groups can be strengthened to ensure they benefit from REDD. The REDD Implementation Centre actively promotes GESI integration through the provision of a dedicated GESI budget, focal point with a ToR, dialogue platforms such as Gender Working Groups, provision for individual and organizational member in the high level REDD Coordination Committee etc. (Gurung 2020).
Nepal Climate Change Policy 2019	Recognized the need to integrate GESI through its objective of mainstreaming GESI into adaptation and mitigation programmes, and as a crosscutting thematic area in the eight sectoral strategies and working policies. However, the policy does not have an intersectional approach as it is not informed by the specific problems, challenges and opportunities faced by different groups of women and men

BOX 4

Nepal's political transition vis-a-vis women's leadership

A study in 2020 showed (Gurung 2020) that the impact of changing climate together with the transition from the unitary system to the new federal system in 2017 has brought both opportunities and challenges for women's leadership and empowerment. Many women have assumed leadership positions. But several factors affect women's ability to influence decisions – the decrease in dedicated human resources, one-door policy for development interventions, and near absence of organized platforms in the provinces and wards for mobilizing and supporting women.

In the previous governance system, each village development committee (VDC)¹⁸ had about 45 members. However, in the new federal system, a ward is almost the same size as the VDC, but has only five key members, including one woman and one Dalit who enter through quotas. These two members have hardly any role or voice in planning and decision-making processes. The chairperson and the other two members tend to control the entire planning cycle.

Further, all external interventions and interactions of the communities with outside agencies or sectors have to be carried out through the ward members. This one-door policy has largely prevented women and marginalized groups from taking leadership for mobilizing and accessing resources and services. The merging of district level line agencies with the local government has also had a largely negative impact on women leaders and groups, as they are not allowed to directly engage with technical agencies for support and services.

3.3.1.2 Institutional Mechanism

The national Climate Change Gender Action Plan, 2012, outlined the institutional mechanisms for integrating gender in climate change in Nepal. However, it lost its relevance with the introduction of the new federal structure (since 2017) consisting of federal, provincial and local governments. In the new federal system, specific institutions have been assigned the role of implementing actions for climate change (see section 3.3.1, Fig 4) and gender equality (see section 3.3.2., Table 4) at the national, provincial and local level. The Chief of Planning Division in the Ministry of Forests and Environment is the focal ministry for climate change. Institutional mechanisms for climate change at the national or federal level include Climate Change Management Division, REDD Implementation Centre (REDD-IC) within the MoFE, Climate Change Council, Inter-Ministerial Climate Change Coordination Committee, Environment Protection and Climate Change Council in Environment Protection Act 2019, designated Climate Change Focal Persons, and Environment and Climate Change Unit in sectoral ministries (Shrestha and Gurung 2020). The Ministry of Finance has adopted a framework integrating climate change and climate finance into the national planning and budgeting process to ensure that climate finance reaches the vulnerable communities, particularly when climate programmes are directly implemented by line ministries (MoF 2017). The climate budget code was introduced in the annual budget of FY2012/13 to track climate public expenditure (NPC 2012).

At the provincial level, the Ministry of Industry, Tourism, Forests and Environment (MoITFE) is the focal ministry for climate change. The Environment and Climate Change Division within the MoITFE and the Infrastructure and Environment Management Section are responsible for carrying out climate related activities at the provincial and local level respectively. Gender working groups for forests, environment and climate change, gender focal points, and GESI, livelihood and governance thematic working groups are being formed at the federal level (Shrestha and Gurung 2020).

There are provisions for clear mechanisms and structures for integrating climate change and GESI at the provincial and local level but the unclear functional linkages between the federal, provincial and local level governments makes it difficult for the provincial governments to formally receive technical support and likewise for the federal government to monitor progress, provide and guide the provincial governments (Shrestha and Gurung 2020).

As per a WOCAN study (WOCAN 2017) provisions and mechanisms have been put in place for gender integration in climate change. For example, gender focal points are being appointed in every ministry, division and department to ensure gender integration in climate change as well as within the ministry and its policies and programmes. But such provisions can only bring results if adequate capacity (GESI training), resources (budgets) and time are dedicated for their implementation. It was found that many of the gender focal points are assigned the responsibility of GESI integration on top of their regular responsibilities, e.g., in the forestry sector, a forester with no background or training in GESI issues serves as a gender focal point just because the person happens to be a woman. Furthermore, there is no detailed ToR provided for the role.

During interviews and data collection, it was found that except for the Ministry of Agriculture and Livestock Development (MoALD) none of the four selected sectoral ministries carry out annual GESI integration monitoring and reporting. From the MoALD it was possible to access two GESI Integration Annual Progress Reports from FY2015/2016 and 2016/2017. These two reports provide excellent detailed data on the integration of women and other social groups (Dalits and Janajati ethnic groups) in agriculture sector institutions, programmes and projects. Gender disaggregated data provided by these reports is provided later in the agriculture sector assessment.

The assessment of policies related to gender and climate change reveals women and the marginalized groups are viewed only as vulnerable groups and not as primary stakeholders or agents of change who can contribute knowledge and experiences for tackling climate change impacts. This affects the way climate change related interventions are prioritized, designed, planned, implemented and monitored.

3.3.2 Sector-specific Assessments

As already mentioned, the state, impact and response components of the DPSIR framework have been assessed separately for each of the four sectors. These sectors are also the priority sectors in the Climate Change Policy (2019) and NDC.

3.3.2.1 Forestry

Forest covers 44.74% of the total area of Nepal (MoFSC 2015). Forests in Nepal are broadly categorized as community-managed and state-managed. Gender perspectives in forestry are more relevant to community-based forestry management than to state-managed forests. According to the Department of Forests and Soil Conservation, about 1.45 million households (35% of the population) are involved in community forestry management. Until now 19,361 Community Forestry User Groups (CFUGs) have been formed, out of which 1072 are women-only CFUGs. A total of 1,813,478 hectares of national forest land has been converted to community forests, benefiting 2,461,549 households.¹⁹

Policy level: The forestry sector is directly impacted by climate change. Poor and marginalized women and men are the main users of forests (Gurung and Bisht 2014). Forestry is one of the first sectors in Nepal to have come up with sectoral GESI policies. Key forest policies are the Forest Sector Gender and Social Inclusion Strategy 2008, Community Forestry Development Program Guidelines 2014, Forest Sector Strategy 2016-2025, Nepal National REDD+ Strategy 2018, the most recently amended National Forestry Policy 2019, draft Gender and Climate Strategy, draft Gender Equality and Social Inclusion Strategy, and Action Plan of Forest and Environment Sector 2020-2030. All these policies recognize the importance of GESI integration and explicitly define beneficiary groups in terms of gender, caste, ethnicity and geography. GESI integration provisions in key policies in the forestry sector can be assessed in the table below.

Table 6. Key forest policies and GESI provisions

Key forest policies	GESI provisions and assessments
Forest Sector Gender and Social Inclusion Strategy 2008	<ul style="list-style-type: none"> Focuses on GESI sensitive policy and guidelines, organizational development, budget, programme and monitoring, along with good governance and equitable access to resources, decision-making processes and benefits. Envisions four distinct organizational structures from central to community level, but this structure existed only at the central level. Seeks to promote women's participation in planning and decision-making at the community level. <p>However, it lacks implementation action plan, is not systematically disseminated or easily available within sectors at the national and sub-national level, and doesn't sufficiently focus on incorporating GESI in institutional mechanisms such as budget and programmes.</p>

Key forest policies	GESI provisions and assessments
Draft Gender Equality and Social Inclusion Strategy and Action Plan of Forest and Environment Sector 2020-2030	<ul style="list-style-type: none"> The strategy addresses both gender and social inclusion issues, and explains them in different chapters Incorporates capacity building aspects <p>However, it is unclear how it will address and monitor issues of intersectionality. Since the forestry sector has defined marginalized groups as key stakeholders, the GESI strategy should also define them as stakeholders to ensure their access to resources, positions and benefits. Also, the strategy has incorporated capacity building aspects only as part of different sub-strategies and action plans. Finally, the strategy and the action plan do not have clearly defined outcome indicators for tracking progress and change.</p>
Community Forestry Development Programme Guidelines 2014	<ul style="list-style-type: none"> States that CFUGs should have at least 50% women, At least one of the two decision-making positions should be filled by a woman (chairperson or secretary), At least one woman should hold a signatory post to ensure women's participation, 35% of the income should be spent on targeted pro-poor programmes identified by participatory well-being ranking. <p>But experience shows that women who are strong and confident are usually not given key positions in the main committees unless they have political affiliations. Women with less experience and confidence may be deliberately chosen just to fill the quota, while men retain the decision-making power. Similarly, there is hardly any effective implementation of pro-poor targeted programmes despite the provision of budget allocation for such programmes.</p>
Forest Sector Strategy 2016-2025	<ul style="list-style-type: none"> Gender equality, social inclusion and poverty reduction is the seventh strategic pillar Promotes gender equity, inclusive development and economic upliftment of the poor, women, Dalits, Janajatis and other marginalized groups.. The third outcome of this strategy is inclusive forest sector organizations and institutions, and focuses on increasing participation, competency and leadership of women, indigenous peoples and other poor and socially excluded groups and individuals. <p>However, this strategy is not implemented effectively.</p>
Nepal National REDD+ Strategy 2018	<ul style="list-style-type: none"> Has three GESI specific objectives: i) improve resource tenure and ensure fair and equitable sharing of carbon and non-carbon benefits from forests among marginalized groups including Dalits, women, and indigenous peoples; ii) increase livelihood assets and diversify employment opportunities; and iii) ensure that policy and legal frameworks meet national and international standards. Seeks to enhance institutional capability and coordination; and strengthen governance, gender equality and social inclusion in the forestry sector (MoFE 2018c). <p>However, the REDD+ strategy is silent about how the social position of women and other excluded groups can be strengthened so that they can reap the benefits of REDD.</p>
National Forest Policy 2019	<ul style="list-style-type: none"> Has provisions for social security, inclusiveness and good governance. It seeks to increase access to benefits by ensuring rights over forests, labour and management for women, indigenous peoples, and Madhesi, Tharu, Muslim, minority, Dalit, disabled, marginalized and backward classes/communities. Outlines a working strategy of ensuring 50% women's participation in decision making in all forestry sector institutions, and in the formulation of strategies, laws, programmes, and budget. <p>However, the working strategy does not clearly lay out a strategy for building capacity to integrate GESI in forestry, develop gender responsive budget and create a gender friendly environment.</p>



Institutional level: The Ministry of Environment and Forest (MoFE), particularly the REDD Implementation Centre, is taking several progressive steps for GESI integration – the Planning Chief, a senior male staff, has been designated the gender focal point; a multi-stakeholder Gender Group has been formed; a ToR has been developed for a gender focal point in REDD Implementation Centre; mandatory write shops have been organized with decision-makers and experts on major policy and programme documents to ensure GESI integration; and budget has been allocated for GESI capacity building. However, these processes are not fully institutionalized and depend on individual staff's motivation and passion (WOCAN 2017). For instance, Gender and Social Inclusion strategy and vision mandate all departments within the Ministry of Forests and Soil Conservation²⁰ to appoint gender focal points for overseeing the mainstreaming of gender into sectoral programme design and strategies; but the gender focal points struggle to fulfill their roles and responsibilities due to lack of clarity about their roles and responsibilities, inadequate resources, and limited authority. GESI integration in programming, budgeting, and monitoring and evaluation was not found to be fully effective, despite concerted efforts by different agencies (ADB, DFID and VVB 2012a).

Forestry organizations at the central and local level have limited GESI responsive strategies and action. Gender sensitive staff who want to bring structural change are dominated and influenced by those who are less supportive of GESI policies and practices. The organizational cultures and attitudes reflect gender biases within the forestry sector, presenting challenges for women staff and women community leaders to be recognized as professionals and leaders (WOCAN 2017).

On the other hand, there have been positive efforts by informal groups, such as the movement led by Female Foresters Nepal (FFN), to improve workplace environment and attitudes and discuss uncomfortable subjects, such as toxic masculinities, patriarchy, gender-based violence and sexual harassment. These innovative efforts can aid the integration of GESI issues in policy and programming in government and civil society organizations at all levels.

The number of women professionals in the forestry sector has increased. The number of women staff recruited by the Ministry of Forests and Environment (MoFE) was four in 2010, ten in 2014, 24 in 2016, and 14 in 2018.²¹ But there are still gaps in staff diversity in terms of gender, caste and ethnicity. A 2011 GESI assessment of the forestry sector found that out of the 6,836 civil servants surveyed, most were men. Brahmins and Chhetris²² formed the majority (57%), followed by Newars (6.26%),²³ Dalits (2.0%), and Muslims (1.6%). Women made up 3.2% of the total staff.²⁴

Table 7. Sex disaggregated data of MoFE

Ministry/divisions	Women's participation
Ministry (MoFE)	58 staff in total, including 13 (25%) are women; out of them 11 (87%) technical
Seven thematic and administrative divisions of MoFE	Only one division headed by a woman (14%)
Five key departments under DoFSC	Of the 41 staff, only five (12%) are women, and they are all in technical sections; two of them head the sections
District forest offices	Of the 84 district forest officers, only three (4%) are women

Source: MoFE 2020 and DoFSC 2020

During an interview, a senior woman official said, "Partly due to reservation policy, there has been a rise in the number of female professionals joining the forestry sector as technical staffs. The sector was dominated by male technicians until 10 years ago." The historically male-centric structures and culture of forestry institutions is slowly changing. Provisions for addressing the specific needs of women staff, such as separate toilets for women, and 98 days maternity leave (with a six-month extension without pay) have been implemented. Although these improvements are noteworthy and welcome, the root cause namely the patriarchal mindset (of both male and female staff), which limit female staff's capacity, mobility, choice of work, participation, etc., is neither discussed nor recognized as an institutional issue. There is no practice of reflecting and assessing whether the workplace environment is enabling or safe for women. This no doubt has implications for programming, as these issues act as barriers to women staff's potential and effective participation.²⁵

There are several civil society organizations and federations that promote the integration of GESI issues in the forestry sector in Nepal. A policy brief published in 2015 on women's participation in forestry states that Nepal's evolving community-based forest management systems have laid the groundwork for facilitating integration of gender-inclusive strategies and policies (FAO and RECOFTC 2015).

The Federation of Community Forestry Users (FECOFUN), Himalayan Grassroots Women's Natural Resource Management Association (HIMAWANTI), a national federation of grassroots women in natural resource management (although not active in all seven provinces), and the Association of Collaborative Forest Users Nepal (ACOFUN) are some of the organizations that promote the participation of local women (and men) in forest use and management. They create important platforms for bringing together government policy makers, non-government practitioners and forest user groups for dialogue on local people's issues. However, despite progressive bylaws and guidelines and support from donor projects, these forestry-related civil society organizations (CSOs) still have not been able to fully and effectively engage women and other marginalized groups. These platforms for participation have largely become spaces for information sharing rather than a democratic space that enables marginalized groups to participate in decision making and influence policies and programmes.²⁶

Past bilateral projects or programmes such as the Multi Stakeholder Forestry Programme (MSFP) had a robust system for monitoring Gender, Poverty and Social Equity (GPSE). GPSE indicators were strategically integrated into the community forestry database system to record gender-disaggregated data. However, after the closing of the project these systems

and frameworks were not institutionalized within the ministry and currently there is no dedicated system to monitor GESI outcomes. The MoFE and its departments do not have a system for tracking GESI outputs and outcomes. There is only a system for tracking the gender responsiveness of budgets during planning, as per the requirement of the Ministry of Finance.

On the financial resource side, the annual budget for gender-focused programmes is inadequate. For example, less than 1% of the MoFSC²⁷ budget was allocated for mainstreaming the GESI strategy into planning, training, monitoring and evaluation in 2010 (FAO and RECOFTC 2015). However, in a few instances the departments have allocated budgets specifically for GESI actions – the REDD Implementation Centre (REDD IC) has been allocating budget for GESI through its Red Book budget since 2017. Although the funding for REDD-IC comes from the World Bank's Forest Carbon Partnership Facility (FCPF), the departments can still choose not to prioritize and allocate resources for GESI actions. The REDD-IC GESI budget has fluctuated over the past three years – in 2018, it received NPR 1.2 million²⁸ (0.36%) out of the total budget of NPR 333 million; in 2019, NPR 17.9 million (3.8%) out of the total NPR 470 million; and in 2020, NPR 2.5 (0.86%) million out of the total NPR 290 million.²⁹ The inconsistency in GESI budget allocation of REDD-IC is evidence that institutionalization of GESI is dependent on leadership that supports and works to promote GESI.

Women and women's organizations are not taken seriously and are undervalued. Women from the grassroots organization HIMAWANTI said that local government and line agencies do not recognize women's groups and networks as stakeholders. Decision-making authorities usually bypass HIMAWANTI during discussions, planning, and implementation and even if they are included, their voices are often not considered. Even at the community level, HIMAWANTI says women's knowledge and skills are undermined, as the local community does not trust women forest groups and women leaders to lead and manage organizations or mobilize larger financial resources. Women are excluded from large infrastructure projects, and community members question the abilities of women, even casting doubt on their character.

Another important issue is abuse of authority by male staffs at all levels and gender-based violence against women at the institutional level. For instance, women in these institutions face: (a) psycho-social violence as strong and vocal women are often maligned and portrayed as women of indecent character; and (b) sexual violence such as inappropriate propositions, touching and use of language, or even asking for sexual favors, in local level offices, particularly when young women go to get services and/or while managing and using natural resources. For these reasons, husbands and mothers-in-law or other family members often discourage or stop women from participating in or leading community work, particularly in the Tarai region.³⁰

Local level: Nepal has made significant progress in ensuring representation of women in community-based forest management institutions. Community forest organizations maintain detailed and regularly updated sex-disaggregated data, which shows their commitment to gender integration. At the time of this assessment, the Federation of Community Forest Users of Nepal (FECOFUN) was chaired by a woman. The five-member national executive committee of FECOFUN currently has two women members including the chairperson. Of the 79 executive members elected by the Sixth General Assembly of FECOFUN in 2018, and attended by 728 Community Forest User Group representatives, 41 (52%) are women.³¹ The executive director of the national executive committee secretariat is a woman and of the total 20 staff members seven (35%) are women. Of the seven women, four are in technical and three in administrative positions.³² Similarly, of the 22,531 community forests in Nepal, there are 1072 (5%) all-women CFUGs and 1392 (6%) CFUGs chaired by women. Overall there is 42% women membership in the CFUGs.³³ Cumulative data on

representation of women in forestry sector civil society organizations (CSOs) in Nepal is given in Table 8 below.

Although women's participation in community forest governance is relatively higher than in most other sectors, studies (Nightingale 2016) and experiences (Gurung and Bisht 2014) have shown that increasing the number of women in forestry institutions alone does not guarantee women's empowerment and access to forest resources and decision making.

To understand the situation of women and marginalized groups, it is important to look at the power relations within community forestry. Generally women's role is confined to low-ranking labour-intensive tasks that do not carry much value in society, and they are unpaid. Different field assessments show a high level of engagement of rural women in labour-intensive forest-related activities on a daily basis, such as plantation, weeding, collecting leaf litter, collecting fuel wood, etc., but low engagement in visible and respectable tasks such as timber harvesting and marketing, leadership, etc. (WOCAN 2017, Gurung 2020). Furthermore, women's workload within and outside the household is heavy and "time poverty" is a critical issue they face. Women's access to resources is determined by the use value of the resource: they have high access to resources that meet practical everyday needs, but low access to resources that can be used to enhance income, status and decision-making power (Hariyoban 2013).

Table 8. Data on representation of women in community forest CSOs

CSO	Executive committee	Provision for women representatives (%)	Women in executive committees	Remarks
FECOFUN	85	At least 50%	43 (12 IPs and 5 Dalits) (50%)	50% women in key posts
ACOFUN	25	33%	8 (2 IPs) (32%)	Proposing up to 40%
AFFON	44	49%	18 (2 IPs) (40%)	45% women in key posts
HIMAWANTI	14	100%	14 women (100%), 7 IPs	All women
NFA	13	23%	3 (23%)	No women in key posts
FenFit	34	0%	1 (2.9%)	No women in key posts
NEHHPA	15	33%	5 (3 IPs) (33%)	No women in key posts

Source: Bylaws of the concerned CSOs and reports of their general assemblies. Note: (1) Federation of Community Forestry Users, Nepal (FECOFUN) (2) Association of Collaborative Forestry Users, Nepal (ACOFUN) (3) Association of Family Forestry Owners Nepal (AFFON) (4) Himalayan Grassroots Women's Natural Resource Management Association of Nepal (HIMAWANTI Nepal) (5) Nepal Foresters Association (NFA) (6) Federation of Forest-based Industry and Trade, Nepal (FenFIT-Nepal) (7) Nepal Herbs and Herbal Products Association (NEHHPA).

Women from historically marginalized groups such as Dalits, Botes, Majhis, Kumals and Rajis, living in geographically remote and disaster-prone areas, have even more limited access to resources. They benefit the least from development and climate change related programmes. Poor outreach mechanisms, exclusionary and centralized planning of the local government, and the dominance of vested political interests make it very challenging for these groups to

access and benefit from resources. Even when these local groups are strong and organized, ultimately the politics of class, ethnicity and caste-based power determines who should be selected or represented or whose skills get recognized (Nightingale 2016). Although local authorities are required to involve all concerned stakeholders in the planning process, the poor and marginalized women, particularly from endangered indigenous groups and Dalits, are not fully included and their knowledge and experience is not taken into consideration. Their roles and contributions thus remain largely invisible (Nightingale 2016, WOCAN 2017, UNDP 2020).

Two separate assessments carried out by WOCAN (2017) and UNDP (2020) in 11 hill and Tarai districts of Nepal found several layers of exclusion in decision-making processes at all levels. Gender, political affiliation, geographic location, caste, ethnicity, age, economic status, literacy and disabilities played a major role in who participated, where or at which level and how they participated. For example, these studies showed that exclusionary leadership practices exist within – a) mixed groups of women and men, where men decide what to prioritize, how much funds to allocate, etc. and women have very little or no say in the whole process; b) groups of women from different social groups, where women from higher or dominant caste/ethnic groups, who are educated and politically connected dominate the discussion and make decisions; and c) groups of women from the same caste/ethnicity, where the more educated, more well-to-do and politically connected women dominate the discussion.

The intersection of caste and gender strongly shapes one's ability to influence decisions in community forestry (Nightingale 2016). It is important to recognize 'women' is not a monolithic category and that their access to power and resources is determined by their caste, class and ethnicity (see the case story in Box 5).

BOX 5

Intersection of caste and gender in forest management

A study of a CFUG in the Karnali region of far west Nepal illustrates how power relations shape the nature and extent of women's participation in CFUG meetings (Nightingale 2016). The CFUG committee in the area consisted of 11 members, of whom two (one man and one woman) belonged to lower caste Dalit groups; all other committee members were men from the higher castes, namely Thakuri and Chhetri. The meeting of the CFUG took place in a mandir (temple) in the Thakuri village, which allowed the Thakuri women to attend the meetings while doing their domestic chores near their homes, but the lower caste women could not attend the meeting. The proximity of the meeting site to the Thakuri village became significant while deciding when to harvest leaf litter: It was proposed that harvesting should be allowed twice a year, for five days at a time. High-caste women

at the meeting contested this as their village was at least forty-five minutes' walk from the community forest. They would not be able to collect more than two or three loads of leaf litter in a day, and doing so for five consecutive days would be very difficult. Most of the lower caste women could not attend the meeting, and even those who could did not share the high-caste women's concerns, as their village was closer to the forest. But their views were not sought at all, although like the Thakuri women, they were the ones who would collect the leaf litter for their households.

The case reveals the patriarchal structure that is so prevalent. It was the men (high caste) who made the decisions, overriding women's concerns and interests. No thought was given to women who might be sick or otherwise unable to collect leaf litter during the specified time. Although

the Thakuri women were actively participating and voicing their interests and concerns at the meeting, they had no say in the decision-making. This example demonstrates the difference between voicing an opinion and influencing a decision. The high-caste women had an advantage over the lower caste women as the meeting was held in their village, giving them the opportunity to easily participate and voice their concerns in the meeting. However, this advantage did not allow them to overcome gender power relations. It was the high-caste men who controlled the committee decisions ultimately. The men had their own reasons for limiting the litter collection period and the women's concerns were deemed irrelevant.



3.3.2.2 Agriculture

The National Living Standard Survey 2010/2011 highlights agriculture as the main source of livelihood for women. The agriculture sector employs about 70.5% of women as compared to men (56.3%) and women's contribution to the agriculture economy is about 60.5%, much higher than that of men (39.5%). They provide most of the labour inputs, especially when men migrate in search of employment opportunities. And yet women's median daily wage in agriculture (NPR 100) is lower than that of men (NPR 150). Women have abundant knowledge and skills regarding farming systems, and management of natural resource and biodiversity across different agro-ecosystems. Although gender roles vary across different caste/ethnic groups, classes and regions, most women shoulder the responsibility of crop cultivation, kitchen gardening, livestock rearing, and forest resource management (FAO 2019).

In Nepal the relationship between gender, social equity, and agriculture is complex. Despite their crucial role in agriculture, women often lack control over the sale or management of productive assets i.e., property, cash crop produce and livestock. Very few women own land, which is an important source of power and status; only 8–10% of land ownership certificates issued in Nepal are in women's names. On average this means women hold less than 0.1 ha per holding. Women engaged in agriculture receive limited first-hand information from extension officers (about 31%) and are less likely to be involved in product marketing (10%). Women's access to and control over income derived from marketing of agricultural product is likely to be limited (Gurung and Bisht 2014).

Policy level: The Government of Nepal considers agriculture and food production a priority sector, as it is one of the sectors most vulnerable to environmental changes. The agriculture sector has formulated progressive policies to promote gender and social inclusion. The key sectoral policies are the Livestock Master Plan 1996-2015, Agriculture Perspective Plan 1995, National Agriculture Policy 2004, Agricultural Extension Strategy 2005, Gender Mainstreaming Strategy 2006, Agriculture Development Strategy 2015-2035, Gender Equity and Social Inclusion Strategy Framework 2016, and the National Seed Vision 2013-2025. These policies emphasize improving access to agricultural resources, leadership and decision making, and benefits for women, the poor and the excluded.

The Agriculture Development Strategy (ADS) 2015 is the key guiding document that aims to ensure food and nutrition security of the most disadvantaged rural populations, including lactating and pregnant women, indigenous and excluded communities, and people in disadvantaged regions. The Ten-Year Action Plan under the ADS calls for the development of a GESI strategy in agriculture. This includes recognition of female farmers, provision of adequate budget for carrying out women empowerment related activities, such as ensuring women's access to and control over productive resources and promoting women leadership in agriculture. The strategy has set a goal of bringing 50% of farmland under women's ownership by 2035 as compared to 10% in 2010. Such ownership could be individual or joint ownership. It also encourages equal wages for women in agriculture development programmes. The strategy recognizes the adverse impacts of climate change and the need to introduce appropriate adaptation mechanisms to enhance agriculture productivity.

The introduction of quotas has ensured women's representation and participation in farmer groups and training opportunities and enhanced their access to agricultural inputs. The Constitution of Nepal 2015 for the first time endorses farmers' right to access land for agricultural purposes, preservation of traditionally adopted endemic seeds and farming species, promotion of state-level land reform policies for agriculture and discourages absentee land ownership. However, the vast majority of women still don't own land due to lack of supportive legislation and the persistence of the patriarchal mindset (MoALD 2016/2017).

Despite GESI positive provisions in the policies, a recent FAO assessment found that gender equality only exists in laws and policies. Often policies and programmes are aimed at meeting targets (i.e., ensuring women's participation) rather than addressing structural barriers in achieving gender equality (FAO 2019).

Although the ADS states the government's commitment to addressing the needs of women, indigenous and excluded groups, it does not mention how such commitments will be translated into action. Similarly, the ADS talks about the establishment of mechanisms like agribusiness incubators and matching grants, but does not contain any plan for implementation or the types of benefits to be provided to women and the excluded groups (Subedi 2017). It is also silent on the differential impacts of climate change on women farmers and the need for gender specific measures to respond to such impacts (Paudyal et al 2019).



Table 9. GESI provisions in key agriculture sector policies

Key policy	Gender provisions
Agriculture Development Strategy 2015-2035	Recognizes women farmers as independent farmers with a goal of bringing 50% farmland under women's ownership (individual or joint ownership) by 2035. Prioritizes food and nutrition security for the poor and marginalized groups, including lactating mothers and pregnant women. Incorporates a Ten-year Plan of Action, including the development of a GESI strategy in agriculture.
Gender Equity and Social Inclusion Strategy Framework 2016	The framework emphasizes capacity building activities for meaningful participation in decision-making processes for GESI target groups.
National Seed Vision 2013-2025	Seeks to ensure equal rights and access to information, skills and services related to seed use for all Nepalis irrespective of gender, caste, ethnicity and geographical location.
National Agriculture Policy 2004	To achieve gender equality, the policy encourages 50% participation of women in agricultural activities. To enhance women's participation and access to information, mobile training programmes shall be conducted in villages and homesteads. Recognizes the need to provide services to small farmers with fewer resources To promote commercial and competitive agriculture, targeted programmes shall be carried out and resources shall be provided to poor landholders (those who own less than 4 ha) and deprived groups (Dalits and Janajatis). Seeks to enhance women's management capacity, with a focus on women's cooperatives and women farmers' groups
Agribusiness Promotion Policy 2007	Seeks to create agricultural entrepreneurs from marginalized groups such as the poor, women and Dalits
Agro-biodiversity Policy 2007 (first revision 2014)	The policy mentions special programmes targeted at the poor, women and Dalits for promoting agro-enterprises Indigenous knowledge and women's knowledge to be promoted and used for agriculture development Sustainable agro-biodiversity and income-generation programmes to be promoted and implemented
Gender Mainstreaming Strategy 2006	Seeks to ensure 50:50 participation of women and men in administrative functionaries – the agriculture ministry's divisions, programmes, committees and boards Increase women's skills for commercial farming and women's economic empowerment Institutionalize gender issues at all levels by focusing on women's participation
Agriculture Mechanization Promotion Policy 2014	Encourage women and youth groups to promote mechanized agriculture for increased productivity. Identify and promote technology that are environment and women friendly to reduce women's drudgery
Irrigation Policy 2014 and Water Induced Disaster Management Policy 2016	Ensure 33% representation of disadvantaged people in water users' associations Promote the participation of backward communities and disadvantaged groups in user groups.

Institutional level: The Ministry of Agriculture and Livestock Development (MoALD) is the agency responsible for promoting gender equality and women development at the central level. In 1993, the Women Farmers Development Division (WFDD) was established to ensure gender balanced programming within the ministry, due to which women's participation in training programmes was given priority. Based on the review of the WFDD's impact and to institutionalize women's participation in all agricultural sub-sectors, the MoAD³⁴ set up the Gender Equity and Environmental Division (GEED) in 2004. In 2012, the GESI Section replaced GEED to include disadvantaged and marginalized groups and support their livelihood. The GESI Section manages and documents GESI related information from the former five development regions,³⁵ as well as for implementing a GESI responsive budget. The GESI Section coordinates within the MoALD and with other line ministries and development agencies.

The GESI Section faces some major challenges, such as limited authority, inadequate mandate and limited human resources (FAO 2019). For example, there is no specific terms of reference (ToR) for the GESI focal point. Instead GESI mainstreaming responsibility is mentioned in a few sentences as an additional task in the designated technical staff's ToR with no outputs to deliver; there is no specific budget and time allocation either. There is no provision for capacity building of the focal point and it is simply assumed that the person is qualified to carry out GESI integration work. As in the forestry sector, there is a need to launch movements/campaigns to raise gender and social inclusion issues in the workplace and programming.³⁶

Data on gender integration in the agriculture service sector in FY2016/2017 is presented in Table 10 below.

Table 10. Gender integration in agriculture sector FY2016/2017

Position	Male	Female	Total
Total gazetted officers	1565 (91.5%)	145 (8.5%)	1710
Secretary	1 (100%)	0	1
Gazetted 1st Class	47 (87.3%)	7 (12.7%)	55
Gazetted 2nd Class	394 (95.2%)	20 (4.8%)	414
Gazetted 3rd Class	1123 (90.0%)	118 (9.5%)	1241
Total non-gazetted	2384 (87.7%)	375 (13.3%)	3059
Non-gazetted 1st Class	1840 (91.1%)	181 (8.9%)	2021
Non-gazetted 2nd Class	809 (80.9%)	191 (19.1%)	1000
Non-gazetted 3rd Class	32 (91.4%)	3 (8.6%)	35
Non-gazetted 4th Class	3 (100%)	0	3
Support staff	9 (100%)	0	9
Total	4258 (89.1%)	520 (10.9%)	4778

Source: GESI Integration Annual Progress Report, MoALD, FY 2016/2017³⁷

BOX 6

GESI mechanisms lost during federal restructuring

The new federal system established after the 2017 local election provides substantial power and authority to provinces, municipalities and wards. But this transition has disrupted several processes and structures that helped address GESI issues. In the current federal structure, there are no direct and functional linkages between the ministry at the central (federal) level and the sub-national level. The few mechanisms for integrating and monitoring GESI issues in the ministry's programmes before 2017, such as the GESI annual reports, have been discontinued. To mitigate this issue, the MoALD in 2019 allocated some resources (around USD100)⁴⁰ in its annual budget for collecting provincial level GESI data. Further, the extension and outreach services provided through the recruitment of junior technical assistants and formation of farmers groups (mostly women) have also become dysfunctional.

Although these mechanisms were not very inclusive and largely benefited men and women from privileged groups, they did, to some extent, enable farmers to receive agricultural resources and technical support.⁴¹ Women farmers groups and leaders had direct access to the government and non-governmental agricultural offices in the districts and could directly mobilize resources. However, in the new federal system, due to the one-door policy, they cannot interact with external agencies or mobilize resources without going through the designated ward member or elected local authority. This has hindered women and marginalized groups with limited networks and political connections from accessing resources and support.⁴²

As the above data shows, women occupied less than 10% of the gazetted positions, which are senior posts with decision-making powers. Though latest data on GESI integration in the MoALD is not available yet, data from available sources shows that currently at the MoALD secretariat there are 15 (36%) women out of a total of 42 staff members. Of the 15 women 9 (60%) are in technical and 6 (40%) are in administrative positions. One female staff is in a senior position and heads a technical division. Among the seven key divisions of the MoALD, one division is vacant, and out of the other six divisions, two (33%) – one administrative and one technical division – are headed by women. This shows that senior level representation of women in the agricultural service sector has increased from around 13% in 2016 to about 33% in 2020.³⁸

The MoALD in 2014 established the Gender Responsive Budget Committee (GRBC) consisting of five members and chaired by the Joint Secretary of Planning. The main role of the GRBC was to build synergy among district, regional and central departments for the implementation of GESI policies, plans and programmes. However, resource constraints and lack of gender auditing have become major impediments in the smooth functioning of the GRBC. But there is optimism that with adequate human resources and logistical support, the GESI strategy of the ADS can still be implemented effectively.³⁹

Local level: Compared to the federal level, there's higher participation of women in the agriculture sector programmes at the community level. But data suggests that the role and contribution of women in the agriculture sector is not recognized and they are perceived as mere beneficiaries or a vulnerable group. For instance, i) 29% of women and 47% of men who are involved in agriculture receive payment in cash or kind; ii) 76.4% of women between the ages of 15 and 49, who are engaged in agricultural work are not paid (National Demographic Health Survey 2011); iii) women and men's labour is not considered equal – during peak agricultural season, when households exchange labour, a man's labour is considered double that of a woman's (as reported by female members of the Ahtrujit Management Agriculture Cooperative in Kavre).

The available gender disaggregated data on female and male beneficiary farmers in FY2016/2017 is given in Table 11 below.

Table 11. Participation of women in agriculture sector programmes, FY2016/17

Programme type and level	Female	Male
District level agricultural programmes	983,170 (47.9%)	10,69,377 (52.1%)
Agricultural extension programmes	583,999 (48.3%)	626,019 (51.7%)
Regional level agricultural programmes	398,814 (47.4%)	444,005 (52.6%)
Food processing and nutrition training	249 (81%)	57 (19%)
Farmer groups formed by the agricultural department	10,135 (73%)	3,792 (27%)
Members of farmers groups	477,921 (56%)	380,671 (44%)
Average	58.93%	41.07%

Source: Adapted from GESI Integration Annual Progress Report, Fiscal Year 2016/2017

BOX 7
Participation of women
in key agriculture
projects

Available data from the High Value Agriculture Development project at the community level in 2106/2017 showed that of the 14,019 beneficiary farmers, 2614 (19%) were Dalits and 1914 (14%) Janajatis. Of the 60% women who benefitted, 25% were Dalits. The Improved Seeds for Farmers Project showed that of the 44,317 households who benefitted, 33,893 (76%) were women, 7303 (16%) were Dalits and 11,853 (27%) were Janajatis (MoALD 2016/2017).

Studies show that rising temperature and unpredictable rainfall patterns are affecting farming systems, giving rise to new and aggressive forms of pests, weeds, diseases and shortage of water and irrigation. In Nepal's farming system, weeding, pest control and irrigation are primarily women's work, and these established roles of women are getting more difficult and tedious due to the pressures of climate change (Gurung and Bisht 2014; Gurung 2017). Consequently, even when women spend six times more hours than men (23.3 hours vs 4.3 hours) on non-economic work, their agricultural performance is considered poor (FAO 2019; WOCAN 2016). A case study from Lubu village in Lalitpur showed women work twice as much as men in cereal and vegetable production as well as perform post-harvest activities (Baral 2016). Such increased workload among women and young girls reduce their opportunity to initiate income-generating activities and attend school.

Although there is a dearth of data on the differential impacts of climate change on women and men of different social groups, a few case studies and observations clearly indicate that the coping and adaptive capacities of these different groups are shaped by their socioeconomic status, geographical location, age, disabilities, etc. For instance, most of the poor and marginalized women were usually not members of farmers groups and hence could not access agricultural resources and inputs provided by the government. Similarly, the so-called lower caste Musahar community in the Tarai region could not get the government to install tubewells close to their homes and hence their women could not irrigate their home gardens unlike upper caste farmers who have tubewells close to their houses and do not have to travel far to get water for drinking and irrigating (WOCAN 2017).

Regarding technology for adaptation to climate change, reports indicate that under the integrated agriculture technology management programme of the MoALD, the use of weed control fertilizer saved the time of 50% of the participating women farmers and increased production by 30%. Under the same programme the use of weeding tools saved the time of 40% of the participating women farmers and they could use this time for other productive activities, and the foot-powered paddy and wheat threshing machine reduced the drudgery of hill women by 15–30% (MoALD 2018/2019).

3.3.2.3. Energy

The primary energy sources in Nepal are biomass, hydropower and coal. Nepal has 83,000 megawatts (MW) of hydropower potential, but currently less than 2% is harnessed (ADB 2017). It is estimated that about 6.6 million people in the country still lack access to electricity (Paudyal et al. 2019). About 58% of the population are connected to grid energy, while 82% still use solid fuels such as wood, dung cakes, rice husks, and coal for cooking (Islar et al. 2017). The energy sector faces challenges related to poor service quality, low bill collection rates and the burden of price subsidies (Islar et al. 2017, Adhikari et al. 2017, ADB 2017). At the household level, lack of energy impacts women disproportionately, as women are responsible for most work in the home and homestead that often requires energy (Murali et al. 2019, Clancy et al. 2016, Oparaocha & Dutta 2011). Gender and other social inequalities have resulted in unequal access to and control over important resources like energy and increased women's reliance on biomass for household energy needs like cooking and heating (Dhakal et al. 2019, Bastola 2020).

Across rural Nepal, women shoulder the responsibility of fetching fuel for their households and micro-enterprises. This prevents them from going to school, getting jobs and participating in skill and leadership. They spend a lot of time in the kitchen and suffer the health effects of biomass smoke. Although energy is an integral part of their everyday life, women are under-represented in decision-making in the energy sector and have limited ownership over renewable energy technologies compared to men. This is because women lack financial resources, information and training (ADB 2015).

Policy level: None of the Five Year Plans (except the Three Year Interim Plan 2013/14–2015/16) address gender and inclusion issues in the energy sector. GESI is only included in



the renewable energy section, presented as a separate category in the Five Year Plan (ADB and ENERGIA 2015).

The Government of Nepal and the Alternative Energy Promotion Centre (AEPCC) have developed several policies for promoting rural (renewable) resources in Nepal. The Renewable (Rural) Energy Policy 2006, Subsidy Policy for Renewable Energy 2009, Subsidy Delivery Mechanism Policy 2009, and Renewable Energy Subsidy Policy 2016 are key policies for the alternative energy sector in Nepal.

The Renewable Energy Policy 2006 seeks to: (a) bring electricity to rural areas (b) use electricity to conserve the environment (c) increase employment through the use of electricity, and (d) implement community-managed projects that also address gender and inclusion. However, the policy reflects a very limited understanding of gender and inclusion and makes no reference to barriers faced by women, poor and excluded groups, such as their limited or lack of access to credit, inability of the poor households to pay for electricity, constraints faced by female-headed households in providing labour, inability of women, poor and the marginalized groups to influence decisions of user committees and construction companies or to access benefits from the alternative energy programmes (SNV 2012).

Following the introduction of Renewable Energy Policy, a Subsidy Policy for Renewable Energy was introduced in 2009 to promote renewable energy technologies. However, it only acknowledged exclusion based on income and overlooked other forms of discrimination. There is a mismatch between the GoN's long-term goal of rural electrification and national and international policy commitments on gender mainstreaming and social inclusion. A clear evidence of this is the provision of a blanket subsidy with no consideration of various factors that would act as barriers to access, such as higher transportation costs in remote sites and financial difficulties of poor households, women-headed households and households with disabled persons. The Renewable Energy Subsidy Policy 2016 tried to redress some of these gaps by providing for specific subsidies to women and socially excluded groups, e.g., (i) additional subsidy of NPR 2,500 to the following types of households - single women, backward groups, disaster victims, conflict affected, poor and endangered ethnic groups as identified by the Government of Nepal (ii) under solar thermal technologies for rural areas, provision of an additional NPR 20,000 to target groups that had at least 50% single women, backward, disaster victims, conflict victims, and endangered ethnic groups (ADB and ENERGIA 2015).

BOX 8 GESI integration trend in energy projects

A study by ADB (2018) found that in most energy projects, gender concerns are incorporated in the initial phase, but during implementation and monitoring, these are sidelined.

Most energy-related projects in Nepal have conducted environmental and social impact assessment and held consultations with the local community in the project area, as per the requirements of government and donors. They have collected baseline demographic and socioeconomic data of the affected population, outlined the different impacts, and developed mitigation measures. Where possible, project developers have held consultations with women and socially excluded groups. However, information gathered through these measures was not used to identify barriers faced by women and other marginalized groups in accessing energy services and technologies, finding employment opportunities, participating in decision-making processes, and accessing credit. As a result no efforts were made to address these barriers during the implementation and monitoring phase. The final reports of these projects do not touch on these issues.

On a positive note, newer energy projects, e.g., Tanahu Hydropower Project, Dana–Kusma Sector of Kaligandaki Transmission Corridor (2020), part of the South Asia Subregional Economic Cooperation initiative, demonstrate a better understanding of the need to integrate GESI in different phases of the project and go beyond box ticking.

Furthermore the Renewable Energy Subsidy Policy 2016 focuses on maximizing service delivery and efficiency in renewable energy technologies and promote their use in rural areas to reduce regional disparity; create rural employment and enhance livelihoods, particularly for single women and low-income households, natural disaster victims and socioeconomically disadvantaged groups; reduce drudgery of rural women; and provide financial support to women with dependent children and endangered indigenous communities. This policy largely ignores the diversity of people. Except single women and endangered indigenous communities, it does not explicitly mention other historically marginalized groups such as hill and Tarai Dalits (ADB and ENERGIA 2015).

Most policies still do not explicitly acknowledge the differential needs of different social groups, longstanding social inequities, and diverse barriers to participation and access to benefits. Only local government policies have provisions for women's representation in decision-making at the three levels of government – federal, provincial and local.⁴³

Guided by AEPC's GESI Mainstreaming Plan, many of the government programmes on energy such as AEPC's Energy Sector Assistance Programme, the National Rural and Renewable Energy Programme and the Rural Energy Development Programme display a strong focus on gender and social inclusion. However, neither the ministry nor the key energy organizations under it has women in planning and decision-making positions. This potentially may have contributed to the gender insensitive practices, mechanisms and results in the energy sector. GESI has been integrated in energy related institutions and projects only to fulfill broader policy or donor requirements.

Overall, the current energy related policies advocate for integration of gender equality and social inclusion issues in the energy sector; but these policies and guidelines largely consider women and the socially marginalized groups as end users or beneficiaries and not as the main clients. If gender analysis guides the formulation of energy related policies, the needs, challenges and capacities of women and men would be better understood and interventions would be more effective. The current approach prevents women from taking up larger opportunities created by the new energy sources, such as becoming energy technicians, owners, entrepreneurs, etc.

Institutional level: It was found that of the total 84 employees (including the minister) of the Ministry of Energy and Water Resources and Irrigation (MoEWRI), only 13 (18%) are women. Only five women occupy senior officer level posts, while two are technical support staff. The remaining six women occupy assistant level posts such as computer operators or procurement assistants. There is no department, division or section that oversees gender and social inclusion issues in the ministry, nor is there a gender focal person or a gender expert.⁴⁴

Gender composition of the four major energy organizations under the ministry is also far from balanced. In the Water and Energy Commission, of the total 28 staff members, only four (14%) are women – two engineers and two administrative staff⁴⁵ (WEC 2020). In Nepal Electricity Authority, the board of directors consists of eight members, all men (NEA 2020). The Alternative Energy Promotion Centre is the most diverse among energy-related government institutions, where out of 43 total staff 13 are women (30%) of whom two are senior officers, one is an engineer and the rest are in assistant non-technical positions like computer operator, administrative assistant or account officers. All ten staff of Hydroelectricity Investment and Development Company Limited are men (HIDLC 2020). None of these four organizations have a division or unit that oversees gender and social inclusion matters. Only AEPC has developed a GESI organizational development strategy and result goals through a donor-funded technical support programme.

Prior to the establishment of the federal system in 2017, energy related programmes at the subnational level were implemented through the nine regional service centres and the Environment, Energy and Climate Change sections of the 75 District Development

Committees. The GESI Unit of AEPC had the mandate to coordinate with these subnational mechanisms. However, since the establishment of the new federal system, the roles and relationships of these mechanisms have become unclear. Moreover, they are in need of skilled human resources (ADB 2018).

Developing GESI analysis skills of government staff is not a priority of government and donors, except for a few donor-funded projects. The gender audit study conducted by AEPC in 2014 showed that most of the staff have some level of understanding of GESI but their work is limited to collecting data on the sex and caste of participants and beneficiaries. Very few officials have taken skill development training in gender. AEPC had plans to conduct GESI capacity needs assessment but the plans did not materialize. Likewise, budget allocated for GESI actions by the ministry and its departments is negligible. Out of the 409 activities in AEPC's annual work plan in 2013/2014, only 55 (13.44%) were GESI related (Koirala 2014).

Local level: The few GESI related assessments show that women from poor and marginalized groups spend more time and energy on collecting fuel for their household than women from relatively well-to-do households who can afford alternatives such as LPG gas stoves or rely on external help for fuel wood collection (MoFSC, REDD Implementation Centre, 2018). For instance, a woman in the rural mountains spends 4 to 6 hours a day collecting a bundle of firewood (Gurung and Bisht 2014). As a result women are time poor and unable to pursue job opportunities, gain new knowledge and skills, and engage in community activities.

In a recent organizational development and capacity needs assessment undertaken by Renewable Energy for Rural Areas Project in Nepal, none of the urban and rural municipalities assessed in Province 1 and Province 7 were found to have a proper GESI policy or strategy (SNV 2018). GESI was taken into consideration while constituting the local bodies, setting targets for development programmes and budgeting, as per constitutional provisions and the Local Governance Operation Act 2017. But there was no GESI policies and strategies. Women and marginalized groups such as Dalits were neither aware of GESI provisions nor had the capacity to claim or access such provisions (GIZ and SNV 2018).

Despite women's day-to-day involvement in the energy sector, the sector is generally regarded as a "male domain". For example, men usually decide whether to invest in alternative energy technologies at the household level. Even with policies for mandatory inclusion of all excluded groups in user committees, women often lack access to forums that make decisions related to energy schemes. They cannot easily harness opportunities created by new energy sources to become technicians and owners of energy related enterprises, or use energy sources for entrepreneurship (ADB 2018). The result is women's low ownership of renewable energy systems. A study in Ilam district found women's ownership was 20% for improved cooking stoves, 33% for biogas plants, 15% for solar home systems, and 4% for improved water mills (ADB 2018). The same study also reported that the Community Rural Electrification Programme managed by the National Association for Community Electricity Users found that women's ownership of different technologies also remains low.

Women also get left out of the benefit sharing process in the hydropower sector as they are underrepresented in the entire process, from stakeholder consultations, to local hiring and employment, to the process of identifying local development priorities. Women from marginalized groups (Janajatis, Dalits, ultra-poor, and disabled) are even more disadvantaged (Shrestha et al. 2016).

As the primary users and managers of household energy, women try to ensure efficient and optimal use of energy. But rural energy problems are rarely considered from the perspective of women, and the interventions are designed with the sole aim of saving fuel, without considering how to reduce human drudgery or create new opportunities for women and men (Mahat 2004).

Electrification of rural communities through small-scale renewable energy systems has brought to the fore the question of who owns technology. A review of the AEPC biogas programme revealed a big difference in the ownership of biogas plants based on gender and caste (ADB 2018, Mohideen 2020). Women owned 17.2% of the biogas systems, upper caste Brahmins owned 26.25% and lower caste Terai communities owned 7.42%. Based on this finding, the study recommended that urgent efforts should be made to promote technology as a “social product” (Mohideen 2020).

Project monitoring and evaluation at the local level do have gender specific indicators incorporated in the results framework, and these are generally included as part of the mitigation plans. However, the problem is that these plans and interventions are geared more towards risk mitigation than towards bringing change or transformation (ADB 2018).

Studies also show affordability of energy technologies remains a challenge despite subsidies provided by the government. Although the government of Nepal provides subsidies for purchase of alternative energy technologies, a large section of the society cannot afford these technologies despite their availability. Even those who can afford improved energy supplies might find that the “conversion technology” required to make that energy useful (e.g., buying a stove, TV, house wiring, or motor) is beyond their means. For most women and poor households (which often belong to marginalized groups), the current price of a subsidized solar home system (average of NPR 6400 for a 20–50 watt system) is still very high. Compared with a cost estimate from 2011, NPR 16,805 for a 20-watt system and NPR 17,414 for a 40-watt system, there would still be a difference of NPR 10,000 or more, which would be quite a sum for the poor households to afford. Additionally, socially excluded groups could also lose out on the benefits of energy projects, which can have serious implications: they would be losing out on increasing their income, opportunity for providing their children better education, and reduction in healthcare expenditure following smokeless cooking facilities, etc. (ADB 2018). Thus, the current subsidy policies do not really benefit the poor women and the socially marginalized groups.

3.3.2.4. Water

Water remains an underdeveloped sector in Nepal. Every year the country faces the problem of either too much or too little water (Dixit et al. 2009), and water management efforts are aimed at tackling water scarcity or water-induced disasters. With the impact of climate change compounded by increasing population and water demand, conflicts over water rights have become more pronounced in Nepal (Goodrich et al. 2017b). As in most developing countries, in Nepal rural women shoulder the burden of collecting water for their household, a task made more difficult by Nepal’s rugged, mountainous terrain. For example, women spend 70% of their time on tasks related to water management and 30% on fetching water for their household (Sugden 2014).

Due to drying of springs or reduced water discharge, more and more households spend at least 3–4 hours every day fetching drinking water. This has increased women’s drudgery and left them with little or no time to engage in economic activities (Gurung and Bisht 2014). However, access and control over water use are not equitable among women and men, the different social groups, sectors and across geographical scales (Scott et al., 2019).

Policy level: Key water policies such as the Water Resources Act 1992 and Regulation 1993, Environment Protection Act 1997 and Environment Protection Regulation 1997 are silent on gender issues. Meanwhile, sectoral policies in irrigation, drinking water and sanitation have established quotas to ensure women’s participation in decision-making processes. The Irrigation Regulation 2003 provides for 33% participation of women and marginalized groups in the local water management committees. The National Water Supply and Sanitation Policy 2003 and Rural Water Supply and Sanitation National Action Plan 2003 have provisions for 30% women’s participation in user committees. The Water Sanitation and Hygiene (WASH) Sector Development Plan (2016–2030) includes an Equity and

Inclusion Framework. Other policy documents, such as the National Sanitation and Hygiene Master Plan 2011, also have GESI related provisions. The master plan explicitly states that programmes should be designed and implemented with women’s participation (Goodrich et al. 2017b).

Table 12 summarizes GESI related provisions in water policies, with a focus on drinking water and irrigation.

Table 12. GESI provision in key water policies

Key policies	GESI provisions
Water Resources Strategy 2002	Stresses the need for “balanced gender participation and social equity” in water resources management.
Irrigation Regulation 1999, amended in 2003	Mandates 33% participation of women and representation of marginalized communities in the local water management committee.
National Water Supply and Sanitation Policy 2003	Gender is key to WASH policy, which mandates meaningful participation of women and marginalized caste and ethnic groups. Active engagement of women in O&M and local planning and budgeting 30% representation of women in water user committees Proposes capacity building of women as health and village maintenance workers Targeted interventions to reduce time and labour required to fetch water
National Water Plan 2005	It is a visionary document for the water sector — irrigation and drinking water It recommends women’s involvement in Integrated River Basin Water Management (IRBM), such as river bank protection, conservation activities, O&M of irrigation systems and electricity distribution.
National Sanitation and Hygiene Master Plan 2011	Recognizes GESI and considers gender and differently abled friendly technologies and site selection
Irrigation Policy 2014	Recognizes gender biases in the irrigation sector and recommends interventions for women’s empowerment, and achieving gender equality through financial incentives and subsidies for irrigation activities
WASH Sector Development Plan (2016–2030)	Builds on the earlier policy of 2003 but goes a step forward to include an Equity and Inclusion Framework to address gender relations. It also ensures: 50% women representation in the executive body chairperson/secretary position to be filled by a woman
National Sanitation and Hygiene Master Plan 2011	GESI is integral to achieving universal WASH coverage. The master plan includes GESI responsive objectives: ensure equity, inclusion and sustainability through a participatory planning process establish inclusive mechanisms to ensure access to WASH services for the poor and marginalized groups.
National Water Resources Policy 2020 (2077)	Identifies the need for women’s participation in decision-making across different levels of water resource management institutions

There is still a gap between gender equality provisions in water policies and their implementation. The organizational culture of most water-related bodies mirrors the patriarchal attitudes and behaviour prevalent in the broader society (Liebrand 2014, Resurrección et al. 2019). Out of the total 108 water users' associations (WUAs) in Nepal, only about 20 WUAs had achieved 20% representation of women through quotas (Shrestha and Clement 2019).

In the WASH sector, there is a lack of women's representation in planning. Despite high rates of male outmigration, the provision of 33% representation of women has not been achieved in the irrigation sector. Even when women quotas are filled, their representation is mere tokenism. At the community and household level, women's specific needs related to water are often overlooked. For instance, in canal design and operation, women's water-related needs such as cooking, cleaning, livestock and vegetable gardening are viewed as secondary. Furthermore, in the absence of men in the household, women often have to rely on male relatives to secure water for irrigation and receive less water than male irrigators (Shrestha and Gurung 2020).

Institutional level: A 2011 GESI assessment of the water sector undertaken by ADB indicated that key constraints in addressing GESI in WASH include: i) lack of diversity – of the total 1511 government employees in the Department of Water Supply and Sanitation, 94% were men and only 6% were women. The Brahmins and Chhetris formed the majority (61%) of the workforce, followed by Dalits (2%); ii) there was no staff or institutional mechanism responsible for integration of gender and social inclusion; iii) the institution lacked gender responsive budgeting. The assessment also reported that the monitoring systems did not comprehensively capture the shifts in people's livelihood. In the irrigation sector, majority of civil personnel belonged to upper castes with 54% Brahmins and Chhetris (Hill), followed by 13% Newars, 6% hill Janajati, 5% Tarai Janajatis, 1% hill Dalits, 1% Tarai Dalits and 1% Muslims (ADB, DFID and WB 2011).

Currently, the water sector falls under the purview of the Ministry of Energy, Water Resources and Irrigation. As discussed earlier, there are only a few female employees in the ministry, mostly in junior administrative posts. There is no woman member in the Water and Irrigation Secretariat. The Water Division, which is not at the ministry, however, has a woman as joint-secretary. The three sections under the Water Division are all headed by men and the remaining five officials are also men.⁴⁶ All 24 staff members of the Department of Water Resources and Irrigation (DWRI) are men. Currently there is a new vacant position of senior sociologist in the Institutional Development Section of the department, but it is not mentioned whether the position will also be responsible for gender integration.⁴⁷ All these data indicate that there has not been much progress in women's inclusion in water sector institutions in the past decade.

In public water agencies such as the Department of Irrigation (DoI)⁴⁸ incorporating gender issues in irrigation development is the responsibility of an official who is a sociologist. Often water management is seen as a technical task, to be dealt with by technicians and engineers, which has resulted in a lack of serious organizational commitment towards gender. In such an institutional environment, the GESI unit remains unrecognized and disconnected from other divisions. For instance, when the Irrigation and Water Induced Disaster Prevention sector proposed GESI as an integral component of project feasibility studies, male engineers did not see how gender was relevant to their work. The GESI unit often gets limited resources and authority to implement the GESI guidelines. In one instance, a junior officer was appointed as sociologist and other posts remained vacant due to such disparities. Often the gender focal points are overburdened and powerless to ensure integration of GESI within the department's activities. The technocrats assume that addressing technical issues (e.g., flood protection, physical access to groundwater) will automatically benefit all including women, poor and the marginalized (Shrestha and Gurung 2020).

The finance ministry's directive on Gender Responsive Budgeting and Planning requires all ministries to take gender issues into consideration while making their budget. However, there is a dearth of evidence that this requirement has been fulfilled by the MoEWRI.

Monitoring and evaluation in the MoEWRI is carried out by the Programme, Budget and Monitoring Division, which has a separate Monitoring and Evaluation Section. But the assessment found no evidence that the ministry has monitored GESI in the water sector. The ministry, unlike some of the other sectoral ministries such as the Ministry of Urban Development or Ministry of Federal Affairs and General Administration, does not have a proper sectoral GESI policy, strategy or guideline.

Water projects supported by foreign aid or development partners are required to include GESI M&E in the project cycle. However, such practices do not continue beyond the project period.

Local level: The mid-term evaluation of the Rural Water Supply and Sanitation Project in western Nepal, Phase II concluded that the project had fully addressed its goal of serving the unserved and leaving no one behind. This conclusion was based on data on beneficiaries gathered from 180 (out of 223) community water supplies. Representation of women in the Water User and Sanitation Committee (WUSC) was 44.9%, slightly less than the required 50%. Members of disadvantaged groups constituted 43.6% of WUSC members (both women and men). It was found that representation of both women and disadvantaged groups gradually decreased at district, project and central level. Dalit representation was disappointing because it did not match their representation at the beneficiary level (20%). Additionally, their participation in the decision-making and leadership positions was not encouraging. Only 7% of the WUSCs were chaired by a woman. Dalits had the lowest representation rate, and their proportion as WUSC chairpersons was only 11%. Though WUSCs had women representatives, men dominated decisions regarding water and sanitation (Hannu Vikman Consulting 2016).

In 2014 Wageningen University conducted an analysis of 588 irrigation WUAs registered with the National Federation of Irrigation Water Users' Association Nepal (NFIWUAN) to understand the gender composition of the committees. Out of the total 673 women committee members, only 58 women held official posts such as president, vice president, treasurer, or secretary. At the district level, out of the total 40 registered users' committees, only 25% had women members, and about 7.5% women were chairpersons. Women's participation has risen significantly compared to the past when all-men committees was the norm, yet the situation remains disappointing, indicating serious lacunas in policy implementation. It is evident that GESI efforts are limited to meeting minimum requirements for representation of women and poor and disadvantaged groups in the committees. In a study that examines if and how the local water planning process integrates gender and social inclusion in Nepal, Goodrich et. al quote an influential male committee member as saying, "If you have any scheme for our village, just contact me. I will bring women to the committee and make them work for it" (2017b: 24).



3.4. Impacts

3.4.1. General Impacts

Available literature on climate change in Nepal (Gurung 2014, Gurung 2020, WOCAN 2017) suggests that climate change impacts often do not specifically focus on women, and even less on the intersections of caste/ethnicity, geographical location, disability, age, etc.

The literature (Nightingale 2016, Goodrich et al 2019a, Gurung and Bisht 2014) states that the climate change on people stems from the compounded effects of the historical discrimination and situational vulnerabilities resulting in differential impacts on women and men. The persistent gender based biases in the society attribute to the exacerbation of gender inequality and social exclusion by the impacts of climate change. It is often found that impacts of climate change entwine with women's unpaid care work resulting in some key impacts such as time poverty and disempowerment of women, limited access to resources and participation in decision-making. Furthermore, with the trend of younger men migrating out of the villages for alternate income sources in the face of agriculture failure and related loss of incomes due to climatic stressors, women are left behind in climatically stressful environments to take on the household and farm responsibilities along with dealing with "outside" work, which were previously the domain of men. This has resulted in an increase in women's workload by leaps and bounds, adding to their own and their children's vulnerability in terms of health and time poverty. Additionally, they face security issues and gender-based violence because on the one hand their menfolk are away, and on the other, they have to engage in the public domains. In such a situation, the lack of safety measures for women and children has resulted to this increased violence against them. Even where such measures and mechanisms exist, most women often do not have the power or the status to access these mechanisms (Goodrich et al 2019b).

3.4.2. Climate Change Impacts on Different Sectors

3.4.2.1. Forestry

In the forestry sector, studies show that climate-induced changes have led to the emergence and/or increase of invasive species, and as a result many households have lost their livelihood and income, especially women, poor and marginalized communities such as the Chepangs and Dalits. For example, in Sankhuwasabha the rapid spread of an invasive species (banmara) has negatively impacted the regeneration of forest and undergrowth, reducing yield of timber, fodder, wild fruits, seeds and non-timber products such as moss, lichens, broom grass, asparagus, and medicinal plants. This has naturally affected the income of poor women and marginalized groups (Gurung and Bisht 2014).

3.4.2.2. Agriculture

Changes in precipitation has resulted in the hardening of soil in agricultural fields. This has had multiple affects – bigger clods, and need for more water and manure before sowing. All this means more physical work for women as tasks such as breaking the clods, watering and applying manure are generally assigned to women. Furthermore, new varieties of weeds and pests have been appearing, again increasing women's workload, as weeding is also a task assigned to women. Early ripening of crops and vegetables has led to pest infestations, creating additional tasks for women, such as checking and removing pests from crops. Previously women used to own certain household grains such as lentils and beans as 'pewa' (a kind of personal property)¹⁹; they would sell these grains along with surplus vegetables from the homestead to earn some personal income. However, this tradition is now almost lost due to climate variances and also their increased workload. Another major impact is the reduction in food diversity and intake. To make up for the loss of cash income, farmers sell their high-quality produce at high prices and buy low-quality, cheaper foods and cereals for household consumption, which affects their nutrition.

Livestock has also been decreasing due to scarcity of fodder, water and labour. Consequently, there is a corresponding decrease in dung for biogas and manure, which has made farmers dependent on chemical fertilizers. This of course has affected poor families as the supply of subsidized fertilizer is limited. Another critical issue is increasing debt burden. In recent years there has been an increase in loans taken by poor farmers (including women) due to the failure of or decreased agricultural production associated with climate change. All these have immense implications for women's physical and mental well-being (Gurung and Bisht 2014; UNDP 2020).

3.4.2.3. Energy

In the energy sector women in rural areas have a predominant role in the biomass energy systems as they are responsible for fetching fuel for household use and running family owned micro-enterprises. With the degradation of natural resources caused by climate change, women's drudgery has increased. This has implications for other spheres of their lives - education, employment, education and skills as they lose the opportunities for these. Although renewable and clean energy sources and technologies are being promoted, women still lack or have limited ownership of and access to these because they do not have access to financial resources, information and training (ADB 2015).

3.4.2.4. Water

The increasing scarcity of water has increased the drudgery of women. The high demand for irrigation water in a situation of scarcity has forced them to fetch water at night, making them susceptible to gender-based violence. Although there are other means of accessing water, such as deep boring and rainwater harvesting, these require technical knowledge, financial resources and networking, all of which are not easily accessible to Dalits, poor and

women-headed households. In the Tarai where water scarcity is more severe, Dalit women have to rely on upper caste or wealthier households, often suffering humiliation and verbal abuse to get water for their household needs. People's health is also at risk due to scarcity of water as sanitation and hygiene could get compromised. Another serious issue is the increasing magnitude and frequency of water related natural disasters. Women and children suffer more during and after such disasters as their workload increases, and they become susceptible to violence and trafficking. Studies have shown that women's workload increases after water-related disasters destroy infrastructures like hydropower plants and mills that assist women in carrying out their daily chores (Gurung and Bisht 2014; WOCAN, 2017)

All these observed impacts of climate change are leading to disempowerment of women: women's workload is increasing, which further prevents them from accessing opportunities to improve their knowledge and skills, thus reducing their coping and adaptive capacity. Representation of women in decision-making bodies and in leadership positions is also low as compared to men. Even those who get to participate are often not well informed and do not have time to follow up on issues that are discussed and could be of concern to them. Thus, they are unable to contribute their knowledge and skills to the local planning processes and to mobilize development and climate change related resources to meet their needs. Due to time constraints, women's sources of income has declined, which has reduced their mobility livelihood options (Gurung and Bisht 2014; UNDP 2020).

Responses with regard to gender integration in climate change can be also assessed in terms of provisions and practices at the policy, institutional and community or programme level.

3.5.1. Policy Level

Nepal is party to various international conventions related to gender equality and social inclusion. The GoN and development partners have implemented different policies and programmes to fulfill its commitments.

As mentioned earlier, the formulation of policies, strategies or guidelines for gender equality in Nepal in any sector and related ministries of the government is directed by the country's constitution. The constitution seeks to ensure economic equality, prosperity and social justice by eliminating discrimination based on class, caste, region, language, religion, gender and all forms of caste-based untouchability (MoLJPA 2016). The constitution enshrines equal rights for women, the poor, marginalized and vulnerable groups of people. There are affirmative actions to address historically disadvantaged groups and to end sex, caste and ethnicity-based discrimination. The articles in the constitution guarantee women the right to equal lineage, safe motherhood and reproductive health; the right to participate in all State bodies, property and family affairs; and positive discrimination in education, health, employment and social security (IDPG Nepal 2017).

Aligned with the constitution, the Local Government Operation Act 2017 makes it mandatory to ensure the participation of women, Dalits and disadvantaged groups in the planning and implementation of development programmes at the provincial and local level. All policies, programmes and service delivery strategies have to be both GESI sensitive and responsive in both spirit and practice in order to help transform social norms and behaviours. GESI sensitivity needs to be reflected in the organizational system of local governments, in the leadership of elected representatives, in the policies, plans and performance measures of local governments and in the planning, budgeting, monitoring and decision-making of local governments (LGA 2017).

Further, as already discussed under sectoral assessments, the sectoral GESI provisions also seek to promote GESI integration in climate change. However, although the sectoral policies are sensitive towards gender integration, it is found that only some of the sectors have

specific GESI policy and have implemented and monitored it effectively. For example, of the four sectors assessed, only the forest sector has a distinct sector specific GESI policy, while the other three have included GESI as a crosscutting issue in their sectoral policies. Moreover, only the agriculture sector has made efforts to effectively monitor GESI integration by publishing two biannual GESI progress reports (FY2015/2016 and 2016/2017) through an external or development partner supported project. However, since 2018 this GESI progress report has not been published.

There is no sector specific GESI policy in the energy sector, but through a project AEPC has prepared and approved a GESI policy for renewable energy sub-sector in FY 2018/2019. Also, the energy sector policies such as Rural Energy Policy 2006 and Renewable Energy Subsidy Policy 2013 have gender and social inclusion considerations. In the water sector also, there is no sector specific GESI policy. However, the Irrigation Policy 1992, Nepal's Water Resource Strategy, National Water Plan, Irrigation Regulation 1999 (amended in 2003), National Water Supply and Sanitation Policy 2003 and Rural Water Supply and Sanitation National Action Plan 2003, National Sanitation and Hygiene Master Plan 2011, WASH Sector Development Plan (2016-2030) take GESI into consideration.

Unlike the preceding two sectors, forestry has a distinct sectoral GESI policy such as the GESI Strategy 2008 and final draft Forest Sector GESI Strategy 2020-2030. Other key forestry sector policies such as the Community Forestry Development Programme Guidelines 2014, Forest Sector Strategy 2016-2025, Nepal National REDD+ Strategy 2018 and the most recently amended National Forestry Policy 2019 are also found to give some consideration to GESI. In the agriculture sector there are sector specific GESI policies like the Gender Mainstreaming Strategy 2006, Livestock Master Plan 1996-2015, Agriculture Perspective Plan 1995, National Agriculture Policy 2004, Agricultural Extension Strategy 2005, which emphasize improved access to agricultural resources and benefits for women, the poor and the excluded groups. The Agriculture Development Strategy 2015-2035 considers women farmers independent farmers and aims to increase women's land ownership from 10% (in 2010) to 50% by 2035. The Agriculture Development Strategy's Ten Year Action Plan calls for development of GESI strategy in agriculture.

In order to translate policy into action, the government needs to allocate adequate budget for such actions. The Ministry of Finance (MoF) introduced Gender Responsive Budget (GRB) system in Nepal in the fiscal year 2007/2008. In compliance with the system, sector-wise ministries are required to categorize and allocate their programme budget to support gender equality. The three recommended categories are: directly gender responsive (more than 50%), indirectly gender responsive (20-50%) and neutral (less than 20%) (MoF 2008). As per the data from the Ministry of Finance for the ten-year period of 2007/2008 to 2017/2018 the overall average GRB allocation in the government budget has been about 39% with the highest being 55.54% in 2007/2008 and the lowest in 2017/2018 at 28.45%.⁵⁰ Information is not available on the status of GRB in the four selected ministries, except that in 2014 the MoALD formed the Gender Responsive Budget Committee (GRBC). To implement GESI policies and activities, GRBC is responsible for harmonizing relations among district, regional and central departments. However, due to resource constraints and lack of gender audit the GRBC is not functioning as expected, but it is assumed if the committee receives adequate human resources, authority and logistical support, the GESI strategy of the Agriculture Development Strategy will be effectively implemented (FAO 2019).

Despite the presence of the above-mentioned sector specific gender policies, or key sectoral policies that give due consideration to gender integration, it is found that none of the sectors have a practice of assessing and addressing gaps and challenges, such as how the policies are translated into actions, provisions of enabling environment in terms of capacity, required financial and technical resources, behavioral and attitudinal changes and championing by the institutional leadership and management (decision-making), support and acceptance by male co-workers, monitoring the gender integration objectively and incorporating the

learning to bring about tangible results in gender integration. This lens of viewing women and marginalized groups as vulnerable groups have largely contributed in sidelining GESI issues as a crosscutting theme and not the primary focus of the sectors, which means very low investments in terms of budget, human resources and capacity building and monitoring.

Table 13. Comparative assessment of GESI integration in sectoral ministries

Sector and GESI integration	Forest	Agriculture	Energy	Water
Direct GESI related policies, strategies, guidelines, or action plans	Forest Sector Gender and Social Inclusion Strategy 2008 Draft Gender Equality and Social Inclusion Strategy and Action Plan of Forest and Environment Sector 2020-2030	Gender Mainstreaming Strategy 2006 Gender Equity and Social Inclusion Strategy Framework 2016	MoEWRI does not have a GESI policy or plan AEPD under the sectoral ministry has GESI Mainstreaming Plan	None MoEWRI does not have a GESI policy or plan
Indirect GESI related policies, strategies, guidelines, or action plans	Community Forestry Development Programme Guidelines 2014 Forest Sector Strategy 2016-2025 Nepal National REDD+ Strategy 2018 National Forest Policy 2019	Agriculture Perspective Plan 1995 Livestock Master Plan 1996-2015 Agriculture Perspective Plan 1995 National Agriculture Policy 2004 Agricultural Extension Strategy 2005 National Seed Vision 2013-2025 Agriculture Development Strategy 2015-2035 National Seed Vision 2013-2025	Renewable (Rural) Energy Policy 2006/2013 Subsidy Policy for Renewal Energy 2009 Subsidy Delivery Mechanism Policy 2009 Renewable Energy Subsidy Policy 2016	Irrigation Regulation 2003 The National Water Supply and Sanitation Policy 2003 Rural Water Supply and Sanitation National Action Plan 2003 The National Sanitation and Hygiene Master Plan 2011 Water Sanitation and Hygiene (WASH) Sector Development Plan (2016-2030)

3.5.2. Institutional Level

There have been efforts to include provisions for integrating gender equality at the institutional level and also establish institutions specifically focusing on gender issues at various levels. As mentioned in Section 3.2.2, the 2015 Constitution, Gender Equality and Social Inclusion (GESI) Policy 2019 and the current plan document (2020/21–2023/24) provide an institutional framework to implement the GESI action plan. Various institutions exist at the national, provincial and local level. GESI focal points responsible for ensuring gender mainstreaming at the programmatic level have been appointed, and they are supported by the MoWCSC. However, although the GESI guidelines prepared by the sector ministries indicate a clear GESI institutional mechanism for implementation in each of their departments, regional office, or division/project/section offices they still continue to lack

coordination. Furthermore, with the recent administrative changes and resulting ambiguities, it is unclear how these institutional mechanisms will perform GESI roles and responsibilities. From a GESI lens the inter and intra institutional gaps continue to exist and these institutions have yet to engage meaningfully (GoN 2016, MoALMC 2018).

There are also many non-state actors and organizations working to promote GESI within the different tiers of the federal system but remain less visible in remote and backward areas (ADB 2020). Key donors, bilaterals and multilaterals under the IDPG have formed a GESI Working Group to oversee the overall coordination of GESI agenda in development organizations and their collaboration with the government on GESI integration. The IDPG has developed 'A Common Framework for Gender Equality and Social Inclusion' (IDPG Nepal 2016). However, such GESI institutionalization efforts through projects or development partners generally do not sustain beyond the project period.

There have been efforts to increase the participation of women in sectoral institutions. However, women are still underrepresented in key decision-making bodies.

The participation of women in key institutional positions is below 40%. For example at the Ministry of Forest and Environment, of the total 58 staff, only 13 (25%) are women; and of these 11 (87%) are in technical posts, while the remaining staff are in administrative positions. At the MoALD secretariat, of the total 42 staff members, 15 (36%) are women. Both water and energy sectors fall under the Ministry of Energy and Water Resources and Irrigation, where, of the total 84 staff members including the minister, only 18 (21%) are women, and that too mostly in junior administrative posts.

There are many social and structural reasons for this low participation of women in decision-making positions in the four sectors assessed. A major reason is that social and gender norms and practices continue to curtail women's mobility and participation in public spaces and domains. There are fewer education opportunities for women, particularly in higher education and in STEM (see Section 3.1.1)

3.5.3. Local Level

Due to the establishment of the new federal structure after the local election in 2017, the governance bodies across Nepal are still in transition. Though the Local Governance Act 2017 outlines the roles and responsibilities of provincial and local governments, there is a lack of clarity about roles and responsibilities that require coordination among the different tiers of government. The different structures and provisions for delivery of services, integration of climate change and GESI related issues are being reworked. At the community level the sectoral response to GESI integration is directly related to the overall response to integrating GESI at the provincial and local level governance.

The key collaborative intervention of the government and the development partners is the Provincial and Local Governance Support Programme (PLGSP), which seeks to address capacity building needs of provincial and local government for climate change action. PLGSP aims to train about 2000 people from local bodies, mainly municipalities and wards, on climate change adaptation. Further, though GESI provisions in the PLGSP do not directly link GESI and climate change, some of the targeted outcomes of the programme are GESI related – e.g., local government systems mainstream GESI in their service delivery; GESI plans need to be mainstreamed in local government bodies; GESI focal persons need to be supported in coordination with the Ministry for Women, Children and Social Welfare; GESI tools need to be developed and implemented in local government bodies; local governments will be encouraged to internalize GESI sensitive tools (such as GRB) while planning and prioritizing activities; local governments will be supported to prepare an annual GESI status report and so on. These provisions will also pave the path towards GESI integration in climate change (MoFAGA 2019).



Contrary to the aforementioned provisions in PLGSP, a policy study published in August 2019 found there was no GESI policy for promoting women's leadership in provincial governments. Although some provincial governments had programmes that targeted specific social groups – children, senior citizens, and differently abled individuals, none of the governments had conducted GESI audit (World Bank 2019).

The PLGSP was officially launched in mid-2019 and has plans to coordinate with provincial governments to identify GESI focal persons who can be trained to apply GESI tools by independent external experts or firms. The PLGSP will provide technical backstopping services to GESI focal persons of provincial government on a regular basis. The findings of the GESI audit will be discussed at different forums to sensitize the provincial governments on GESI and encourage them to mainstream GESI in all aspects of the programme including planning, budgeting, monitoring and reporting (MoFAGA 2019).

Besides the PLGSP progress at the provincial and local level, a senior MoFE technical staff reported that the provincial governments are in the process of establishing Provincial Climate Change Coordination Committees, as stipulated in the Climate Change Policy 2019. The MoFE's Climate Change Management Division assisted in developing the committee's ToR. The ToR provides space for including women members and mandates the committees to mainstream GESI. Three provinces are already in the process of forming these committees.⁵¹

3.6. Good Practices

Based on the literature review and stakeholder consultations, a number of good practices have been identified. These good practices in gender and climate change are categorized at two levels: i) policy and institutional level; and ii) Local or programme level.

3.6.1. Policy and Institutional Level

- **Dedicated sectoral policy on gender:** Some of the sectoral ministries such as the MoFE have come up with a sector-specific GESI strategy and action plan, and gender and climate change strategy. The forestry sector first developed a GESI strategy and action plan in 2008 and it has recently been revised and re-drafted for the ten-year period of 2020–2030. The government also developed a separate gender and climate change strategy for the forest sector. These steps have contributed to GESI mainstreaming in the sector.
- **Clear recommendation on female quotas:** The National Forest Policy 2019 directs all forestry related government, non-government and private sector entities to “include 50% women in their respective organizations with leadership responsibilities.” Similarly, the Community Forestry Implementation Guideline states that there should be at least 50% women in CFUG; at least one of the two decision-making positions should be filled by a woman (chairperson or secretary); and at least one woman should hold a signatory post. This provision has allowed more women to hold leadership positions.

- **Appointment of gender focal point:** The MoFE has taken some small but commendable steps towards integrating GESI in climate change – designate a senior official (e.g., chief of the planning division) as the gender focal point; invest in holding separate consultations with GESI related groups and organizations; conduct residential writeshops with GESI experts to review key policy and programme documents, such as the Emission Reduction Programme Document, GESI strategy, etc.; creation of a multi-stakeholder gender group consisting of members from within the government and outside; expand membership to include GESI experts and organizations in high-level committees such as the national REDD Coordination Committee. Although these efforts have yet to be institutionalized, they have helped increase the representation of women and marginalized groups.
- **Professional women networks:** Several informal platforms and networks have been created to allow professional women from diverse groups to discuss, raise issues and challenge power relations within institutions. This has led to meaningful discussions on uncomfortable subjects such as patriarchy, power relations and sexual harassment in the workplace and contributed in making institutional decisions GESI responsive. For example, Female Foresters Nepal, a loose network of female foresters from within and outside the government and forestry students, currently has more than 800 members who organize webinars on institutional and technical issues and provide training on both GESI awareness and integration. The network has created 'Team 30', a select group of female foresters who will be trained to lead the movement and train others, engage male champions, etc.

3.6.1. Local or Programme Level

- Introducing quotas for women and marginalized groups in community-level initiatives is a good initial step towards promoting inclusion. However, it has been found that quotas are often manipulated and captured by elites. Such manipulation can be controlled and avoided by regular monitoring of the system.
- Local governments have invested in time-saving technologies that have helped address women's increased workload and time poverty. For example, in Sankhuwasabha district in east Nepal, one ward had allocated a portion of its annual budget for providing mini tillers to women farmers. However, it is important to ensure that the poor and highly marginalized women and caste groups are not excluded from such schemes (UNDP 2020).
- CARE Nepal's SAMARTHYA project 'Promoting Inclusive Governance and Resilience for the Right to Food' identified, piloted and scaled up a number of models which could help to reduce people's vulnerabilities and increase their adaptive capacity. One of the models 'Climate Resilient Leasehold Farming Practice' fostered a strong sense of collective responsibility among farmers to uphold the obligations of the land lease signed by their group leader, while creating opportunity for individual member household to own its share of the land, make effort to produce more and earn an income. This model focused on land-poor women farmers, and stakeholders urged the local government to institutionalize and scale it up by citing concrete evidence of success including returns on investment. The model championed optimum utilization of land resource for generating employment and improving the livelihood of the most marginalized land-poor and landless communities. For the local government this model provided a direct link to the most marginalized farmers and the opportunity to address their socioeconomic problems (CARE 2019).
- The 'Farmers' Identity Cards with Categorization' initiative promoted identity cards of the most marginalized landless, land-poor and women farmers including agricultural labourers to ensure their access to government services and facilities. Considering the

differential needs of these farmer categories, the programme revised its subsidy scheme to ensure equity in access to resources. A detailed household level inventory was prepared to categorize farmers based on their wealth for subsequent policymaking, programming and planning purposes (CARE 2019).

- The High Value Agriculture Project (HVAP) supported by the International Fund for Agriculture Development has launched a package of interventions to engage the poor, women and marginalized groups in value chains through business literacy classes (BLCs), a poverty inclusion fund (PIF) and GESI training for farmers. In Nepal, those who belong to the poorest strata, especially women, are generally illiterate or semi-literate, which severely limits their ability to participate effectively as producers in value chains. BLCs imparted literacy to marginalized farmers, especially women, so that they could read business plans, contracts, training materials, market information and instructions on how to use farm inputs. Similarly, PIF after identifying the poorest and excluded households, identified producer groups that were best positioned to adopt these households as members of their group. Producer groups that committed to including one or more excluded households were rewarded with a maximum grant of USD 3000. No co-funding by the group was required. Typical inputs funded by the PIF were seeds, irrigation equipment, fertilizers, and improved breeds. In addition, funds from the PIF could be used to provide supplementary support to the poorer households, or to help them contribute their share of the application fee that is collected from the member households when they apply for more fund from the HVAP Value Chain Fund. HVAP has developed a special training programme for farmer groups with the aim to create awareness about factors that can lead to the exclusion of women and other groups. The training also addresses measures that producer groups can take to achieve gender and social inclusion such as reducing women's workload, improving equal access to resources and equal participation in decision making (Greijn et al. 2018).
- A few Green Climate Fund (GCF) projects that are being developed will be required to conduct gender assessment. Based on this assessment, the projects have to develop their gender action plan with a dedicated budget. This mandatory step can help ensure that the projects are based on the needs, priorities and interests of women and marginalized groups.

IV. Recommendations



Following recommendations have been made based on the assessment of the four sectors and the existing gaps and challenges. The recommendations are divided into four categories.

i. Institutional arrangements:

- Provide dedicated and trained human resources with clear ToR on GESI within each ministry to roll out GESI strategy, along with an annual appraisal system and budget.
- Establish a system of conducting GESI and climate change-based impact analysis in ministries and departments and develop evidence-based action plans to address GESI issues. For example, provide climate information that caters to the needs, priorities, and interests of women and the marginalized groups.
- Develop gender-responsive climate financing mechanisms for supporting and promoting gender-sensitive and gender-responsive practices and innovations. Ensure that climate change responses recognize the rights, differential needs and priorities of women and men, poor and the marginalized groups. These responses should be provided adequate financial and technical support. Technical responses should be carefully designed (along with an auditing mechanism) in collaboration with agencies with long experience and expertise in integrating gender and social exclusion.
- Establish a system for promoting collaboration among agencies with expertise and experience in gender and climate change. This would strengthen the gender component of key climate related national documents such as the NDC and NAP.

ii. Policy development and monitoring

- Reframe the portrayal of women and marginalized groups in current climate change discourses, so that they are recognized not only as a vulnerable group but also as key contributors and agents of change. Label them as primary stakeholders and highlight their contributions and agency. Climate-related issues faced by communities should be understood from an intersectional perspective as women and men are not monolithic homogenous groups. Factors such as gender, caste, ethnicity, class, geographical location, disability, age, and sexual orientation should be taken into consideration.
- Prepare sector-specific strategy and action plan for GESI and climate change in line with the second NDC targets. In the NDC it has a specific component to show linkages between GESI and climate change with specific objectives, outcomes and actions outlined in the action plan. The strategy should help the sectors to go beyond numbers in terms of participation of women for achieving gender transformative changes.
- Support the development of GESI integrated monitoring and evaluation system to capture gendered outcomes. GESI data should be collected, analysed and disaggregated by gender, social and economic status. Invest in collaborative research on the links between GESI and climate change and disseminate the findings through publications, media and other knowledge-sharing platforms.

iii. Changing social norms and gender roles

- Launch efforts to transform the organizational cultures of institutions at the federal, provincial and local level and create an enabling work environment for women. Assess how patriarchal norms and toxic masculinities are reproduced in these organizations and build an alliance of men who will support this effort. For example, encourage institutions at all levels, including community groups, to engage male champions in addressing gender inequities and promoting women and women leaders.
- Support the transformation of power relations by identifying and recognizing the different types and layers of power relations and leadership practices within institutions and in community groups that hinder both professional and community women from participating in climate change related discourses, decision-making and accessing resources, including participation in international decision-making forums. For example, understand the power dynamics between women and men in a specific context; and between women from different classes and caste/ethnic groups.

iv. Implementation level

- Develop a comprehensive capacity building package that focuses on developing: a) technical skills and knowledge related to climate change adaptation and mitigation of women and marginalized groups; b) knowledge of participatory approaches of both male and female staffs of sectoral ministries, CSOs and community members; and c) confidence, self-esteem and leadership skills of women and marginalized groups.
- Promote climate smart tools and technologies to reduce the drudgery of poor and marginalized women, in partnership with relevant government and non-government institutions, local resource persons, and cooperatives, preferably women-led cooperatives.
- Enhance the income and adaptive capacity of poor and marginalized women and men⁵² by linking them with value chain actors, local cooperatives, particularly women run cooperatives and micro-enterprises that are already established and successful (e.g., MEDPA⁵³ and Agriculture Research Centre, Pakhribas and their groups and networks). Promote the knowledge of women, indigenous peoples and local communities and support their enterprises.
- Strengthen existing or create new groups and networks of women, IPs, Dalits, PWDs at the local level, and support them to market forest, agricultural and ecotourism products, start renewable energy enterprises, influence planning and decision-making processes, and mobilize both project and local development resources. Link these groups with the local wards and municipalities and committees on disaster risk reduction and climate change.

Endnotes

- [1] These are the eight sectors identified by the Nepal Climate Change Policy 2019 as priority sectors: 1) Agriculture and Food Security; 2) Forest, Biodiversity and Watershed Conservation; 3) Water Resources and Energy; 4) Rural and Urban Habitats; 5) Industry, Transport and Physical Infrastructure; 6) Tourism and Natural and Cultural Heritage; 7) Health, Drinking water and Sanitation; and 8) Disaster Risk Reduction and Management.
- [2] The eight priority sectors identified by the revised Nepal Climate Change Policy 2019 include: 1) Agriculture and Food Security; 2) Forest, Biodiversity and Watershed Conservation; 3) Water Resources and Energy; 4) Rural and Urban Habitats; 5) Industry, Transport and Physical Infrastructure; 6) Tourism and Natural and Cultural Heritage; 7) Health, Drinking Water and Sanitation; and 8) Disaster Risk Reduction and Management.
- [3] Hindu, Buddhism, Islam, Kirat, Christianity, Prakriti, Bon, Jainism, Bahai, Sikhism
- [4] Health is measured by female and male life expectancy at birth; education is measured by female and male expected years of schooling for children and mean years for adults aged 25 years and older; and command over economic resources is measured by female and male estimated GNI per capita (UNDP 2019, p.5).
- [5] Reproductive health is measured by maternal mortality and adolescent birth rates; empowerment is measured by the share of parliamentary seats held by women and attainment in secondary and higher education by each gender; and economic activity is measured by the labour market participation rate of women and men (UNDP 2019, p.5).
- [6] 68 local adaptation plans and 342 community level adaptation plans are currently being implemented
- [7] The eight sectors are: Agriculture and Food Security; Forest, Biodiversity and Watershed Conservation; Water Resources and Energy; Rural and Urban Habitats; Industry, Transport and Physical Infrastructure; Tourism and Natural and Cultural Heritage; Health, Drinking Water and Sanitation; and Disaster Risk Reduction and Management
- [8] Agriculture, Education, Forests and Soil Conservation, Health, Federal Affairs and General Administration, Physical Infrastructure and Transport, Urban Development, Water Supply and Sanitation.
- [9] Telephone and email interviews with NDC related officials from MoFE and UNDP Nepal.
- [10] Email interview with a senior female official from CCMD.
- [11] A detailed breakdown of the cost of achieving the adaptation component will be provided in the upcoming National Adaptation Plan (NAP).
- [12] The 1854 Civil Code formally classified Nepalis according to the Hindu caste system. At the top of the hierarchy were 'pure' castes namely Brahmins and Chhetris, below whom the 'impure' castes were further divided into 'non-enslaveable Matwals', 'enslaveable Matwals', and 'Untouchables'. Every caste and sub-caste is ascribed certain hierarchical rules under the civil code, making social mobility between the castes near impossible, thus paving the way for institutionalization of social, political and economic discrimination towards Dalits and the ethnic groups; and women within these groups are even further marginalized (Acharya and Bennett 1981).
- [13] Janajatis are non-Hindu ethnic groups with their own language, culture and religion.
- [14] LGBTQ rights in Nepal are very progressive. The Nepalese Constitution 2015 recognizes LGBTQ rights as fundamental rights. Homosexuality was legalized in 2007 and several new laws protecting individuals on the basis of sexual orientation were also introduced.
- [15] Data provided by Himalayan Grassroots Women's Natural Resource Management Association (HIMAWANTI) Nepal (<http://www.nhimawanti.org.np>). Interview with HIMAWANTI senior representative. 09/09/2020.
- [16] Tarai means plains or flatlands in Nepal
- [17] Nepal currently has 77 districts.
- [18] Before the urban and rural municipalities were created in the new federal system, the village level governance units were called the village development committees.
- [19] http://dof.gov.np/dof_community_forest_division/community_forestry_dof
- [20] The MoFE was known by this name earlier.
- [21] Data provided by a female senior technical staff of MoFE. Telephone interview.
- [22] Brahmins and Chhetris are accorded the highest status in the Hindu caste hierarchy.
- [23] Newars are considered as the indigenous original inhabitants of the Kathmandu valley.
- [24] Women, Dalits, Muslims are considered as historically marginalized groups in Nepal.
- [25] Personal telephone interview with senior female official from MoFE.
- [26] Telephone interview with a female GESI expert.
- [27] Ministry of Forests and Soil Conservation (MoFSC) preceded the MoFE.
- [28] 1 USD = NPR 117 (07/10/2020)
- [29] Interview with the female Gender Focal Point and technical staff from REDD-IC, MoFE.
- [30] Interview with a HIMAWANTI member, 09/09/2020.
- [31] FECOFUN website. <http://fecofun.org.np/executive-committee>. Accessed on 08/09/2020
- [32] FECOFUN website. <http://fecofun.org.np/executive-committee>. Accessed on 08/09/2020
- [33] Data provided by Himalayan Grassroots Women's Natural Resource Management Association (HIMAWANTI) Nepal (<http://www.nhimawanti.org.np>).
- [34] The MoALD was formerly called the Ministry of Agriculture Development (MoAD).
- [35] Restructured into seven provinces in the new federal system.
- [36] Telephone interview with male senior technical staff and GFP of MoALD.
- [37] This was the latest report prepared by the ministry. Made available for this assessment by the ministry on special request. Not available publicly.
- [38] MoALD website. <http://doanepal.gov.np/our-staffs/>. Accessed on 10/09/2020.
- [39] MoALD website. <http://doanepal.gov.np/our-staffs/>. Accessed on 10/09/2020.
- [40] This very small amount was not enough for such work and was allocated just for box ticking.
- [41] Interview with MoALD's senior male technical staff and Gender Focal Point.
- [42] Interview with Dalit women farmers from Kavre district.
- [43] Gender equality and social inclusion was one of the major agendas of state restructuring.[This explanation seems inadequate because one might ask - how come these efforts are being made only at the local level? -ed.]
- [44] <https://moewri.gov.np/pages/who-is-who>. Accessed on 07/09/2020.
- [45] <https://www.wecs.gov.np/staff.php>
- [46] <https://moewri.gov.np/pages/who-is-who>. Accessed on 07/09/2020.
- [47] DWRI's website at: https://www.dwri.gov.np/Employee_Details. Accessed on 07/09/2020
- [48] The then DoI was replaced by the current Department of Water Resources and Irrigation (DoWRI) in late 2018 under the directive of the new Constitution of Nepal 2015. Source: DoWRI Year Book 2018/2019.
- [49] Traditionally, rural women have always set aside some high-value crops, such as beans, lentils, and leafy green vegetables, to sell for personal or side income, which other family members either do not notice or question. These crops then become part of her 'pewa', or personal property. This traditional economic practice of saving high-value crops affords a degree of economic independence to women. The sharp decline in the production of these crops and vegetables has huge implications for women, particularly from poorer families, as they may lose their only source of cash income and have to depend on their husbands or fathers for every small expense.
- [50] <https://mof.gov.np/en/gender-responsive-budget-76.html>
- [51] Interview with a senior female technical staff of MoFE.
- [52] Poor and marginalized people or groups should particularly include: historically marginalized groups e.g. Kumals, Majhi, Bote, hill Dalits etc); situationally vulnerable such as PWD, elderly, pregnant women, economically poor families etc.
- [53] Micro-enterprise Development Program for Poverty Alleviation (MEDPA) is a government programme under the ministry of Industry, Commerce and Supplies with the objective of poverty alleviation in Nepal through micro enterprise development and employment generation. MEDPA mobilizes Micro Enterprise Development Service Providers through the outsourcing from private sectors. The enterprise development facilitators are the pillar of this programme who provide microenterprise development services at the beneficiary level.

References

- [1] Acharya, M and Bennett, L. (1981). Status of women in Nepal. Centre for Economic Development and Administration, TU, Kathmandu, Nepal.
- [2] Acharya, S.P., & Bhatta, G.R. (2013). Impact of Climate Change on Agriculture Growth in Nepal, *NRB Economic Review*, 25(2), 1-16.
- [3] ADB. (2015). Gender Review of National Energy Policies and Programs in Nepal: Improving Gender-Inclusive Access to Clean and Renewable Energy in Bhutan, Nepal and Sri Lanka.
- [4] ADB. (2016). Gender Equality Results Case Study: Nepal Gender Equality and Empowerment of Women Project. Asian Development Bank. <https://www.adb.org/sites/default/files/publication/185563/nepal-gender-equality-and-empowerment-women-project.pdf> (Accessed 15th April 2021).
- [5] ADB. (2017). Nepal Energy Sector Assessment, Strategy and Road Map, Asian Development Bank (ADB). <https://www.adb.org/sites/default/files/publication/356466/nepal-energy-assessment-road-map.pdf>
- [6] ADB. (2018). Gender Equality and Social Inclusion Assessment of the Energy Sector, Enhancing Social Sustainability of Energy Development in Nepal. February 2018.
- [7] ADB (2020). Gender equality and social inclusion diagnostic of selected sectors in Nepal. October 2020. DOI: <http://dx.doi.org/10.22617/TCS200291-2>
- [8] ADB, DFID and WB. (2011). Gender and Social Exclusion Assessment 2011, Sectoral Series: Monograph VII, Sectoral Perspectives on Gender and Social Inclusion, Water Supply and Sanitation.
- [9] ADB, DFID and WB. (2012a). Gender and Social Inclusion Assessment 2011, Sectoral Series: Monograph III, Sectoral Perspectives on Gender and Social Inclusion, Forestry. 2012.
- [10] ADB, DFID and WB. (2012b). Gender and Social Inclusion Assessment 2011, Sectoral Series: Monograph I, Sectoral Perspectives on Gender and Social Inclusion, Agriculture. 2012.
- [11] ADB and ENERGIA. (2015). Gender review of national energy policies and programs in Nepal.
- [12] Adhikari, M., Pahari, B. R., & Shrestha, R. (2017). 'Impact of renewable energy subsidy policy in rural electrification. In Proc. IOE Graduate Conf. Vol 5. https://www.researchgate.net/profile/Rajendra-Shrestha5/publication/344927666_Impact_of_Renewable_Energy_Subsidy_Policy_in_Rural_Electrification/links/5f9943b92851c14bcd53f0/Impact-of-Renewable-Energy-Subsidy-Policy-in-Rural-Electrification.pdf
- [13] Aguilar, L. (2009). Women and climate change: Vulnerabilities and adaptive capacities. Worldwatch Institute, 59.
- [14] Alston, M. (2014). Gender mainstreaming and climate change. *Women's Studies International Forum* (Vol. 47, pp. 287-294). Pergamon.
- [15] Bajracharya, P. (2012). Nepal: Integrating employment targets into national development policies, in ed. Huynh, P., and Parisotto, A., (2012). Case studies of policy coherence initiatives in developing Asia, ILO Asia-Pacific Working Paper Series, ILO Regional Office for Asia and the Pacific, International Labour Office, Policy Integration Dept. – Bangkok.
- [16] Baral, S. (2016). An Analytical Desk Review Report on Work Load Distribution between Men and Women in the Agriculture Sector of Nepal, 28 October 2016 (unpublished).
- [17] Bartels, W., McKune, S., McOmber, C., Panikowski, A., and Russo, S. (2013). Investigating climate information services through a gendered lens. CCAFS Working Paper No. 42.
- [18] Bartlett, R., Bharati, L., Pant, D., Hosterman, H., & McCornick, P. (2010). Climate Change Impacts and Adaptation in Nepal, IWMI Working Paper 139, International Water Management Institute, Colombo.
- [19] Bastola, A., Hynie, M. & Poudel, S. (2015). Gender and Ethnic Practices: Can gender based practices in ethnic groups illustrate the impacts of climate change? In World Symposium on Climate Change Adaptation, 2–4 September 2015, Manchester. Grantham Research Institute (GRI) (2015). Myanmar. <http://www.lse.ac.uk/GranthamInstitute/legislation/countries/myanmar/>
- [20] Bista, D.R., Amgain, L.P., & Shrestha, S., (2013). Food security scenario, challenges, and agronomic research directions of Nepal, *Agronomy Journal of Nepal (Agron JN)*, Vol. 3.
- [21] Bolch, T., J. M. Shea, S. Liu, F. M. Azam, Y. Gao, S. Gruber, W. W. Immerzeel, A. Kulkarni, H. Li, A. A. Tahir, G. Zhang, and Y. Zhang (2019). Status and Change of the Cryosphere in the Extended Hindu Kush Himalaya Region. The Hindu Kush Himalaya Assessment: Mountains, Climate Change, Sustainability and People, P. Wester, A. Mishra, A. Mukherji, and A. B. Shrestha, Eds., Springer International Publishing, 209-255.
- [22] CAMRIS, 2020. Nepal Gender Equality and Social Inclusion Analysis 2020. CAMRIS International, Inc. USAID. https://pdf.usaid.gov/pdf_docs/PA00X13H.pdf
- [23] CARE. (2019). Climate Resilient Scalable Models and Guidelines on Land & Agriculture Documentation of practices from 'SAMARTHYA' Project. CARE Nepal. December 2019.
- [24] Central Bureau of Statistics (CBS), (2013). Nepal in Figures 2013, Central Bureau of Statistics, National Planning Commission Secretariat, Government of Nepal.
- [25] Central Bureau of Statistics (CBS), (2014). Population Monograph of Nepal: Volume II (Socio Demography), Nepal Planning Commission Secretariat, Government of Nepal. <https://nepal.unfpa.org/sites/default/files/pub-pdf/Population%20Monograph%20V02.pdf>
- [26] Central Bureau of Statistics, National Planning Commission. (2016). National Climate Change Impact Survey 2016, A Statistical Report. Government of Nepal.
- [27] Clancy, Joy et al. (2016). Mainstreaming Gender in Energy Sector Practice and Policy, Lessons from the Energia International network. 30 September 2016, USAID.
- [28] Dajjuvai, Hami. August 2020. Webinar on 'Nepal's first conference on feminism and men
- [29] Darmouth University (2020). Caste based inequality, Nepal Earthquake Case Studies Project. <https://journeys.dartmouth.edu/NepalQuake-CaseStudies/ caste-based-inequality/>
- [30] Dhakal, S., Srivastava, L., Sharma, B., Palit, D., Mainali, B., Nepal, R., & Wakhley, K. B. (2019). Meeting future energy needs in the Hindu Kush Himalaya. In *The Hindu Kush Himalaya Assessment* (pp. 167-207). Springer, Cham.
- [31] Dixit, A., Upadhy, M., Dixit, K., Pokhrel, A., & Rai, D. R. (2009). Living with water stress in the hills of the Koshi Basin, Nepal. ICIMOD and ISET-N, Nepal. <https://lib.icimod.org/record/8023>
- [32] EEA (1999). Environmental indicators: Typology and overview. Technical report No 25.
- [33] European Commission (2019). INFORM Index for Risk Management. Nepal Country Profile. URL: <https://drmk.jrc.ec.europa.eu/inform-index/Countries/Country-Profile-Map>.
- [34] FAO and RECOFTC. (2015). Understanding Women's Participation in Forestry in Nepal. Policy Brief. March 2015.
- [35] FAO. (2019). Country gender assessment of agriculture and the rural sector in Nepal. Kathmandu.
- [36] Gautam, D. and Dong, Y. (2018). Multi-hazard vulnerability of structures and lifelines due to the 2015 Gorkha earthquake and 2017 central Nepal flash flood. *Journal of Building Engineering*, 17, pp.196–201. URL: <http://ira.lib.polyu.edu.hk/handle/10397/77914>
- [37] Gill, J.C. and Malamud, B.D. (2017). Anthropogenic processes, natural hazards, and interactions in a multi-hazard framework. *Earth-Science Reviews*, 166, 246–269. URL: <https://www.sciencedirect.com/science/article/pii/S0012825216302227>
- [38] GIZ and SNV. (2018). Organizational Development Assessment and Capacity Needs Assessment Combined Summary Report of Province 1 and 7. Submitted by DeKMIS Pvt. Ltd and Rupantaran Nepal. December 2018. Unpublished.
- [39] Goodrich, C.G., Mehta, M., Bisht, S. (2017a) Status of gender, vulnerabilities and adaptation to climate change in the Hindu Kush Himalaya: Impacts and implications for livelihoods, and sustainable mountain development. ICIMOD Working Paper 2017/3. Kathmandu: ICIMOD
- [40] Goodrich, C.G., Udas, P. B., Gurung, M. B., Shrestha, N. T., Shrestha, S. (2017b). Gender and social inclusion in local water planning: Lessons from water use master plan practices in Nepal. ICIMOD Working Paper 2017/16. Kathmandu: ICIMOD
- [41] Goodrich, Chanda G, Pranita Bhusan Udas and Harriet Larrington-Spencer. (2019a). Conceptualizing gendered vulnerability to climate Change: Contextual conditions and drivers of Change. In: Goodrich, C. G; Udas, P. B. & Prakash, A. (eds) Conceptualizing and Contextualizing Gendered Vulnerabilities to Climate Variability in the Hindu Kush Himalayan Region; Special Issue of Environmental Development, ELSERVIER (pp. 9-18). <https://doi.org/10.1016/j.envdev.2018.11.003>
- [42] Goodrich, Chanda G, Anjal Prakash and Pranita B Udas. (2019b). Gendered vulnerability and adaptation in Hindu-Kush Himalayas: Research insights. In: Goodrich, C. G; Udas, P. B. & Prakash, A. (eds) Conceptualizing and Contextualizing Gendered Vulnerabilities to Climate Variability in the Hindu Kush Himalayan Region; Special Issue of Environmental Development, ELSERVIER (pp. 1-8). <https://doi.org/10.1016/j.envdev.2019.01.001>
- [43] GoN (2010). National Adaptation Programme of Action (NAPA) to Climate Change, Ministry of Environment, Government of Nepal (GoN), Kathmandu.
- [44] GoN (2016). The Sixth Periodic Report of Government of Nepal on Implementation of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), Ministry of Women, Children & Social Welfare. Government of Nepal, Kathmandu, Nepal.
- [45] GoN. (2020). Second National Determined Contribution. 8 December 2020.
- [46] Greijn, Heinz et al. (2018). The HVAP Approach: Lessons from the Value Chain Project. September 2018. HVAP, MoALD, IFAD.
- [47] Gum, W., Singh, M. P., & Emmett, B., (2009). Even the Himalayas have stopped smiling: Climate Change, Poverty and Adaptation in Nepal, Oxfam International.
- [48] Gurung, Dibya Devi. (2020). Protecting Livelihoods and Assets at Risk from Climate Change Induced Flooding in Glacial River Basins of Nepal. A 5-year project proposal prepared for submission to the Green Climate Fund, Gender Equality and Social Inclusion Assessment, Final Draft Report. UNDP Country Office. April 2020.
- [49] Gurung, D. D., and Bisht, S. (2014). Women's empowerment at the frontline of adaptation: emerging issues, adaptive practices, and priorities in Nepal. ICIMOD Working Paper, (2014/3).

- [50] Hannu Vikman Consulting. (2016). Mid-Term Evaluation of the Rural Water Supply and Sanitation Project in Western Nepal, Phase II (RWSSP-WN II), Final Report. April 2016
- [51] Hariyoban Program. (2013). Gender Equality and Social Inclusion Mainstreaming Strategy. USAID.
- [52] HIDLC (2020). http://www.hidcl.org.np/member/who_is_who http://dof.gov.np/dof_community_forest_division/community_forestry_dof
- [53] International Development Partners Group (IDPG), Nepal. (2016). A Common Framework for Gender Equality and Social Inclusion. Gender Equality and Social Inclusion Working Group.
- [54] International Development Partners Group (IDPG), Nepal. (2017). A Common Framework for Gender Equality and Social Inclusion. Gender Equality and Social Inclusion Working Group.
- [55] International Organization for Migration. (2016). Barriers to women's land property access and ownership in Nepal.
- [56] Islar, M., Brogaard, S., & Lemberg-Pedersen, M. (2017). Feasibility of energy justice: Exploring national and local efforts for energy development in Nepal. *Energy Policy*, 105, 668-676.
- [57] Kapoor, A. (2011). Engendering the Climate for Change: Policies and practices for gender-just adaptation.
- [58] Koirala, U. (2014). Gender Equality and Social Inclusion Audit in AEPC, Nepal.
- [59] Krishnan, R., A. B. Shrestha, G. Ren, R. Rajbhandari, S. Saeed, J. Sanjay, M. A. Syed, R. Vellore, Y. Xu, Q. You, and Y. Ren, (2019). Unravelling Climate Change in the Hindu Kush Himalaya: Rapid Warming in the Mountains and Increasing Extremes. The Hindu Kush Himalaya Assessment: Mountains, Climate Change, Sustainability and People, P. Wester, A. Mishra, A. Mukherji, and A. B. Shrestha, Eds., Springer International Publishing, 57-97
- [60] Kristensen, Peter (2004). The DPSIR Framework .National Environmental Research Institute, Denmark Department of Policy Analysis European Topic Centre on Water, European Environment Agency Email: Paper presented at the 27-29 September 2004 workshop on a comprehensive / detailed assessment of the vulnerability of water resources to environmental change in Africa using river basin approach. UNEP Headquarters, Nairobi, Kenya.
- [61] Liebrand, J. (2014). Masculinities among irrigation engineers and water professionals in Nepal. Ph.D. thesis, Wageningen University, Wageningen, NL. ISBN: 978-94-6257-141-9.
- [62] Local Governance Act 2017, MoFAGA, Government of Nepal.
- [63] Lohani, S. N. (2007). Climate change in Nepal – shall we wait until bitted consequences?. *Journal of Agriculture and Environment*, 8, 38-45.
- [64] Mahat, Ishara. (2004). Rural Energy Planning and Policies in Nepal: Gender Perspectives. *Journal of Resources, Energy and Development* 1 (1): 19–41.
- [65] Malla, G., (2008). Climate Change and its impact on Nepalese Agriculture, Vol. 9, *The Journal of Agriculture and Environment*, June, 2008, 62-71.
- [66] Mehta, M. (2009). Reducing disaster risk through community resilience in the Himalayas. *Women, Gender and Disaster: Global Issues and Initiatives*, 57-74.
- [67] Mertz, O., Halsnaes, K., Olesen, J. E., and Rasmussen, K. (2009). Adaptation to climate change in developing countries. *Environmental management*, 43(5), 743-752.
- [68] Ministry of Education, UNICEF, UNESCO. 2010. A Study on Gender Responsive Budgeting, Ministry of Education, Government of Nepal, UNICEF and UNESCO. Nepal. https://un.org.np/sites/default/files/doc_publication/Situation%20analysis%20of%20GRB%20in%20the%20education%20July%202019_2011.pdf
- [69] MoALD (2016/2017). GESI Integration Annual Progress Report, Fiscal Year 2016/2017. Ministry of Agriculture and Livestock Development (MoALD), Government of Nepal.
- [70] MoALD (2018/2019). GESI Integration Annual Progress Report, Fiscal Year 2018/2019.
- [71] MoALMC (2018). Impact of Climate Finance in Agriculture on the Poor: MoALMC and UNDP Kathmandu.
- [72] MoF. (2008). Gender Responsive Budget. Gender Responsive Budget Committee. Budget and Program Division. Ministry of Finance (MoF). August 2008.
- [73] MoF (2017). Climate Change Financing Framework: A roadmap to systematically strengthen climate change mainstreaming into planning and budgeting. Ministry of Finance (MoF), Government of Nepal, Kathmandu, Nepal.
- [74] MoFAGA. (2019). Provincial and Local Governance Support Program (July 2019/20 - July 2022/23), Program Document, July 2019. MoFAGA.
- [75] MoFE (2018a). Nepal's National Adaptation Plan (NAP) Process: Reflecting on Lessons Learned and the Way Forward. Ministry of Forest and Environment (MoFE), Government of Nepal, the NAP Global Network, Action for Climate Today (ACT) and Practical Action Nepal.
- [76] MoFE. (2018b). Nepal National REDD+ Strategy. 2018.
- [77] MoFE (2018c). GESI Assessment, Forest Investment Plan (FIP). Ministry of Forest and Environment (MoFE), REDD Implementation Centre, (2018). Supported by World Bank/FCPF.
- [78] MoFE 2019. National Climate Change Policy 2019, Ministry of Forest and Environment (MoFE), Government of Nepal.
- [79] MoFE (2020). Mapping of responsibilities of key institutions in the planning, implementation, monitoring and research on climate change adaptation over the medium and long term in Nepal. Building Capacity to Advance National Adaptation Plan Process in Nepal: Ministry of Forests and Environment (MoFE), Government of Nepal.
- [80] MoFSC (2015). State of Nepal's Forest. Department of Forest Research and Survey, Ministry of Forest and Soil Conservation. Government of Nepal. December 2015.
- [81] MoFSC, REDD Implementation Centre, (2018). GESI Assessment, Forest Investment Plan (FIP). Supported by World Bank/FCPF.
- [82] MoHA (2019). Nepal Disaster Report 2019. (2019). Ministry of Home Affairs (MoHA), Government of Nepal, June 2019.
- [83] Mohideen, Reihana. (2020). Gender-Inclusive Energy: The Nepal Case. In *Women and the Energy Revolution in Asia*, 39–58. Singapore: Springer Nature Singapore Pte Ltd.
- [84] MoHP (2018). Gender Equality and Social Inclusion Strategy of the Health Sector, 2018. Ministry of Health and Population, Government of Nepal.
- [85] Mol (2017). Targeting, Gender Equality and Social Inclusion Strategy/Guideline, Ministry of Industry (Mol), Rural Enterprises and Remittances Project SAMRIDDHI, Government of Nepal.
- [86] MoLJPA. (2016). Constitution of Nepal, 1st Amendment, 28 February, 2016, English Translation.
- [87] MoPIT (2017). Gender Equality and Social Inclusion Operational Guidelines 2017, Ministry of Physical Infrastructure and Transport (MoPIT), Government of Nepal.
- [88] MoUD. (2013). Gender Equality and Social Inclusion Operational Guidelines 2013, Ministry of Urban Development (MoUD), Government of Nepal.
- [89] Murali, R., Brahmachari, D., & Govindan, M. (2019). Influence of Electricity Access on Gender: Evidences from Nepal. The Energy and Resource Institute, Munich Personal RePEc Archive. https://mpr.ub.uni-muenchen.de/107282/1/MPPA_paper_107282.pdf
- [90] National Planning Commissions (NPC). (2012): Climate Change Budget Code, Documenting the National Process of Arriving at Multi-sectoral Consensus, Criteria and Method, Published by Government of Nepal, National Planning Commission with support from UNDP/UNEP in Kathmandu, Nepal in September, 2012.
- [91] National Planning Commissions (NPC) (2017). Fourteenth three-year plan (2017-2020). Kathmandu: National Planning Commission (NPC), the Government of Nepal.
- [92] National Planning Commissions (NPC) (2018). Nepal Multidimensional Poverty Index 2018: Analysis Towards Action. National Planning Commission, Government of Nepal. URL: https://www.npc.gov.np/images/category/Nepal_MPI.pdf
- [93] National Planning Commissions (NPC) (2019). Fifteenth plan (2020 - 2024) (in Nepali). Katmandu: Government of Nepal, National Planning Commission, Singha Durbar, Kathmandu Nepal.
- [94] National Planning Commissions (NPC). (2020). Nepal's Sustainable Development Goals. Progress Assessment Report 2016–2019. Government of Nepal
- [95] NEA (2020). Gender Equality and Social Inclusion Strategy and Operational Guidelines 2020, Nepal Electricity Authority (NEA), Government of Nepal.
- [96] Nepal (2014). Second National Communications to the United Nations Framework Convention on Climate Change. <https://unfccc.int/sites/default/files/resource/nplnc2.pdf>
- [97] Nibanupudi, H. K., and Khadka, M. (2015). Gender and Disaster Resilience in the Hindu Kush Himalayan Region. In *Mountain Hazards and Disaster Risk Reduction* (pp. 233-249). Springer Japan.
- [98] Nightingale, Andrea J. (2016). Participating or Just Sitting In? The Dynamics of Gender and Caste in Community Forestry. *Arkleton Centre for Rural Development Research, University of Aberdeen, United Kingdom. Journal of forest and livelihood* vol. 2 (1).
- [99] Nightingale, A.J., Siri Eriksen, Marcus Taylor, Timothy Forsyth, Mark Pelling, Andrew Newsham, Emily Boyd, Katrina Brown, Blane Harvey, Lindsey Jones, Rachel Bezner Kerr, Lyla Mehta, Lars Otto Naess, David Ockwell, Ian Scoones, Thomas Tanner & Stephen Whitfield (2019): Beyond Technical Fixes: climate solutions and the great derangement. *Climate and Development*. DOI: 10.1080/17565529.2019.1624495 <https://doi.org/10.1080/17565529.2019.1624495>
- [100] Nursey-Bray, M. (2015). Gender, Governance, and Climate Change Adaptation. *Handbook of Climate Change Adaptation*, 1077-1090.
- [101] Okali, C., and Naess, L. O. (2013). Making sense of gender, climate change and agriculture in sub-Saharan Africa: creating gender responsive climate adaptation policy. *Future Agricultures Working Paper*, 57.
- [102] Onta, N., and Resurreccion, B. P. (2011). The role of gender and caste in climate adaptation strategies in Nepal: emerging change and persistent inequalities in the far-western region. *Mountain Research and Development*, 31(4), 351-356.
- [103] Oparaocha, S., & Dutta, S. (2011). Gender and energy for sustainable development. *Current Opinion in Environmental Sustainability*, 3(4), 265-271.
- [104] Panta, S. K., & Resurrección, B. P. (2014). Gender and caste relations amidst a changing political situation in Nepal: Insights from a farmer-managed irrigation system. *Gender, Technology and Development*, 18(2), 219-247.
- [105] Paudyal, R., Loskot, P., Nepal, R., Parajuli, R., & Khadka, S. K. (2019). Mitigating the current energy crisis in Nepal with renewable energy sources. *Renewable and Sustainable Energy Reviews*, 116, 109388.
- [106] Piya, L., Maharjan, K. L., & Joshi, N. P. (2019). Climate Change in Nepal: Policy and Programs. In *Socio-Economic Issues of Climate Change* (pp. 35-51). Springer, Singapore.
- [107] Pradhan, M. (2014). Perspectives on Multiple Dimensions and Intersections in Social Inclusion. In *Perspectives on Social Inclusion and Exclusion in Nepal*. Central Department of Sociology/Anthropology, TU, Kathmandu, Nepal.
- [108] Resurrección, Bernadette P.; Chanda Gurung Goodrich; Yiching Song; Aditya Bastola; Anjal Prakash; Deepa Joshi; Janwillem Liebrand; and Shaheen Ashraf Shah. (2019). In the Shadows of the Himalayan Mountains: Persistent Gender and Social Exclusion in Development. In P. Wester, A. Mishra, A. Mukherji, A.B. Shrestha (eds) *The Hindu Kush Himalaya Assessment – Mountains, Climate Change, Sustainability and People*. Springer, Cham

- [109] Ribot, J. (2010). Vulnerability does not fall from the sky: toward multiscale, pro-poor climate policy. *Social dimensions of climate change: Equity and vulnerability in a warming world*, 2, 47-74
- [110] Ruth, M. (Ed.). (2009). *Distributional impacts of climate change and disasters: Concepts and cases*. Edward Elgar Publishing.
- [111] Scott, C. A., Zhang, F., Mukherji, A., Immerzeel, W., Mustafa, D., & Bharati, L. (2019). Water in The Hindu kush himalaya. In *The Hindu Kush Himalaya Assessment* (pp. 257-299). Springer, Cham.
- [112] Sharma, Shankar Prasad. (2019). Nationally Determined Contribution (NDC) implementation in Nepal: A Pathway towards Climate Friendly Development. Clean Energy Nepal.
- [113] Shrestha, P., Lord, A., Mukherji, A., Shrestha, R. K., Yadav, L., & Rai, N. (2016). Benefit sharing and sustainable hydropower: Lessons from Nepal. ICIMOD Research Report 2016/2. Kathmandu: Nepal. Shukla, A., & Sharma, K. R. (1997). *Participatory irrigation management in Nepal: A monograph on evolution, processes and performance*.
- [114] Shrestha, Gitta and Floriane Clement. (2019). Unraveling gendered practices in the public water sector in Nepal Water Policy 21 (2019) 1017–1033. International Water Management Institute (IWMI). Kathmandu, Nepal.
- [115] Shrestha, Srijana and Dibya Devi Gurung. (2020). Gender and social inclusion in climate change: Issues and opportunities in federal Nepal. Proceedings of National Workshop on Gender Integration in Forestry. REDD Implementation Cell, Ministry of Forest and Environment, Government of Nepal. July 2020
- [116] Skinner, E. (2011). *Gender and climate change: Overview report*. Bridge.
- [117] Smit, B., and Piliifosova, O. (2003). Adaptation to climate change in the context of sustainable development and equity. *Sustainable Development*, 8(9), 9.
- [118] SNV. (2012). *Renewable (Rural) Energy Policies Gender Equality and Social Inclusion Analysis Report*. Prepared for AEP/ESAP.
- [119] SNV. (2018). *Gender and Social Exclusion in Access to Water and Sanitation Services in Nepal*. Published by Sustainable Sanitation and Hygiene for All (SSH4A) Project.
- [120] Souza, K., Kituyi, E., Harvey, B., Leone, M., Murali, K. S., and Ford, J. D. (2015). Vulnerability to climate change in three hot spots in Africa and Asia: key issues for policy-relevant adaptation and resilience building research. *Regional Environmental Change*, 15(5), 747-753.
- [121] SRPC (2018). *Shadow Report on the Sixth Periodic Report of Nepal on CEDAW*, CEDAW Shadow Report Preparation Committee (SRPC), 2018. https://www.insec.org.np/wp-content/uploads/2019/01/RS74310_Shadow-Report-on-Sixth-Periodic-Report-of-Nepal-on-CEDAW-2018.pdf
- [122] Stern, N. (2006). *Stern review report on the economics of climate change*
- [123] Subedi, Yuba Raj. (2017). *An Analysis of the Agricultural Development Strategy of Nepal (ADS 2015-2035) from Civil Society Perspective*.
- [124] Sugden, Fraser. (2014). *A Framework to Understand Gender and Structural Vulnerability to Climate Change in the Ganges River Basin: Lessons from Bangladesh, India and Nepal*. IWMI Working Paper 159. IWMI.
- [125] The World Bank. (2019). *Policy Note for the Federalism Transition in Nepal*. August 2019.
- [126] The World Bank. (2020). *Nepal Development Update 2020: Post-pandemic Nepal – Charting a resilient recovery and future growth directions*. <http://documents1.worldbank.org/curated/en/473551595429740654/pdf/Nepal-Development-Update-Post-Pandemic-Nepal-Charting-a-Resilient-Recovery-and-Future-Growth-Directions.pdf>
- [127] The World Bank Group and the Asian Development Bank (2021). *Climate Risk Country Profile: Nepal (2021)* <https://www.adb.org/sites/default/files/publication/677231/climate-risk-country-profile-nepal.pdf> (Accessed 16th April 2021).
- [128] Tribhuvan University and USAID. 2018. *The State of Social Inclusion in Nepal: Caste, Ethnicity and Gender -Evidence from Nepal Social Inclusion Survey 2018*. Central Department of Anthropology (CDA), Tribhuvan University (TU), Kirtipur, Kathmandu, Nepa. US Agency for International Development, Nepal (USAID/Nepal)
- [129] Udas, Pranita Bhushan. (2014). *Gendered Participation in Water Management in Nepal Discourses, Policies and Practices in the Irrigation and Drinking Water Sectors*. Thesis submitted in fulfillment of the requirements for the degree of doctor at Wageningen University. 9 December 2014.
- [130] Udas, Pranita B., Deepak Dorje Tamang, Aparna Unnic, Menaka Hamala, Kriti Shresthad and Anju Pandit (2019). Basin level gendered vulnerabilities and adaptation: A case of Gandaki River Basin. In: Goodrich, C. G; Udas, P. B. & Prakash, A. (eds) *Conceptualizing and Contextualizing Gendered Vulnerabilities to Climate Variability in the Hindu Kush Himalayan Region*. Special Issue of *Environmental Development*, ELSEVIER (pp. 43-54). <https://doi.org/10.1016/j.envdev.2019.01.001>
- [131] UGC (2019). *Education management information system / report on higher education 2018/19 AD (2075/76 B.S.) Nepal*. <https://www.ugcnepal.edu.np/uploads/upload/1BmXHe.pdf>
- [132] UNDP (2019). *Human Development Report 2019: Inequalities in Human Development in the 21st Century*, Nepal. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/NPL.pdf
- [133] UNDP Nepal. (2020). *Protecting Livelihoods and Assets at Risk from Climate Change Induced Flooding in Glacial River Basins of Nepal*. Gender Assessment Report. Prepared for submission to Green Climate Fund. Unpublished.
- [134] UNFP (2017). *Population Situation Analysis of Nepal (With Respect to Sustainable Development)*. <https://nepal.unfpa.org/sites/default/files/pub-pdf/Nepal%20Population%20Situation%20Analysis.pdf>
- [135] UN Women and Ministry of Women, Children and Social Welfare (MOWCSW), Government of Nepal. (2017). *Nepal Gender Equality and Social Inclusion Profile*.
- [136] Vincent, K., Vnaji, L., Aubry, A., Mershon, A., Nyandiga, C., Cull, T., and Banda, K. (2010). *Gender, climate change and community-based adaptation: A guidebook for designing and implementing gender sensitive community-based adaptation programmes and projects*.
- [137] WOCAN. (2017). *Gender Integration in REDD+ and the ERPD in Nepal, Assessment Report and Gender Action Plan*. Prepared by Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN), For Forest Carbon Partnership Facility/World Bank. June 2017.

Annexes

List of people consulted and interviewed (telephone and e-mail)

SN	Name	Agency and designation	Female	Male	Caste/ethnicity			
					Brahmin/ Chhetri	Dalits	Janjati/ IP	Others
1.	Nanu Ghatane	Grassroots Women Leader, Kavre	X			X		
2.	Nima Lama	Grassroots Women Leader, Kavre	X				X	
3.	Shova Karki	Grassroots Women Leader, Sindhuli	X		X			
4.	Daliya Devi Sardar	Grassroots Women Leader, Koshi Tappu	X			X		
5.	Sirish Pun	MoALD, Senior Agri-economist, Under-secretary and Gender Focal Point		X			X	
6.	Sindhu Dhungana	Secretary, MoITFE, Bagmati Province (former GFP)		X	X			
7.	Radha Wagle	Joint Secretary, Chief of Climate Change Division, MoFE	X		X			
8.	Srijana Shrestha	Under Secretary/Forester, Climate Change Management Division, MoFE	X				X	
9.	Keshab Raj Gautam	Under Secretary, and Team Leader, NDC Formulation Process, MoFE		X	X			
10.	Shreejana Bhusal	Section Officer, MoFE	X		X			
11.	Barun Gurung	Gender Expert, WOCAN, USA		X			X	
12.	Manohara Khadga	Country Representative, IWMI Nepal	X		X			
13.	Rasu Manandhar	Program Officer, UNDP Country Office Nepal	X				X	

14.	Apar Paudel	Program Officer, UNDP Country Office, Nepal Program Officer		X	X			
15.	Manjeet Dhakal	Climate Analytics, Consultant - NDC (technical report preparation)		X	X			
16.	Nigma Tamrakar	Independent GESI Expert/Consultant (Energy and Agriculture)	X				X	
17.	Manorama Sunwar	Program Officer, Hariyoban, Care Nepal	X				X	
18.	Kanchan Lama	Independent GESI Expert/Consultant (Forestry and Agriculture)	X				X	
19.	Ek Rana Magar	Independent Climate Change Expert/Consultant					X	
	Total	19	12	7	8	2	9	



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