BHUTAN
GENDER ANALYSIS
EXECUTIVE SUMMARY
ABOUT UNDP
UNDP’s work on climate change spans more than 140 countries and USD $3.7 billion in investments in climate change adaptation and mitigation measures since 2008. With the goal to foster ambitious progress towards resilient, zero-carbon development, UNDP has also supported the implementation of the Paris Agreement on Climate Change by working with countries on achieving their climate commitments or Nationally Determined Contributions (NDCs).

THE UNDP NDC SUPPORT PROGRAMME
The NDC Support Programme provides technical support for countries to pursue a “whole-of-society”, integrated approach that strengthens national systems, facilitates climate action and increases access to finance for transformative sustainable development. The programme helps countries address these financial barriers by deploying a structured approach for scaling up sectoral investments and putting in place a transparent, enabling investment environment. Beyond direct country support, UNDP facilitates exchanges and learning opportunities on NDC implementation at the global and regional level by capitalizing on our close collaboration with the UNFCCC and other strategic partners.

GENDER INITIATIVE
Coordinating and connecting the interlinked processes of climate change and gender equality, by using NDCs as a platform, offers an opportunity to promote inclusive and successful development outcomes. The NDC Support Programme is supporting the work in 17 countries to ensure that gender equality aspects are factored into the NDC processes by leveraging analysis, strengthening institutional mechanisms, ensuring gender-responsive climate actions and disseminating best practices to enhance national-level capacities.

The Programme, which works in contribution to the NDC Partnership, is generously supported by the German Federal Minister for the Environment, Nature Conservation, and Nuclear Safety (BMU), the German Federal Ministry of Economic Cooperation and Development (BMZ), the European Union and the Government of Spain.

To get an understanding of gender issues in the context of climate change and related policy responses in Bhutan a study on gender and climate change in the NDC select sectors of agriculture, energy and waste was undertaken. The study findings will set a basis for understanding gender and climate linkages while enabling the incorporation of the gender approach into climate change in the three sectors. It will assist the Royal Government of Bhutan and other stakeholders to achieve the country’s vision of carbon-neutral, resilient and sustainable development in a gender-responsive way. The study was led by the National Commission for Women and Children (NCWC) and National Environment Commission (NEC) with support from UNDP Bhutan Country Office.

DISCLAIMER
The Gender Analysis Summary has included a few additional statistics to provide contextual information to facilitate a better understanding of the context/situation for a broader audience, however, statements/recommendations have not been altered from the Gender Analysis.
I. BACKGROUND

Bhutan is a small, landlocked country, located in the fragile eastern Himalayan ecosystem. Climate change is not just an environmental problem here, but a serious challenge to sustainable development and the livelihoods of its people. Bhutan is a net sink of Greenhouse Gases (GHGs) because of its large forest coverage (which stands at 71 percent of total land area), relatively low levels of industrial activity, and almost 100 percent electricity generation from clean renewable hydropower. Nonetheless, its emission level is rising gradually, with an almost 33 percent increase in recorded GHG emissions between 2000-2015. With increasing pressure on existing forest cover from economic development, and rising GHG emissions from key sectors such as industry, transport and waste, Bhutan’s standing as a carbon neutral country is at risk.

As a signatory to the Paris Agreement, Bhutan has reaffirmed its commitment to carbon neutrality. This was reflected in the country’s first Nationally Determined Contribution (NDC) of 2015, and the set of mitigation and adaptation actions it provided. At the domestic level, Bhutan has established a climate change legal and strategic framework, as laid out in the recently adopted Climate Change Policy (2020), to support the implementation of the country’s NDC. Bhutan’s climate targets are currently being enhanced as part of the NDC communication process to the UNFCCC, in order to integrate cross cutting issues like gender considerations. As such, a Gender Analysis was conducted that looked into the gender–climate change nexus in Bhutan. The analysis explored the gender differentiated impacts of climate change by looking at gender inequalities between gender groups, in relation to their access to resources, participation, and benefits. It analyzed the extent to which gender issues have been considered within Bhutan’s policy, legal, and institutional frameworks, and their suitability for supporting gender-responsive climate action.

It focused on the key NDC sectors of agriculture, energy and waste, given the increase in present and projected emissions from these sectors. In each sector, the analysis explored the role of gender, the challenges to women’s participation and empowerment, and opportunities for supporting gender responsive measures. To support the gender analysis, extensive interviews were conducted, with 600 households surveyed across 10 districts in Bhutan. The gender analysis provides recommendations on governance, planning, and policy that aims to strengthen the integration of gender equality into NDC planning and implementation processes.
II. GENDER AND CLIMATE

In Bhutan, as weather patterns change, the country is seeing a rise in extreme weather events and natural disasters such as floods, flash floods, landslides, droughts, forest fires, and hail storms. Of particular concern is the melting of glaciers and formation of glacial lake outburst floods (GLOFs). These can result in flooding that threatens human lives and settlements, biodiversity, infrastructure and water supply in the region. In addition to natural disasters, climate change is also increasing water insecurity. This particularly affects remote communities who are dependent on local watersheds for their food production and household needs, as well as for hydropower generation.

According to those surveyed for the Gender Analysis, the impacts of climate change are already being felt. Over 90 percent of respondents reported experiencing warmer and more unpredictable weather, while more than three-quarters of the survey population were experiencing “increased landslides” and “hail storms.” Over 80 percent reported that climate change had affected the availability of natural resources on which they depend for their livelihood, and more than a third of respondents felt their household wasn’t well prepared in the event of a disaster.

However, these changes don’t impact all demographic and social groups equally. For women, the way they experience climate change is shaped by social and cultural norms and practices that influence gender roles, responsibilities and activities. They can also affect access to, and control over assets (including natural resources, technologies, financial resources), mobility, education and training, and relevant information. Additionally, vulnerability is shaped by empowerment and decision-making power, which for women in Bhutan, is not always guaranteed. In turn, gender differences impact climate change vulnerability, participation in climate change decision-making and action, and diverse levels of benefit-sharing.

In Bhutan, even though women have gained significant rights in recent times, gender equality remains a mixed success. Important progress has been made for women and girls, with gender parity in education (up to secondary level), reductions in maternal mortality, and increasing participation in society and work. At the same time, while Bhutan is a signatory to many international gender conventions and agreements, and equal rights are enshrined in the country’s Constitution and other legal frameworks, there are still areas where gender inequalities persist. These include unequal land ownership, women’s low representation in public and political institutions. Only 14.9 percent of parliamentarians are women and 10 percent of ministerial position are held by women—which translates to 1 woman candidate. Furthermore, women are much less represented than men beyond secondary education—especially in science, technology, engineering and mathematics (STEM) subjects: there are twice as many men enrolled in STEM-specialized colleges than women. Women also experience a higher unemployment rate, gender payment gaps, and gender-based violence: 60 percent of women are part of labor force participation as compared to 76.8 percent of men.

In rural households, daily tasks are divided according to societal gender roles and expectations. For example, women are expected to fetch drinking water and collect fuelwood, while men are responsible for irrigation water. The survey found that while both sexes are involved in making household decisions, there are clear differences based on gender roles for some of the decisions. For instance, women are more heavily involved in decisions related to ‘household food expenditure’ and ‘minor household non-food expenditures’, whereas men are more heavily involved in decisions like ‘major
farm investments’, ‘buying and selling of land’, ‘whether or not members of the household engage in salary or wage employment’, and ‘major household expenditure’ on durable goods.

The survey also identified that men spend more time outside the home than women, while women spend more time on household tasks than men. A study conducted in 2019 in Bhutan found that women perform 71 percent of unpaid household and care work, which is 2.5 times more than what men do. Men, on the other hand, spend 2.5 times more time on paid work than women. While overall, women’s unpaid and domestic work is largely unrecognized, if it were assigned a value, the study found that this work would amount to 10 to 16 percent of GDP.

Figure 1: Household time contribution of men and women

For rural women, their responsibilities in supporting household wellbeing and (subsistence) crop and livestock production mean that they depend on natural resources such as water, non-wood forest products, and fuelwood energy sources. Their natural resource-related household tasks are particularly impacted by changing rainfall patterns, rising temperatures and extreme weather events. Resulting droughts, flooding, GLOFs and changing agro-ecosystems not only directly impact personal health and security, but also increase time and labour burdens for women as they carry out livelihood security tasks, including those for food, water and energy. This limits not only women’s leisure time, but also their ability to attend meetings, trainings, and access to (paid) quality work. This is particularly the case in rural areas with mountainous terrain.

It is also important to note that increasing tensions and pressures in households (including increased alcohol consumption) is leading to rising rates of violence against women and girls (VAWG), sexual exploitation, trafficking, and early marriages. Due to climate change and deteriorating agro-ecological conditions, many men have been forced into out-migration in search of off-farm employment, increasing the number of women-headed households and the burden of responsibilities that women carry. About half of the surveyed population strongly agreed that ‘climate change increases women’s workload more than men’s’, and that ‘climate change impacts women more than men’. 
III. RELEVANT SECTOR(S)

AGRICULTURE

The agricultural sector is integral to livelihoods in Bhutan, employing 51.1 percent of the country’s labour force.²³ For more than 60 percent of Bhutan’s population that live in rural areas, the majority are engaged in subsistence crop and livestock production, and their livelihoods rely on forest products. Women’s participation in the agricultural sector is substantial at 63.2 percent, compared to 46.4 percent for men.²⁴ A transformation from traditional subsistence to a more market-based agriculture is taking place across the country, as illustrated by the promotion of organic farming practices. Nonetheless, the agricultural sector is a prominent GHG emitter, having contributed to 14.5 percent of total emissions in 2015.²⁵

In addition to the sector’s contributions to emissions, agriculture is also extremely vulnerable to the effects of climate change. Challenges such as loss of agro-biodiversity, loss of agricultural land, increased human-wildlife conflicts, and farm labour shortages are exacerbated by climate change. People surveyed mentioned that while half of farmers are women, the feminization of agriculture was taking place due to out-migration of men. In 2017, almost 60 percent of employed women were active in agriculture, as compared to more than 34 percent of employed men.²⁶

While women have access to land and other productive resources, they have less control over these resources than men. Data shows 48 percent of land is owned by men, 47.3 percent by women and 4.7 percent to institutions and community land holdings.²⁷ Even when they are the main land owners, women often receive limited economic benefits from land.²⁸ This is because, in Bhutan, land is often not used as collateral for lending and that decision-making power over land often remains with men.²⁹ To compound the situation, gender roles and societal expectations limit women’s access to and use of financial resources, and the World Bank has found that this was cited as an obstacle for women-owned businesses.³⁰ Women’s lower literacy rates, standing at 63.9 percent in comparison to 78.1 percent for men, may also contribute to this situation.³¹

A UNDP survey to back the analysis found that 84 percent of rural men are aware of climate-smart and -resilient agriculture (CSA/CRA) initiatives,³² in comparison to only 68 percent of rural women.³³ Not surprisingly, a higher proportion of men (83 percent) than women (73 percent) have access to CSA/CRA

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information, training, and inputs to facilitate climate-smart agriculture.\textsuperscript{34} Access to decision-making on CSA/CRA support systems is also different at 25.5 percent for men and at 11.7 percent for men.\textsuperscript{35} As such, while the survey findings indicate that a higher proportion of women participate in agricultural related activities, reported access to training in and access to information on CSA remains lower among women. Regardless of gender, over 90 percent of the survey respondents, reported the need for CSA/CSR support systems, including access to information, training, appropriate technologies, inputs, and decision-making.\textsuperscript{36}

The survey also showed that there is an urgent need to empower and build the leadership of women farmers, and to enhance their communication skills. This can strengthen their voice and decision-making abilities in (local) governance and farming decisions, including those related to CSA/CRA.

**ENERGY SECTOR**

Bhutan's energy production depends on a mix of energy sources including fossil fuels (21 percent), biomass (36 percent) and hydropower (28 percent) (Figure 2).\textsuperscript{37} Energy use is highest in the industrial sector at 37 percent, followed by 33 percent in the construction, 19 percent in transport, and two percent by agriculture and auxiliary\textsuperscript{38}. Electricity access has increased from 30 percent in 2000, to about 100 percent now, with almost all of Bhutan’s electricity generated through run-off on-grid hydropower.\textsuperscript{39}

**Figure 2**

- **Electricity**: 180,092 TOE, 28%
- **Coal**: 97,567 TOE, 15%
- **Petroleum Products**: 138,192 TOE, 21%
- **Biomass**: 234,369 TOE, 36%


- Target CC mitigation and adaptation programmes, through CSA/CRA, towards the needs and priorities of rural women and men, minimising the shocks induced by climate change. Enhance rural women’s access to and control over productive resources of good quality, such as land and water sources, agrobiodiversity and livestock, as well as labour and extension services.
- Ensure rural women’s access to sustainable technologies, inputs, credit and financial services for CSA/CRA, including organic agriculture. Promote access to agro-meteorological information and Climate Information Systems (CIS) through mobile phone/applications or radio in national and local languages.
- Promote awareness of women and men farmers (including groups and cooperatives) on climate smart and resilient agriculture, and gender-differentiated contributions, through training, extension services, mass media and social media.
- Facilitate women and men’s equal participation in and access to benefits from CSA/CRA activities. Support the empowerment and leadership-building of rural women, and their full and meaningful involvement in the development and implementation of agricultural mitigation and adaptation activities—including CSA/CRA and organic agriculture. Enable rural women to participate actively in relevant groups such as farmers groups, cooperatives, forests groups, and water-user groups.
Due to economic growth energy emission have increased from 26 mil tons (256.125 Gg CO$_2$) in 2000 to 0.71 mil tons (707.917 Gg CO$_2$) in 2015 an increase in 173.195 percent. During that period, GHG emissions from the industrial sector increased from 0.22 to 0.79 million tons of CO$_2$. In 2015, GHG emissions from the transport sector stood at 60 percent of the total energy-related GHG emissions, whereas manufacturing industries and construction accounted for 20.88 percent.

Bhutan has pledged to remain carbon neutral and strives for low-carbon development. They're advancing renewable energy, energy efficiency, and conservation, in part through the use of improved cooking stoves and LEDs. Development of hydropower and alternative renewable energy like solar (including the distribution of solar panels and solar farms), biogas, and wind energy is promoted.

Women's energy demands differ from men’s. Societal roles place women in charge of housework, including cooking and heating, and many women rely largely on fuelwood / biomass for these tasks. However, the survey showed that both men and women have roles to play in supporting energy supply as illustrated in Table 1.

<table>
<thead>
<tr>
<th>TYPE OF ENERGY</th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuelwood collection</td>
<td>45%</td>
<td>30%</td>
</tr>
<tr>
<td>Liquified petroleum gas (LPG)</td>
<td>55%</td>
<td>21%</td>
</tr>
<tr>
<td>Kerosene</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>Biogas</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Solar installation</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Modern sustainable energy services—on-grid electricity, biogas and solar power—when used alongside fuel- and labour-saving technologies such as improved cookstoves, can reduce indoor pollution and have a positive impact on women’s health and reduce drudgery. But these technologies are not widespread, and not easily accessible, particularly for (individual) rural women. Over half of those surveyed were aware of biogas and solar, while a quarter were aware of wind power as an option for sustainable renewable energy. Only a very small proportion of respondents reported meeting their household energy requirements with biogas and solar.

More men than women reported having access to information about sustainable renewable energy.

On receiving support to save energy or promote the use of sustainable renewable energy, 52 percent felt supported in having ‘access to information’. Less than 10 percent reported receiving support with ‘access to technical training;’ ‘access to appropriate technologies’, ‘access to finance’, and ‘access to decision-making’. In all apart from ‘access to technical training’, slightly more women than men felt they received support.

Most employees in the energy sector are men, and women and men are often impacted differently by energy projects. In STEM education, women are still a minority but their participation is increasing. In the Cottage and Small Industry sector, sustainable energy production and consumption offer important opportunities for enhancing efficiency, sustainability and women’s empowerment.

In Bhutan, energy accounts for 18.56 percent of the total GHG emissions, of which transport represents 60 percent of GHG emissions. The increased import of fossil fuels and its increasing share of GHG emissions is a direct result in the import of internal combustion engine vehicles. For example, the number of registered vehicles in Bhutan increased by 7.5 percent and 6 percent in the years 2018-2019 and 2019-2020. The sector also causes localized particulate air pollution and is responsible for emission of nitrogen dioxide and carbon back, a precursor to GHGs. Therefore, the sector forms an important area for climate change mitigation and adaptation including the promotion of low emission vehicles, public transport and improvement of public transport.

We know that transport is not gender neutral. Improved transport services and pedestrian facilities are critical to women’s mobility, especially in times of disaster. Economic, social and livelihood status greatly influence mobility, and women and men experience this differently. Literature suggests that mobility for women is more complex than for men. Overall, women have inferior access to transportation compared to men, and travel with heavier physical loads because of their multiple domestic tasks and responsibilities. Women use urban public transportation more than men with a preference for taxis (34.5 percent) over buses (18.3 percent) and other modes of transport.

This preference is explained by women’s concerns for their personal safety while using urban transportation, as evidenced by the installation of CCTV. Similarly, pedestrians are exposed to dangerous situations, and women pedestrians in particular might be exposed to (sexual) harassment.
Employment in the transport sector is largely dominated by men, and only few women are engaged in local decision-making about roads. However, rural women carry a disproportionate share of work in the maintenance of farm roads. Their work in road construction is often hard and unsafe, especially in deteriorating weather conditions like heat stress and road flooding. There is only a small number of women taxi drivers (only 35 of the 2,200 registered taxi drivers in 2017 were women) although, in the government’s promotion of electric taxis, women drivers are given preference to benefit from subsidies.

**SUSTAINABLE ENERGY CONSUMPTION AND PRODUCTION RECOMMENDATIONS**

- Ensure equal participation of women and men in sustainable energy use, awareness-raising and promotion, including by recognition and empowerment of women as agents of change for energy efficiency inside and outside the household. Promote women’s increased participation in decision-making, supply and use of renewable energy technologies (RETs)—like solar for lighting and heating, biogas plans, improved cook stoves and improved heating stoves.
- Decrease women’s workloads and explore options for investments in and subsidies for programmes promoting use of improved cookstoves and other labour-saving energy-efficient devices. Enhance women’s access to finance, technical training, and appropriate sustainable technologies for promoting the use of sustainable renewable energy, contributing to the enhancement of women’s welfare, environmental health and gender equality.
- Support women’s participation in sustainable energy-related livelihoods and entrepreneurships, advancing their economic opportunities by targeting women’s organisations and enterprises as possible producers and suppliers of renewable energy products.
- Increase women’s participation as employees, professionals and managers in the energy sector, and involve women’s organisations and gender expertise in energy planning, monitoring and evaluation.

**PROMOTING SUSTAINABLE TRANSPORT SYSTEMS RECOMMENDATIONS**

- Change the mindset that everybody needs a car, building on awareness campaigns that address the general public. Promote clean transport technology; sustainable public transport and energy efficiency in public infrastructure and monitoring; and explore and introduce alternative modes of transport, such as cable cars, water transport, electric mass transport and railways.
- Emphasize the role of public transport investments and its affordability in improving mobility and quality of life, in order to address gender issues and CCM/CCA, with clear gender and climate assessments. Induce gender-friendly public transport services through an inclusive transport policy.
- Ensure safety for women and girls on roads, in transport services, and public spaces. Enhance facilities for taxi stands, to create safe, affordable and accessible parking places. Strengthen and streamline women’s safety on the road.
- Explore and promote employment opportunities for, and entrepreneurship of women in sustainable transport services. Improve working conditions and guarantee better payment including in road construction. Build women’s capacity to drive electric vehicles (EVs), and give priority to women taxi drivers for subsidies on EV taxis.
WASTE SECTOR

In Bhutan, the amount of solid waste (including hazardous and toxic waste) is increasing alongside improvements in economic welfare, a more open market system, changing lifestyles, urbanization, and inadequate public awareness and advocacy. 172.16 MT solid waste is generated per day, which forms a small but growing contribution to GHG emissions (particularly CH4), especially solid waste disposal on land via landfills/dumps. In 2015, it accounted for 13.15 percent of GHG emissions, with wastewater handling responsible for 86.85 percent. Overall, the waste sector generated 3.32 percent of the total GHG emissions in the country. Figure 3 below illustrates increasing emissions from the sector.

Figure 3: GHG emissions from the waste sector (Gg of CO\textsubscript{2} Equivalent)

Waste management in urban centers takes the following steps: households dispose of their own waste; wet waste (59.20 percent) and dry waste (40.80 percent) can be disposed separately, although this is not always done. The waste is then collected by private companies and taken to transfer stations where it is further segregated; the remaining waste—often still solid and wet waste—is dumped in the landfill. Some paper, glass and plastics is recycled, mainly via scrap dealers. Waste management takes place through districts and municipalities, using private companies.

Waste prevention and sorting at source is key to successful waste management. However, men and women have different views and experiences. There’s quite a large gender gap in the waste sector, spanning the division of labour, power structures, payment, access to information and equipment, and unequal roles and opportunities. Women are the main handlers of household waste, sorting waste at source, home composting, and teaching children. They’re also active in prevention, reuse and recycling, often informally, and some become small waste recycling entrepreneurs.

Figure 4: Waste Hierarchy
Women are often associated with the upper four levels of the waste hierarchy as depicted in Figure 4, from prevention to recycling. However, this is mainly within the informal household or community sphere, which lacks social protection mechanisms. Men dominate the upper administration in the public and private sectors, as managers, planners, or machine operators in landfills. As most community leaders are men, the decisions on initiatives to improve local waste management at the community level (for example through composting and waste segregation training) are made by men. In the public and private sector, women are often absent at senior levels or as professionals (with some exceptions), and they work mainly as support staff. At the operational level, the gender division is even more clear: truck drivers are men, while waste segregation in transfer centers is mainly done by women; and waste pickers and sweepers are mostly women as well.

Most scrap dealers or repair shops are owned by men, but many women work at the scrapyard as recycling waste materials is mostly seen as a feminine activity. Women’s engagement in the waste sector is often more informal with less job security; workers are often unaware of adverse health effects of working with waste and protection is scarce. Some civil society organizations empower women in recycling businesses, prevention of waste, and composting.

In terms of awareness of waste management, 41.5 percent of those surveyed were aware of reusing waste, 29 percent of recycling waste, and six percent of proper disposal of waste. Almost 76 percent of respondents (71 percent men and 80 percent women) reported that they have access to sustainable waste management information. However, apart from access to information, there is a major discrepancy in support that respondents need, compared to the support they actually receive. For example, 96 percent need access to technical training, but only 12 percent receive this support; and while 98 percent need access to appropriate technology, only seven percent currently have it. The differences by gender are marginal.

SUSTAINABLE WASTE MANAGEMENT RECOMMENDATIONS

- Ensure women’s participation in all levels of waste management, including having more women in leadership roles. Promote women’s leadership and entrepreneurship in the waste sector, with Government, CSO and private sector support.
- Give urgent attention to the occupational health and safety aspects of dealing with waste, and provide workers in the waste sector with knowledge about and protection against the health effects of waste management. Train sweepers and all workers at the landfill and segregation sites about the health aspects of dumped waste. Ensure the provision of safety equipment for all workers in the sector.
- Enhance education, and conduct awareness-raising and advocacy on waste management—including on prevention, segregation and composting—using media in this process. Build appreciation for women’s and men’s work in this sector, and advocate for waste management (including along the waste value-chain) as a valued occupation. Raise awareness to change cultural notions of household management—including household waste management—as only women’s domain and responsibility.
- Improve support systems for sustainable waste management—particularly in terms of access to finance, technical training and appropriate technologies—and ensure their availability to local women and men. Set up and support community (women’s) groups to establish composting units.
IV. GOVERNANCE

The National Environment Commission (NEC) is a high-level autonomous agency of the Royal Government of Bhutan (RGoB) and is responsible for all environment-related issues in the country, including acting as the UNFCCC Focal Point, and overseeing the coordination and implementation of the NDC. The National Environment Commission functions as the National Climate Change Committee (NCCC), and considers policy and regulatory matters on climate change, providing overall guidance on climate actions. The Climate Change Coordination Committee (C4) is a multi-sector technical body that serves as a forum for discussion and coordination around climate change and has representation from all government organizations including the ministries/institutions of agriculture, transport, and energy (waste management has its own division within the NEC). The National Commission for Women and Children (NCWC) does not formally sit on the C4, however the chair of the NEC, the Foreign Minister, is also the chair of the NCWC.

In relation to gender, Bhutan’s institutional architecture is comprehensive. It includes the NCWC, Gender Focal Points (GFPs), and a Gender Expert Group (GEG), however human capacity and resources are still limited. The NCWC is the main coordinating body for gender-equality and child-sensitive policies, plans, projects and activities. The GEG was established to provide technical support to the NCWC. It’s comprised of six members with gender expertise from government, civil society and private agencies. The GEG members support the NCWC in reviewing policies from a gender perspective, and in conducting capacity-building programmes. The NCWC provides support in mainstreaming gender-responsive climate actions.

Gender Focal Points (GFPs) and Gender and Child Focal Points (GCFPs) are driving gender mainstreaming in ministries, districts, Civil Society Organizations (CSOs), and the private sector. The GFP play diverse roles, such as awareness-raising and sensitization on gender issues and initiatives, to create a gender-friendly workplace. They’re supported and trained by the NCWC. Since 2013, efforts have been made to trickle down the work of GFPs at district, local and community levels. Under the decentralization process, the local governments role in gender mainstreaming has been emphasized as well. Currently, 24 GCFPs (7 women, 17 men) are active in the districts and municipalities, and 32 GFPs (16 women, 16 men) at central level. At the local level, district/municipality Woman and Child Committee was established to increase provision of services to women and children in need of care and protection, and implement the Child Care and Protection Act (CCPA) and Domestic Violence Prevention Act (DVPA). However, there is still a need for more capacity-building, awareness-raising, and advocacy on gender issues at the local level.

The Ministry of Economic Affairs (MoEA) has several entities that are responsible for energy affairs. The Department of Renewable Energy (DRE) is the central agency for renewable energy. The Ministry of Information and Communication (MoIC) is responsible for managing emissions from the transport sector. While gender focal points exist in both ministries, gender capacity across the ministry remains low.

The National Environment Commission is the regulatory authority for environmental issues and is also responsible for waste management. It has a Waste Management Division (WMD) that develops policies and plans, and monitors their implementation. The National Coordination Committee for Waste Prevention and Management was set up by the National Environment Commission Secretariat. It comprises 13 members (two women and 11 men), from the 13 key implementing agencies, and acts as a bridge between agencies and the National Environment Commission, in order to enhance efficient coordination and to ensure the implementation of roles and responsibilities. While there is a Gender Focal Point at the National Environment Commission, the Waste Management Division does not have a dedicated Gender Focal Point. At local level, district and municipality administrations are responsible for safe and proper waste management, which includes municipal waste, wastewater and industrial waste. At national and local levels, there is limited capacity linking waste management, climate action, and gender issues.
The Ministry of Agriculture and Forests (MoAF) is responsible for climate response, actions and research within the agriculture sector. Their outreach, particularly in climate smart agriculture, is enhanced at the local level through agriculture sector representatives at the district level, and the Renewable Natural Resources (RNR) extension services at the gewog level. GFPs have been created across sectors, and efforts to mainstream gender are ongoing. However, there are still challenges due to limited sector-specific gender capacity and budgeting.

At the district level, climate change actions are coordinated by the District Planning Officers and the District Environment Officers, along with respective sectors. In addition, the Mainstreaming Reference Group (MRG) is responsible for mainstreaming issues like gender, environment, climate, disaster and poverty.

**GOVERNANCE RECOMMENDATIONS**

**RECOMMENDATION 1**
Inform and raise awareness of government officials at all levels, professionals, private sector, academia, students, CSOs, and the broader public about the gender dimensions of climate change, climate policies, and related mitigation and adaptation strategies and practices in Bhutan—with a focus on the agricultural, energy and waste sectors. Engage the media—including mass media and social media—in this endeavor. To facilitate this, provide training to journalists on the gender dimensions of climate change and climate action.

**RECOMMENDATION 2**
Enhance institutional capacity building, including short-term and long-term training on gender-responsive climate action in institutions, ministries, agencies, CSOs, and private companies, including for local leaders who are men.

**RECOMMENDATION 3**
Strengthen the role and position of Gender Focal Points (GFPs) within institutions and agencies, and institute a mechanism to include the GFPs in all climate change actions within the various sectors.

**RECOMMENDATION 4**
Promote the inclusion of National Commission for Women and Children (NCWC) in the C4 committee (on climate change policies and actions), reviving the central Mainstreaming Reference Group to provide backstopping for mainstreaming cross-cutting issues across all policies, including in the NDC sectoral priority areas.

**RECOMMENDATION 5**
Strive for gender equality and parity at all levels within agencies, institutions and organizations dealing with climate action, by promoting inclusive, active and meaningful participation and decision-making of women.

**RECOMMENDATION 6**
Empower and train women to take on leadership roles and act as change agents in CC action from community to management levels, locally and nationally, building on the existing leadership trainings of CSOs and other agencies.
V. PLANNING

The Gross National Happiness (GNH) provides guidance for policies and programmes in Bhutan. It’s a development framework based on the four pillars of sustainable and equitable socio-economic development, environmental conservation, preservation and promotion of culture, good governance. All development programmes fall under Five-Year Plans (FYPs), and are based on these four pillars. Bhutan’s recent FYPs increasingly reflect the approach advocated by GNH through National Key Result Areas (NKRAs), many of which are in line with the SDGs. The 12th FYP (2018-2023) identifies 16 NKRAs; NKRA 6 and NKRA 10, address climate-sensitive development and gender equality, respectively.

Gender Responsive Planning and Budgeting (GRPB) is an important objective of the RGoB. The Strategic Framework and Action Plan for Gender Mainstreaming and Gender Responsive Planning and Budgeting was approved in 2014. It provides guidance on institutional arrangements, advocacy, awareness-raising and capacity-building, collection of sex-disaggregated data, gender analysis of sectors, and development of gender-sensitive indicators. Since 2013, the Budget Call Circulars for each Fiscal Year have highlighted the need to mainstream gender in sectoral activities. The budget guidelines for the Fiscal Year 2019-2020, emphasized alignment with the 12th FYP and Annual Performance Agreement targets. They state that “as the 12th FYP calls for mainstreaming crosscutting themes, the budgetary agencies must ensure that budget proposals are inclusive of gender, environment, climate change and disaster.”

Tools that support both gender and climate change mainstreaming include:

a. Gross National Happiness (GNH) Screening Tool, which looks at gender equality as part of 26 areas to be screened;

b. RGoB’s guidelines for mainstreaming gender, environment, climate change, disaster risk reduction and poverty into policies, plans and programs;

c. Local Development Planning Manual that includes several references to gender elements in order to mainstream gender at local levels; and
d. The National Gender Mainstreaming Guidelines which provides approaches and procedures for gender mainstreaming in each sector, with checklists for planning and implementation, and law and policy development.

Recently, climate change issues have been included in the National Plan of Action for Gender Equality (NPAGE) (2019-2023). The plan outlines strategies to promote gender equality in the political, public, social and economic domains: Critical Area 10 of the NPAGE addresses ‘Environment and Climate Change’. It recognizes the gender dimensions of environment and climate change, acknowledges that the environmental legal framework and strategies in place are not adequately gendered, and that the lack of awareness, resources and appropriate institutional framework are still an issue. Enhanced participation of women in climate change decisions and actions, and reducing their vulnerability to climate change impacts is identified in the NPAGE.

Under the Climate Change Policy (2020), gender issues are well-defined. It indicates that gender issues should be integrated in all climate change actions, and should be informed by a situational analysis of gender gaps and their interlinkages with climate change in Bhutan. It places the responsibility on all agencies and is supported by the NCWC, who provide support in mainstreaming gender-responsive climate actions. In line with the Climate Change Policy (2020), a gender responsive Climate Change Action Plan has also been developed, listing specific actions and responsibilities. The Gross National Happiness Commission (GNHC) and Ministry of Finance (MoF) allocate and mobilize resources for climate action.

At the sectoral level, gender integration through the five-year plans has always been a challenge, given the inadequate knowledge and skills on gender tools while drafting national and local-level plans. The Ministry of Agriculture has taken steps to build capacities of Plan Focal Points and Annual Performance Focal Points from each department and research centre, including through sensitization of district RNR Sector officials. Importantly, the maintenance of gender-disaggregated data for all activities carried out by
Ministry of Agriculture departments and agencies has been initiated and is coordinated by the Gender Focal Point of the Ministry. For the energy sector, the Department of Renewable Energy (DRE) is the central coordination agency for renewable energy. In the present planning mechanism, there is no process for dialogue or consultation between DRE and the NCWC. This partly explains the lack of gender considerations in DRE-related policies and documents. Although the DRE sometimes collects sex-disaggregated data during the implementation of activities, there is no procedure in place to ensure that gender disaggregated data is collected and used in planning, monitoring and reporting. In the waste sector, apart from a few recent studies, there is a lack of gender-disaggregated data on waste management and related research (including solid baseline information) and expertise.

While many guidelines, tools and strategies are available to mainstream gender, effective implementation is often hampered by lack of awareness, capacities and practice. Moreover, an intersectional approach is needed to take into account other social differentiators such as single mothers, disabled people, girls, women working in unorganized sectors, and unemployed youth, among others.
**RECOMMENDATION 7**
Make the gender-climate change nexus part of the agendas of leadership forums, such as the Executive Forum, Annual Gup Conferences, and District Head Annual Conferences.

**RECOMMENDATION 8**
Ensure that in activities addressing causes and impacts of climate change, the perceptions and attitudes are gender-sensitive and monitored, to prevent stereotypes about gender roles.

**RECOMMENDATION 9**
Ensure ministries’ organizational mandates and commitments are in line with national and international gender-climate change commitments. Include gender and climate change as mandatory indicators for relevant sectors in Annual Performance Agreements.

**RECOMMENDATION 10**
Guarantee the systematic collection of sex-disaggregated data, development of gender-sensitive statistics and other information in the design, planning, implementation, monitoring and evaluation of climate mitigation and adaptation efforts in all sectors and at all levels. Apply existing sex-disaggregated data, indicators and information about climate change action, including in NDC priority sectors. In addition, make sex-disaggregated climate information, data and statistics available in a coordinated way, for example through a national repository on gender and climate change.

**RECOMMENDATION 11**
Build the evidence base by developing research and documenting case studies of gender and climate change in Bhutan. Specifically, this should include women’s and men’s engagement in climate action in the NDC priority areas, gender-based violence and climate change (e.g. on human-wildlife conflicts and increasing violence against women and girls guarding the fields), and gender, health and safety in the context of climate change and climate action.

**RECOMMENDATION 12**
Climate change adaptation and mitigation programmes need to address the different needs, priorities and levels of knowledge of women and men. In order to do so, apply a participatory gender analysis or gender impact assessment as well as gender-sensitive monitoring and evaluation for all climate-related initiatives, including in NDC priority areas. Ensure gender expertise is included in the development and implementation of such climate mitigation and adaptation programmes and projects.

**RECOMMENDATION 13**
Enhance women’s livelihoods and promote women-led green enterprises, by ensuring their access to finance, including climate finance, insurance, technical training, and sustainable technologies, specifically in climate-related sectors such as agriculture, energy, transport and waste. For instance, apply health, safety, and labor standards that enable women’s participation in CSA/CRA, renewable energy, and sustainable transport and waste management sectors, by supporting Early Childhood Care and Development (ECCD) and creche for children of employees.
VI. POLICY

The Constitution of the Kingdom of Bhutan (2008) underscores the obligation of the Royal Government “to protect, conserve and improve the pristine environment and safeguard the biodiversity of the country” (Article 5.1), and “to ensure a safe and healthy environment for present and future generations” (Article 5.2). Article 7 on Fundamental Rights guarantees all person the right to life, liberty and security and its sub-articles protect citizens from discrimination based on sex (Article 7.15).

Building on the foundations of the Constitution, the country’s development framework is rooted in the four pillars of Gross National Happiness: sustainable and equitable socio-economic development; environmental conservation; preservation and promotion of culture; and good governance. Bhutan’s Economic Development Policy (2016) is the apex policy for Bhutan’s economic development, providing guidance for all ministries and agencies to stimulate economic growth, and more importantly, to ensure that growth takes place in accordance with the principles of GNH. The Economic Development Policy (2016) emphasizes the ‘five jewels’ of hydropower, tourism, mining, agriculture, and Cottage and Small Industries, and includes measures to promote ‘green growth’.

The recent Climate Change Policy (2020) underlines that climate change is a cross-cutting issue. It needs to be addressed comprehensively, and coordinated effectively across relevant sectors and levels, including in gender equality considerations and disaster-risk management. Its objectives are to

1. pursue carbon-neutral development, or mitigation;
2. build resilience to climate change, or adaptation;
3. ensure means of implementation;
4. ensure effective and coordinated actions, including mainstreaming gender.

For each of these objectives, specific actions are identified. In Bhutan’s 2015 NDC submission, gender concerns were not integrated, however in Bhutan’s revised NDC, cross-cutting issues such as gender will be mainstreamed.

The National Gender Equality Policy (NGEP) (2020) explores gender equality through the lens of three domains - political, social and economic. Statement 5.9 of the NGEP establishes the link to climate change, recommending to “mainstream gender in all disaster and climate change related initiatives through acknowledgment of differentiated impacts of disasters and climate change on women and men, and the positive roles that women can play in adaptation and mitigation efforts.”

At the sectoral level, however, there is minimal integration of gender issues in agricultural policies. In the Agriculture sector, the Food and Nutrition Security Policy of the Kingdom of Bhutan (2014-21) aims to provide physical, economic and social access to safe and adequate nutritious food for a healthy and active life, for all people in the country. Nonetheless, with NKRA 8 on “Food and Nutrition Security Ensured”, the 12th FYP underscores the importance of enabling farmers to enjoy the returns of their labour, from the growing economy, and increasing production to improve food self-sufficiency and nutrition security, particularly for women and children. The RNR Sectoral Adaptation Plan of Action (SAPA) 2016 forms an updated version of RNR SAPA 2013, proposing a series of Adaptation Plan of Action to mainstream climate change risks, vulnerabilities and adaptation measures into RNR sector plans and programmes, and to promote resource mobilization. The policy does not mention gender specific objectives and actions.

In the energy sector, until recently, energy policies and legal frameworks made limited reference to gender aspects. The Integrated Energy Management Master Plan 2010 was an exception. The Economic Development Policy (2016) doesn’t incorporate any pro-poor and gender-sensitive considerations in the reforms recommended in the energy sector. While it highlights the role of hydropower as a key driver of the economy, and emphasizes alternative renewable energy, gender is mentioned in the context of women’s participation and its importance in the hydropower sector. The policy states that special focus on women’s enterprises shall be given within the development of CSI industries. The
development of new legal frameworks and review of existing ones offer important opportunities to integrate gender aspects as reflected in the rationale for the National Energy Efficiency and Conservation Policy (2019) and the actions identified in the Energy Efficiency Roadmap 2019. In the Roadmap, the gender perspective has been included under relevant outcomes. At the household level, these energy efficiency measures are expected to bring energy savings and enhance household income, increase employment opportunities, and offer other added advantages to women who handle household chores.

In the waste sector, the National Waste Management Strategy 2019 seeks to prevent and minimize waste generation at source, and divert materials to be refused, re-used, recovered, and recycled. Following the circular economy concept, the goal is to continuously move towards a “Zero Waste Bhutan”. This will involve partnerships with the general public, industries, CSOs, and government authorities, across local and sectoral levels, municipalities, and potential development partners. It places emphasis on appropriate management to respond to waste as an emerging national environmental issue. Building the link between waste and climate change, it identifies strategic interventions and tools for sound waste management.

Gender is highlighted as a cross-cutting concern, with gender issues to be integrated across all waste management actions. The document states that such integration shall be informed by a situational analysis of gender issues and waste management, and that it will seek to address the identified concerns through a synergistic approach considering other environmental issues. Implementation of the National Waste Management Strategy is a shared responsibility of all agencies, with support on gender dimensions from the NCWC.

POLICY RECOMMENDATIONS

RECOMMENDATION 14
Sectors should integrate gender and climate aspects in the formulation and review processes of existing policies, programmes and projects on climate change (including the NDC and APA). This should be achieved by conducting a gender analysis of climate-related policies and policy action plans, through the involvement of internal and/or external gender experts/ expertise, and with close monitoring of the implementation using gender-specific indicators.

RECOMMENDATION 15
Recognise and acknowledge the important but undervalued contributions that women make to climate mitigation and adaptation in households, to communities and larger society, including within the national accounting system.

RECOMMENDATION 16
Improve education and awareness surrounding gender and climate change at all levels, from primary education to academic levels, including vocational training and informal education, through the review of existing curricula, development of new courses that promote innovations which can properly address issues related to agriculture, energy and waste in the context of climate change. Incorporate these themes in existing forums/initiatives, such as school camps, scouts camping, and other vacation activities, seminars and workshops.
VII. CONCLUSION

This analysis of gender-climate interactions in Bhutan—particularly in the NDC sectors of agriculture, energy and waste—was done to assist Bhutan’s ongoing efforts to achieve carbon-neutral, resilient, and sustainable development in a gender-responsive way. The analysis is supported by evidence that was compiled through a study that involved meetings with 90 stakeholders, and surveyed a sample of 600 households in 10 districts, covering three agro-ecological regions of the country.

The Gender Analysis highlights the governance, planning, and policy challenges that are faced by the institutions and actors that are responsible for coordinating, supporting, and implementing gender-responsive climate actions. These include:

- Limited technical capacity of climate change and gender expertise within sector areas;
- Gaps in gender and climate change mainstreaming efforts at the sectoral and local levels; and
- A conducive policy environment that has yet to be fully implemented across all sectors and programs.

This analysis has provided recommendations at the sectoral, coordination, planning, and policy levels, to support awareness, education and capacity building; increasing the evidence base; and strengthening women’s participation and empowerment. As Dr. Tandi Dorji, Chairperson of NCWC, says in the foreword of the full Gender Analysis report: “Due to their cross-cutting interlinkages, Climate and Gender require collaboration and coordination among all stakeholders to deliver effective outcomes.” Implementation of these recommendations will contribute to a gender transformative trajectory for climate-related policies and actions in Bhutan, including the implementation of its NDC.
ENDNOTES
2 Ibid.
4 RGoB, 2015. Intended Nationally Determined Contribution of the Kingdom of Bhutan.
7 Ibid.
9 ADB, 2014. Gender Equality Diagnostic of Selected sectors. ADB & UN Bhutan, Mandaluyong City, Philippines.
16 Ibid.
17 Ibid.
22 Survey respondents were able to choose from four options: 1) strongly disagree, 2) disagree, 3) agree, 4) strongly agree.
29 Ibid.
30 Ibid.
32 Climate-smart agriculture (CSA) is defined as “an approach that helps to guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. CSA aims to tackle three main objectives: sustainably increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing greenhouse gas emissions, where possible.” FAO. 2021. Climate-Smart Agriculture.
34 Ibid.
35 Ibid.
36 Ibid.
38 Ibid.
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45 Ibid.
48 Ibid.
50 UN WOMEN. 2016. Gender Responsive Planning and Budgeting in Bhutan: From Analysis to Action.
51 RGoB. 2013. Framework to Mainstreaming Gender, Environment, Climate-Change, Disaster Risk Reduction and Poverty (GECDP) in the 11FYP of the Local Governments.