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Shared tasks but unequal burdens: Gender, agriculture and empowerment in Bhutan

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Key highlights

1. Despite sharing most agricultural production and socio-political activities, women in Bhutan bear the primary responsibility for reproductive and unpaid household chores, reinforcing their triple role.
2. The triple role significantly restricts women's participation in policy and decision-making discourses, leadership development, and the acquisition of entrepreneurial skills crucial for their empowerment.
3. Whilst both men and women formally have access to land and natural resources, women generally exercise less control over these assets and the benefits derived from off-farm activities, thereby undermining their property rights in practice.
4. Although the practical needs of women are often similar to those of men, their strategic needs differ markedly. Women seek improvements in education and health to achieve social, economic, and political empowerment, whilst men prioritise infrastructure such as farm roads for better accessibility and the installation of solar or electric fences to protect their farms from wild animals.

Abstract

Women play a crucial role in the agricultural economy of Bhutan. Constituting almost half of the national population, women are central to a sector that provides 57% of national employment. Despite remarkable progress in closing gender gaps in education, gender inequality persists due to traditional socio-cultural norms and a lack of clear understanding of common but differentiated gender roles at the household level. The paper argues that whilst men and women in Bhutan jointly participate in many agricultural production and socio-political activities, women are disproportionately burdened by reproductive and unpaid household chores (their "triple role"). This restricts their participation in policymaking, leadership development, and entrepreneurial opportunities, thereby hindering their overall empowerment. We used the Harvard gender analytical framework, using tools 1 and 2 for mapping the activity profiles and access to and control of land and natural resources, respectively. In addition, we used Moser's framework to

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identify critical gender needs and strategic priorities. We collected data and information at the household level using individual interviews and at community level using group interviews. We found that productive, reproductive, and socio-political activities were often jointly done by men and women. However, women overwhelmingly undertake vegetable cultivation, agricultural marketing, reproductive tasks, and unpaid domestic household chores. Whilst formal access to land and natural resources and their benefits appeared equal, practical control, particularly over land-based decisions and off-farm benefits, often favoured men. Women's practical needs were similar to men's, whilst women's strategic needs differed. Women prioritise better education and health, whilst men prioritise farm roads and solar/electric fences to deter wild animals.

Keywords: Bhutan; Gender equality; Women's empowerment

1. Background

In Bhutan, 62.2% of the population live in rural areas (NSB, 2018), largely dependent on natural resources for ecosystem services like food, medicine, and shelter. Agricultural farming is the main occupation of the rural economy, providing 57% employment (NSB, 2018) to men and women. According to the Bhutan Living Standard Survey (BLSS), 35% of the total number of households are headed by women (NSB, 2017).

Women play a crucial role in the agricultural economy. Out of the projected population of 741, 672, women comprised almost half (48%) of the population in 2019 (NSB, 2019). However, employment by occupation revealed that 46% of women are employed compared to 54% of men. Women's unemployment rate, particularly at the tertiary level, steadily increased from 2010 to 2015 (MoLHR, 2015). According to the global gender gap ranking[3] 2020, Bhutan's gender parity ranking dropped to 131 (WEF, 2020) from 122 (WEF, 2018), owing to gender disparity in political empowerment and economic participation.

1.1. Gender policy and regulatory frameworks

Bhutan is committed to mainstreaming gender equality into development planning. The government, in collaboration with several multilateral agencies and civil society organisations, has made gender equality a cross-cutting theme within the goal of inclusive development. The National Action Plan for Gender 2008-2013 implemented seven critical areas: good governance, economic empowerment, combating violence against women, education and training, health, prejudices and stereotypes, and ageing, mental health, and disabilities (NCWC, 2008a).

The action plan aims to implement gender equality, enacted domestic violence prevention legislation in 2013, and promotes gender mainstreaming in policies, programmes, and plans through gender-responsive governance, budgeting, and women's participation in politics. Though considerable progress has been made, formulating inclusive policies, programmes, and plans has been hindered by a limited understanding of women's socio-cultural, economic, and political barriers. For example, a study on the stocktaking of policies, laws, and programmes revealed that whilst there are some gender mainstreaming initiatives in the education and health sectors,

3 The World Economic Forum measures progress on gender parity on a scale from 0 (imparity) to 1 (parity) across four thematic dimensions; economic participation and opportunity, educational attainment, health and survival, and political empowerment.

there are virtually no initiatives in male-dominated sectors like transport, energy, agriculture, and natural resources to address gender disparity in access, employment, and leadership (ADB, 2024). The gender equality policy 2017 reinforces the gender action plan and aims to ensure equal rights, opportunities, and benefits to men and women in the family, community, workplace and society at large (NCWC, 2017).

1.2. Gender inequality

Although remarkable progress has been made in bridging gender gaps in education (gender parity index 1.02), differences persist (GNHC, 2013). The gap widens in the ratio of men to women to 75:30 in tertiary education (NCWC, 2017). Women's participation at the national policy and legislative level barely increased to 15% in 2019 from eight percent in the 2008 parliamentary elections (ECB, 2014). In public sector administration, although there has been a gradual increase in the proportion of female civil servants from 36.75% in 2018 to 40% in 2022, the representation of women at decision-making levels remains low at 20.4% (NCWC, 2023).

Gender discrimination is still woven into the fabric of traditional socio-cultural norms. Traditional gender stereotypes, beliefs, and practices discriminate against women, confining them within the homes and limiting their social boundaries (NCWC, 2008a; NCWC, 2008b), often positioning them as subordinate to men.

Accordingly, Sachs (2005, p. 36) notes:

Traditional societies tend to be strongly differentiated in gender roles, with women almost always getting the short end of the deal. […] Traditionally homebound women live lives of backbreaking labour on the farm, endless walking to collect fuelwood and water, and child-rearing, and with modern economic growth, this dynamic changes.

1.3. Gender in agriculture and climate

Agriculture and forestry projects have differential impacts on social, economic, and environmental well-being through their influence on production, reproductive, and socio-political spheres. Bhutan's agricultural development policies focus on food and nutrition security, self-sufficiency, income and employment generation, commercial farming, sustainable land and biodiversity conservation, and efficient and effective service delivery to farmers (GNHC, 2013). However, these agricultural policies and programmes are not always inclusive of women's roles in production, processing, transportation, and marketing. According to Khadka and Verma (2012), women and men have specific gender roles and a division of labour in conserving and using biodiversity in the Himalayas. GNHC (2011) reported that land preparation, planting, weeding, harvesting, cooking, washing, and cleaning are still predominantly women's domain, whilst fuelwood collection and mechanisation are men's domain.

Recognising the common but differentiated gender roles and collecting sex-disaggregated agricultural information could be useful to inform better policy decisions in targeting women-specific interventions to harness agricultural productivity gains. According to FAO (2013), agriculture yields could increase by up to 20-30% if women are given the same access to productive resources, markets, and technologies as men.

Climate change and its impacts are not gender-neutral, nor are its policies and actions. With the gender-differentiated roles in societies and traditional and customary norms, women are likely to face the heaviest burden of climate change. Women are crucial actors in the adaptation process, and development programmes and projects should integrate their knowledge and needs to inform climate actions.

1.4. Access and control

Access to and control of land and natural resources, and the benefits arising from them, can differ between men and women. Often, women have limited access to and control over land, labour, credit, information, and technology (Gurung, 1999; Leduc, 2011; Khadka and Verma, 2012). In Bhutan, sons and daughters inherit equal land rights under statutory laws. However, customary laws can dictate land rights based on lineage rules and tradition. For example, in western Bhutan, land rights are inherited by women more than men in a ratio of 60:40 (GNHC, 2011). However, in eastern and southern Bhutan, families have customary land tenure practices often inclined towards men. Studies revealed that only 40% of women in the Trashigang and Mongar districts of eastern Bhutan inherit land rights (GNHC, 2011). Although women have had equal access to land, they have little and/or no control over it (GNHC, 2011). This may presumably hold good for other natural resources, and benefits arising from them. Ensuring equitable access to and control over land and natural resources, and benefits arising from it, enhances women's empowerment.

1.5. Women empowerment

Project interventions, e.g., the creation of resource management groups with equal participation by women, can articulate their bargaining power over men. A case study in Nepal shows that women are taking up leadership roles in community forestry activities owing to increased recognition of women's role from protectors to managers (Khadka and Verma, 2012). Education, training, and extension services tailored to women's needs capacitate them with the necessary knowledge and skills to make informed policy and management decisions. Studies have pointed out that women's under-representation in politics and decision-making is attributed to a low level of education, the stereotypical image of women as less capable leaders (HELVETAS, 2010), and women's triple-role fortified by traditional cultural norms and patriarchal values (IMS, 2011). Women's access to education through formal and informal learning has been identified as the cornerstone of promoting women's successful leadership (Thinley et al., 2014).

Despite these insights, there is little and/or no empirical research specifically focusing on the gender-differentiated roles in agriculture production, reproductive activities, socio-political participation, critical gender needs, and strategic priorities to inform gender-sensitive policies, programmes, and projects in the agriculture and natural resources sectors of Bhutan. This study therefore conducts a gender analysis to: i) identify the common but differentiated gender roles and division of tasks between men and women in agricultural production, marketing, reproductive roles, and socio-political activities; ii) determine the extent to which women as compared to men have access to and control over land and natural resources, and the benefits arising from them; and iii) ascertain the critical gender needs and strategic priorities of both groups.

2. Materials and Methods

2.1. Gender analytical concepts and tools

The Harvard Analytical Framework or concept (March, Smyth and Mukhopadhyay, 1999) is often referred to as a gender analysis framework. Published in 1985, it was one of the first frameworks designed for gender analysis. The Harvard framework was based on the premise that there is an economic case for allocating resources to women as well as to men. The framework aims to help planners design more efficient projects and improve overall productivity. It does this by mapping the work and resources of men and women in a community and highlighting the main differences. The framework serves as a grid (also known as a matrix) for collecting data at the micro-level, i.e., household and community level.

We used Harvard gender analytical framework tools 1 and 2. Tool 1 refers to the mapping of the activity profile, and tool 2 refers to access[4] to and control[5] of land and other natural resources.

The Moser framework (Moser, 1989) aims at "gender planning" as the emancipation of women from their subordination and the achievement of equality, equity, and empowerment, concentrating on the power relations between men and women. Moser's concept is based on the idea that women as a group have particular needs, which differ from those of men as a group, not only because of women's triple work role but also because of their subordinate position to men in most societies.

At the heart of the Moser concept is the triple-role (production, reproductive, and socio-political) analysis that makes sense in a planning framework because the development impact of a project in one area can affect the work in the other two areas, and vice-versa. For example, women's reproductive workload can prevent them from spending more time and energy on production and less time on education and training activities.

We used Moser's tool 2, gender needs assessment, to identify practical gender needs[6] and strategic priorities.[7] Addressing the strategic priorities of women in policies, programmes, and projects can lead to women's empowerment.

2.2. Study area and sampling

The study area falls within the Global Environment Facility financed project titled 'Enhancing sustainability and climate resilience of forest and agricultural landscapes and community livelihood' covering 12,709.34 km^2 and focusing on three protected areas connected by biological corridors, namely: Jigme Khesar Strict Nature Reserve (JKSNR) and biological corridor (BC) 1 in western Bhutan under Landscape 1; Jigme Singye Wangchuck National Park (JSWNP) and biological corridors (BC)

[4] We explained access as an opportunity to use the resources. Access simply means that one can use the resources, but this says nothing about whether one has control over it.

[5] Control is the authority to determine the use of resources and impose a decision on others. A person who controls a resource is the one who ultimately makes the decision.

[6] Practical gender needs are those which, if they were met, would assist women in their current activities. Interventions that meet practical gender needs respond to an immediate perceived necessity in a specific context, often related to inadequacies in living conditions.

[7] Strategic gender priorities are those that, if they were met, would enable women to transform existing imbalances of power between men and women. Meeting strategic gender priorities helps women to achieve greater equality and challenge their subordinate positions.

2 and 8 under Landscape 2; and Phrumsengla National Park (PNP) and biological corridor (BC) 4 under Landscape 3 (Figure 1). These landscapes were pre-determined based on the location of the protected areas and their biological corridors, and area-based project selection criteria adopted by the Gross National Happiness Commission of Bhutan. The project areas encompass the following districts, sub-districts, and villages nested within these three landscapes. Under Landscape 1, the sub-districts were Bjee in Haa district, Tsento in Paro district, and Norbugang in Samtse district; under Landscape 2, Athang in Wangdi Phodrang district, Kabji in Punakha district, Drujaygang in Dagana district, Dhajay in Tsirang district, Tangsibji in Trongsa district, Trong in Zhemgang district, and Jigmecholing in Sarpang district; and under Landscape 3, Chumey and Ura in Bumthang district were selected.



Figure 1. Sample villages nested within protected areas and biological corridors

The project area is populated by 88,783 persons (48% women), with land use dominated by forest (75%), agriculture (two percent), meadows and snow (14%), and shrub vegetation (nine percent) (UNDP, 2016).

We used the list of village household records accessible at the sub-district administration office as the sampling frame. The sub-district level villages were formally informed through district-level offices by the Gross National Happiness Commission at the national level.

In consultation with the sub-district agriculture, livestock, and forestry extension staff, households were randomly selected for interviews. We interviewed the heads of households, who usually make decisions on behalf of the family. The unit of observation was the household, and information was solicited on the household economy. The average age of the respondents was men (49 $\pm$ 15 (standard deviation (SD), ranging from 17-74 years, and women (42 $\pm$ 11 (SD), ranging from 21- 66 years. Altogether, we interviewed 102 households with 58 men and 44 women, across the villages from June to August 2020.

2.3. Individual interview

Structured and semi-structured questionnaires were administered to the respondents, and information was solicited using the tools above. Depending on the local circumstances, respondents

were informed to gather at a convenient place. During the interviews, activities listed in the left-hand column of the tools (production, reproductive, and socio-political) were tallied against men, women, or both. Similarly, using tool 2, we solicited information on access to and control of land and natural resources, and the benefits arising from them**.** We explained these tools clearly to the respondents, and information was solicited in order of importance.

2.4. Group interview

After the individual interviews, the respondents were grouped, and their views were solicited using open-ended questions. The questions were: i) what strategies were appropriate to ensure women's access to and control over land and natural resources and the benefits arising from them and, ii) what strategies were needed to reduce the negative impact on women's lives and livelihoods? These questions were designed to solicit strategies for empowering women to take control over resources and their livelihood choices. Altogether, we interviewed 12 groups comprising 57% men and 43% women across 11 villages within the project area.

2.5. Data analysis

The data collected were entered into Excel sheets and imported into the Statistical Package for Social Sciences (SPSS) (Nie, Bent and Hall, 2007). We calculated frequencies and percentages from the responses of the interviews by gender. We used cross-tabulation to observe any association between relevant variables by gender. We report results with a significant association between the variables ($p < 0.05$).

2.6. Limitations of the study

The information collected and analysed is based on the perception of the project's direct beneficiaries, i.e., households and community groups. During the interviews, men turned out in greater numbers than women due to the monsoon rains and their views may therefore dominate.

3. Results

The result section describes the analysis and findings of gender roles and division of labour between men and women in agricultural production, reproductive, and socio-political activities; access to and control over land and other natural resources and the benefits arising from them; and practical gender needs and strategic priorities.

3.1. Division of tasks by gender

The division of tasks between men and women in agricultural production and marketing activities is given in Table 1. Both men and women participated in the preparation of agricultural land for crop cultivation. However, mostly men (97%) ploughed agricultural farms due to the arduous task. Cereals e.g., paddy, maize, wheat, and buckwheat, were cultivated by men and women (74%) but wetland paddy seedlings were predominantly transplanted by women (60%) assisted by children at times. Both men and women weeded crops and cultivated fruits. Mostly, women undertook the cultivation of vegetables (72%), kitchen gardening (80%), and marketing of vegetables (47%). Again, the marketing of livestock products, e.g., butter, cheese and home-processed products, e.g., potato chips, was significantly done by women ($p < 0.05$). Certain cash crops, e.g., cardamom are

predominantly cultivated and marketed by men owing to its nature as an off-farm activity, though not statistically significant.

Table 1. Agricultural production and marketing activities by gender

Production and marketing	Men (%)	Women (%)	Both (%)	*df*	*Chi-square*	*P value*
Land preparation (n=100)	38	19	43	2	2.133	0.344
Land ploughing (n=97)	96.9	0	3.1	1	2.364	0.124
Cultivate cereals (n=61)	6.6	19.7	73.8	2	4.185	0.123
Transplant paddy seedling (n=10)	20	60	20	-	-	-
Weeding (n=29)	3.4	34.5	62.1	2	1.189	0.552
Cultivate fruits (n=14)	28.6	7.1	64.3	2	4.200	0.122
Cultivate vegetables (n=101)	1	72.3	26.7	2	13.594	0.001**
Kitchen gardening (n=101)	1	80.2	18.8	2	5.804	0.055*
Cultivate cardamom (n=20)	60	5	35	2	1.289	0.525
Harvest cereals (n=43)	4.7	7	88.4	2	2.733	0.255
Market cereals (n=6)	16.7	50	33.3	2	3.333	0.189
Market vegetables (n=90)	23.3	46.7	30	2	7.292	0.026*
Market cardamom (n=23)	82.6	4.3	13	2	3.511	0.173
Market fruits (n=13)	30.8	30.8	38.5	2	3.846	0.146
Market livestock products (n=28)	3.6	89.3	7.1	2	2.845	0.241
Market home-processed products (n=9)	0	77.8	22.2	2	5.143	0.023*

*** p < 0.01; * p < 0.05 and - values for cells with expected count less than 5.*

Harvesting and marketing of cereals and fruits were jointly done by men and women. Mostly, men (97% and 71%, respectively), do off-farm contract work in construction and timber extraction, invariably benefiting them, while women benefit from marketing vegetables, livestock, and home-processed products.

3.2. Reproductive activities

The reproductive activities by gender are given in Table 2. Rural household women were overwhelmingly engaged in food preparation (89%), cooking (91%), childcare (77%), family health care (50%), sanitation and hygiene (83%), and weaving handicrafts (89%). These findings reveal that women are overburdened with unpaid domestic chores such as cooking, childcare, sanitation and hygiene and weaving handicrafts. At the same time, men were mostly engaged in off-farm activities, leaving the burden of household chores to women. The results also show that 45% of women collect drinking water, whilst 65% of men sourced irrigation water ($\chi 2_{(2)} = 9.073$, $p < 0.05$), and 63% of men collected fuelwood. Both men and women collect fodder, but cattle herding was significantly shared ($\chi 2_{(2)} = 11.083$, $p < 0.01$).

Table 2. Reproductive activities by gender

Reproductive activity	Men (%)	Women (%)	Both (%)	*df*	*Chi-square*	*P value*
Drinking water (n=102)	24.5	45.1	30.4	2	8.391	0.015*
Irrigation water (n=57)	64.9	10.5	24.6	2	9.073	0.011*
Fuel wood (n=99)	62.6	10.1	27.3	2	3.364	0.186
Fodder (n=92)	22.8	35.9	41.3	2	5.797	0.055
Food preparation (n=102)	2.9	89.2	7.8	2	6.815	0.033*
Cooking (n=102)	4.9	91.2	3.9	2	3.210	0.201
Childcare (n=102)	2.9	77.5	19.6	2	4.477	0.107
Family health care (n=102)	9.8	50.0	40.2	2	9.745	0.008**
House sanitation and hygiene (n=102)	5	83.2	11.9	2	1.773	0.412
Cattle herding (n=102)	19.5	35.6	44.8	2	11.083	0.004**
Weaving handicrafts (n=38)	2.6	89.5	7.9	2	1.231	0.540

*** p < 0.01; * p < 0.05*

3.3. Socio-political activities

The socio-political activities by gender are given in Table 3. Most men overwhelmingly contribute voluntary labour ($\chi^2_{(2)}$ = 7.786, $p < 0.05$) and participate in decision-making in local government policy discourses significantly ($\chi^2_{(2)}$ = 12.312, $p < 0.01$) owing to off-farm activities. Both men and women participate in religious activities (51%) and local ceremonies (47%). Both men and women make household decisions on resource use and exercise their franchise in local government elections. The above findings revealed that women participate less in development-related policy and decision-making discourses, leadership, and other capacity-building programmes at the local government level.

Table 3. Socio-political activities by gender

Socio-political activity	**Men (%)**	**Women (%)**	**Both (%)**	***df***	***Chi-square***	***P value***
Religion (n=102)	22.7	20.8	51.5	2	8.378	0.015*
Local ceremonies (n=102)	25.7	26.7	47.5	2	15.379	0.000**
Voluntary labour contribution (n=100)	40	17	43	2	7.786	0.020**
Participation in formal meetings (n=102)	42.2	26.5	31.4	2	12.312	0.002**
Decision-making on resource use (n=102)	20.6	34.3	45.1	2	4.974	0.083
Politics (n=102)	21.8	16.8	61.4	2	7.692	0.021*

*** p < 0.01; * p < 0.05*

3.4. Access to and control of land and natural resources

Access to and control over land tenure by gender is given in Figure 2. In Bhutan, private land ownership and use rights are customarily inherited from parents by their children and endorsed by statutory laws. Access to and control over land rights are governed by either a matrilineal or patrilineal system. Our results by district revealed that both genders often reported equal access to

and control over land rights in western Bhutan districts like Punakha, Paro, Haa, and Wangdi whilst men reportedly dominated land rights in central Bhutan districts, e.g., Tsirang (67%), Samtse (42%) and Sarpang (41%) and vice-versa in Zhemgang (75%). These findings indicate that control over land rights is often inclined towards men in patriarchal communities.

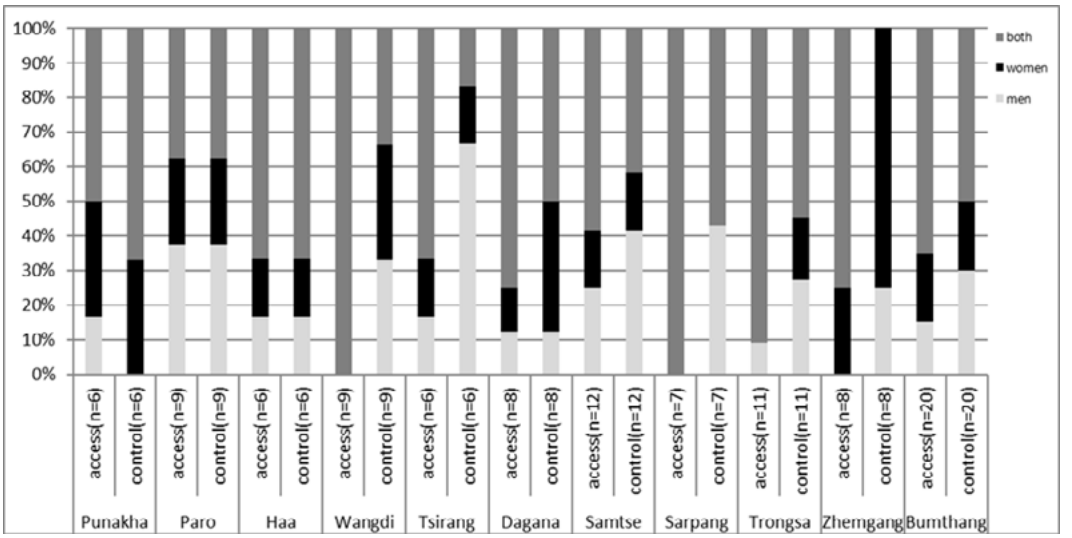


Figure 2. Access to and control over land by gender

Access to and control over natural resources by gender are given in Figure 3. Both men and women have equitable access to and control over agriculture, livestock, sharecropping, labour, and credits/ loans from financial institutions, education, health, training, and extension services. However, men reported significantly higher access to and control over forest products and agricultural machinery than women, due to the off-farm nature of the work.

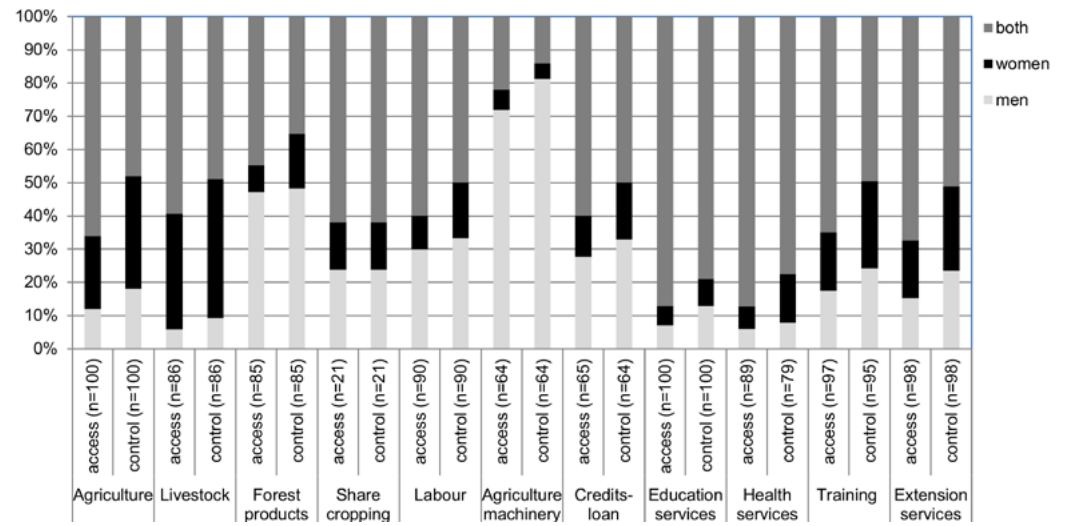


Figure 3. Access to and control of natural resources and services by gender

3.5. Access to and control over benefits arising from land and natural resources

Access to and control over benefits arising from land and natural resources by gender is given in Table 4. Women had significantly higher access to ($\chi^2_{(2)} = 6.190$, $p < 0.05$) and control ($\chi^2_{(2)} = 6.448$, $p < 0.05$) over benefits accrued from livestock. Similarly, women had access to benefits accrued from business ($\chi^2_{(2)} = 9.170$, $p < 0.05$), though not necessarily control over them. In contrast, men had significantly higher access to ($\chi^2_{(2)} = 8.873$, $p < 0.05$) and control over ($\chi^2_{(2)} = 7.333$, $p < 0.05$) daily wage benefits due to the off-farm nature of such work.

Table 4. Access to and control over benefits from land and natural resources by gender

Category	Access/Control	Men	Women	Both	*df*	*Chi-square*	*p-value*
Land	Access (n=100)	17	17	66	2	0.673	0.714
	Control (n=100)	25	31	44	2	1.062	0.588
Agriculture	Access (n=97)	9.3	27.8	62.9	2	2.405	0.300
	Control (n=97)	14.4	42.3	43.3	2	4.957	0.084
Livestock	Access (n=84)	10.7	35.7	53.6	2	6.190	0.045*
	Control (n=84)	11.9	46.4	41.7	2	6.448	0.040*
Forest	Access (n=75)	22.7	25.3	52	2	2.303	0.316
	Control (n=75)	20	36	44	2	2.780	0.249
Contract	Access (n=35)	68.6	5.7	25.7	2	4.148	0.126
	Control (n=34)	58.8	17.6	23.5	2	4.006	0.135
Business	Access (n=24)	29.2	45.8	25	2	9.170	0.010*
	Control (n=22)	13.6	63.6	22.7	2	5.809	0.055
Daily wage	Access (n=65)	43.1	9.2	47.7	2	8.873	0.012*
	Control (n=66)	40.9	19.7	39.4	2	7.333	0.026*
Politics	Access (n=99)	18.2	10.1	71.7	2	6.055	0.048
	Control (n=99)	23.2	17.2	59.6	2	13.773	0.001**

*** p < 0.01; *p < 0.05*

3.6. Practical gender needs and strategic priorities

Women's practical needs and strategic priorities in order of importance are given in Table 5. Women's five most important practical needs were drinking and irrigation water supplies (64%), women-friendly agricultural machinery (e.g., power tillers) and tools (36%), seeds/seedlings of crops and fruit plants (35%), capacity building on tailoring and entrepreneurship skills (43%), and electric/solar fences (50%) for deterring wild animals' incursion into farms. Women's five top strategic priorities were formal education including non-formal education and up-gradation of existing schools (53%), health (50%), farm road maintenance (45%), drinking and irrigation water supplies (44%), women-friendly agricultural machinery (70%), and tailoring and entrepreneurship skills (62%).

Table 5. Women's practical needs and strategic priorities

Needs/priorities	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6
Practical needs						
Drinking and irrigation water	9(64.3)	2(14.3)	3(21.4)			
Agriculture machinery	5(35.7)	7(50)	1(7.1)	1(7.1)		
Seeds and seedlings	6(35.3)	6(35.3)	4(23.5)	-	1(5.9)	
Tailoring and entrepreneurship skills	6(42.9)	5(35.7)	-	1(7.1)	2(14.3)	
Electric and solar fence	3(50)	1(16.7)	1(16.7)	1(16.7)		
Biogas technology	2(40)	-	1(20)	1(20)	1(20)	
Market Infrastructures	-	-	2(40)	3(60)	-	
Farm road maintenance	3(75)	-	1(25)	-	-	
Cattle and cattle sheds	1(14.3)	2(28.6)	2(28.6)	1(14.3)		1(14.3)
Green/polythene house	1(33.3)	1(33.3)	1(33.3)	-	-	-
Credits-loan	2(100)	-	-	-	-	-
Land lease for cultivation	1(50)	-	-	1(50)		
Orchard maintenance	1(50)	-	-	1(50)		
Agriculture pesticides	1(100)					
House construction	1(33.3)	2(66.7)				
Potato chips making machines		1(100)				
Strategic priorities						
Education (schools' upgradation and NFE)	9(52.9)	5(29.4)	2(11.8)	-	1(5.9)	
Health services (upgradation of BHUs)	1(12.5)	4(50)	2(25)	1(12.5)		
Farm road maintenance	5(45.5)	2(18.2)	2(18.2)	1(9.1)	1(9.1)	
Drinking and irrigation water	4(44.4)	4(44.4)	-	1(11.1)		
Agriculture machinery	7(70)	3(30)				
Tailoring and business management skills	5(62.5)	1(12.5)	1(12.5)	1(12.5)		
Timber for house construction	2(66.7)	-	1(33.3)			
Land lease for cultivation	1(33.3)	2(66.7)				
Credits-loan	1(50)	1(50)				
Electric/solar fence	-	-	2(100)			
Livestock/cattle sheds	2(66.7)	-	-	1(33.3)		
Market Infrastructure	1(33.3)	1(33.3)	-	1(33.3)		

Note: Figures in parentheses are percentages; NFE stands for non-formal education and BHU for basic health unit

Men's practical needs and strategic priorities are given in Table 6. Men's five most important practical needs were: drinking and irrigation water supplies (78%), farm road maintenance (56%),

electric/solar fences (45%) to deter wild animals' incursion into farms, seeds/seedlings supply (44%), and capacity building on entrepreneurship skills (40%). Men's strategic priorities were farm road construction where non-existent (90%), solar/electric fencing (80%), formal and non-formal education (56%), agricultural machinery (40%), and drinking and irrigation water supplies (42%).

Table 6. Men's practical needs and strategic priorities

Needs/priorities	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6
Practical needs						
Drinking and irrigation water	14(78)	4(22)				
Farm road and maintenance	5(55.6)	2(22.2)	2(22.2)			
Electric /solar fence	5(45.5)	4(36.4)	2(18.1)			
Seeds and seedlings	8(44.4)	4(22.2)	4(22.2)	2(11.1)		
Entrepreneurship skills	4(40)	5(50)	1(10			
Agriculture machinery	3(25)	5(41.7)	3(25)	1(8.3)		
Credit-loan	3(42.9)	2(28.6)	1(14.3)	-	1(14.3)	
Biogas technology	1(33.3)	2(66.7)				
Market infrastructure	1(50)	1(50)				
Cattle and cattle sheds	2(50)	1(25)	1(25)			
Green/polythene house	1(50)	-	-	1(50)		
Land lease for cultivation	1(33.3)	2(66.7)				
Agriculture pesticides	-	3(42.9)	3(42.9)	1(14.2)		
House construction	2(50)	2(50)				
Strategic priorities						
Farm road construction	9(90)	-	-	-	1(10)	
Solar/electric fence	8(80)	1(10)	-	-	-	1(10)
Education (school upgradation and NFE)	14(56)	9(36)	1(4)	-	1(4)	-
Agriculture machinery	4(40)	5(50)	-	1(10)		
Health services (upgradation of BHUs)	-	1(25)	2(50)	1(25)		
Drinking and irrigation water	2(16.7)	5(41.7)	4(33.3)	-	1(8.3)	
Business/entrepreneurship skills	-	1(33.3)	2(66.7)			
Timber for house construction	2(50)	-	1(25)	1(25)		
Land lease for cultivation	1(20)	3(60)	1(20)			
Credits-loan	1(33.3)	2(66.7)				
Livestock/cattle sheds	-	-	-	1(100)		
Domestic on-violence	-	-	1(100)	-		
Market infrastructure	1(33.3)	-	1(33.3)	1(33.3)		

Note: Figures in parentheses are percentages; NFE stands for non-formal education, and BHU stands for basic health unit

3.7. Group findings

The group findings on strategies to improve women's access to and control over benefits from land and natural resources and to address negative impacts are given in Tables 7 and 8, respectively. The strategies identified to empower women's access to and control over land and natural resources include the promotion of women's participation in local government decision-making processes, formal and non-formal education, training and capacity building on agriculture enterprises and value chains, and access to women-friendly farm machinery and farm mechanisation, complementing the findings in Tables 5 and 6.

Table 7. Group strategies to improve gender access to and control over benefits from land and natural resources

Location, district	Strategies to improve gender access to and control over benefits from land and natural resources
Guma, Punakha	Promote the participation of women in local governments Provide training tailored to women's needs Encourage public speaking and self-esteem development for women
Athang, Wangdi Phodrang	Training of trainers by women resource persons Strengthen non-formal education for illiterate women Awareness and access to schools for differently abled children
Tangsibji, Trongsa	Training on agriculture-based entrepreneurship development Educating women's knowledge of politics
Trong, Zhemgang	Reform rules for mandatory participation by women in government meetings Training on best agronomic and livestock practices
Jigmecholing, Sarpang	Promote women's decision-making role in agriculture and other natural resources management groups Gender-responsive budgeting in development project design Capacity building on paddy transplantation and cultivation practice for women and youth engaged in agriculture Scaling-up of farmers' study tours Scaling-up of the smokeless stove and biogas use, and maintenance Capacity building of unemployed youth on cardamom cultivation, processing, and marketing
Bjee, Haa	Conduct awareness on gender equality Capacity building on improved cattle milking, processing, and marketing; tailoring to women entrepreneurs; and knowledge and skills on potato value-addition (chip production, processing, packaging, and marketing)

Tsento, Paro	Improve access to markets and pricing information Capacity building on gender-friendly agriculture machinery and tools
Chumey, Bumthang	Capacity building on mushroom production, packaging, and marketing
Ura, Bumthang	Capacity building on vegetable cultivation and seed management

Table 8. Group strategies to address negative impacts on women's livelihood

Location, district	**Strategies to address negative impacts on women's livelihood**
Guma, Punakha	Promote smokeless stoves and biogas to improve women's health Conduct awareness on gender equality for men and women
Athang, Wangdi Phodrang	Increase women's decision-making in agricultural informal and formal groups Enforcement of equal wage rates for men and women
Tangsibji, Trongsa	Provide an electric/solar fence that reduces women's time in guarding crops against wild animals
Trong, Zhemgang	Educate men to shoulder women's unpaid domestic chores
Jigmecholing, Sarpang	Promote home-made product processing and marketing
Tsento, Paro	Awareness of alcohol abuse and domestic violence Promote livestock extension services and technologies Awareness of gender equality
Chumey, Bumthang	Enforcement of regulations on alcohol abuse Women-friendly wheat, buckwheat and, barley harvesting and threshing machines
Ura, Bumthang	Promotion of user-friendly power tillers to substitute manual ploughing Formation of women's group on mushroom cultivation, processing and marketing

The strategies suggested to improve the negative impacts on women's livelihoods include awareness campaigns on gender equality, the use of cooking stoves and biogas technology to improve women's health, ensuring equal wages, enhancing women's decision-making in resource management groups, improving access to agricultural harvesting/processing and marketing technologies, encouraging men to share women's unpaid household chores, and to a lesser extent, the prevention of gender-based violence.

4. Discussion

Our findings revealed that despite men and women jointly engaging in productive and socio-political activities, women are overwhelmingly engaged in reproductive tasks and agricultural marketing, which reinforces their triple role burden at the household level. Although statutory laws may suggest women have equal access to and control over land and natural resources and the

benefits arising from them, this study indicates that men exercise more control over land-based decisions and off-farm benefits. Women's practical needs were found to be similar to men's, but their strategic priorities differed significantly. These findings are further elaborated and reinforced by similar studies.

Most agricultural production and socio-political activities were reportedly jointly done by men and women. However, women mostly cultivated and marketed vegetables, whilst men ploughed land due to the arduous nature of the work and marketed cash crops, e.g., cardamom. Similar studies corroborate that land ploughing, bush clearing, and marketing cardamom were done by men in shifting cultivation farms (Wangdi and Pelgen, 2017; Yangzom, 2017; Acharya, Pathak and Pandey, 2021). Studies by Tiwari, Tynsong and Phanbuh (2006) revealed that while men and women equally shared shifting cultivation activities, men's share of responsibilities increased with cash crops in a matrilineal community in eastern India. These findings imply that agricultural policies, programmes, and projects should aim to meet both subsistence and commercial needs without over-emphasis on transformation from subsistence to cash crops, e.g., cardamom in the agro-transformation through commercialisation, ensuring women's roles and benefits are not overlooked.

In general, women's role is often confined to agricultural activities within the boundaries of their farms, whilst men are more frequently employed in off-farm work. Similar studies revealed that men and women both engage in production activities; however, gendered division of labour becomes obvious owing to the nature of the work or income (GNHC, 2011; Norbu and Moktan, 2012). Mostly, women weeded crops, transplanted paddy seedlings, and marketed cereals, vegetables, fruits, livestock products, and home-processed products, underscoring women's active participation from production to marketing of agricultural and livestock products.

Women collected drinking water, firewood, and fodder whilst men predominantly sourced irrigation water and grazed cattle. Besides, women are significantly engaged in unpaid domestic household chores, e.g., food preparation and cooking, childcare, sanitation and hygiene, and weaving of handicrafts. A similar study corroborates that 80% of rural women cooked, washed clothes, cleaned homes, maintained kitchen gardens, and prepared food, whilst 60% of men engaged in fuelwood collection (GNHC, 2011). Another study pointed out that about two-thirds of rural women fetch drinking water and shoulder responsibility for children's health care. This clearly indicates that women are the primary collectors, transporters, and users of domestic drinking water and caretakers of household sanitation (UNDP, 2014), underscoring that securing drinking and irrigation water for families has a direct bearing on women's health and workload. In our study, drinking and irrigation water ranked as one of the critical and strategic priorities of women. Our findings reaffirmed women's triple role, from productive to socio-political through reproduction, with multiple tasking (March, Smyth and Mukhopadhyay, 1999).

Unlike in productive and reproductive spheres, women's role in socio-political activities was less prominent, potentially attributed to women's significant engagement in the former two activities. Both men and women performed religious ceremonies, whilst voluntary labour contribution was largely considered a domain for men. Our study revealed that men overwhelmingly engage in government-sponsored policy discourses, including capacity-building training, often leaving women to manage household work possibly due to gender stereotypes. Household agricultural

and political decisions were reportedly jointly decided based on consultation. Similar findings corroborate that agricultural decisions were made by both men and women (GNHC, 2011).

Although women may formally have equal access to land, men appear to exercise greater control over land decisions. However, benefits arising from land were reportedly equitably shared between men and women. Our study did not find a significant difference in reported access to and control over land in matrilineal societies, except in patrilineal societies where men's control was more evident. It shows a gradual shift in parental behaviour towards land property rights in Bhutan. Both boys and girls are considered equal, bestowing equal rights to inherit land and other physical assets. Similar studies corroborate that property-inheritance decisions were made based on consultation between men and women (GNHC, 2011). Our study revealed that men have greater control over forest products and agricultural machinery due to the nature of the off-farm work. Mostly, men benefit from capacity-building training in agriculture, livestock, and forestry with fewer women beneficiaries (GNHC, 2011). However, both groups reported equal access to and control over agriculture, labour, credits, health, and education services. Women significantly took control over benefits from livestock, whilst men outnumbered women in formal policy discourses at the local government level. Similar findings revealed that men dominated public policies at the national level whilst women dominated productive and reproductive decision-making (GNHC, 2011; Choden et al., 2012). Our study findings revealed an uneven playing field for women in public policy-making discourses and capacity-building/training, including the development of leadership skills. Barriers to women's participation in policy discourses were reportedly due to lack of education and their triple role (Cheizom and Choden, 2014), and a range of cultural stereotypes (Thinley et al., 2014). A recent study by NCWC (2024) found that social and cultural norms remain a key barrier to women's leadership in the public sector.

Our group interview findings reaffirmed that enhancing women's empowerment regarding land and natural resources requires capacity building on gender equality, agricultural value-chains, marketing, and entrepreneurship through education, and the development of leadership and communication skills. Sraboni et al. (2014) noted that women's asset control and economic empowerment through reformed property rights are important policy drivers for South Asian women's empowerment. In contrast, Akter et al. (2015) revealed that Southeast Asian women often have far better access to productive resources e.g., land property rights and greater control over household income.

Women's practical needs were similar to men's however; women's strategic priorities differed. Women prioritise education and health, leveraging gender equality and women's empowerment in the longer-term whilst men prioritise more immediate critical needs e.g., farm roads and solar/electric fences for improving accessibility and preventing wild animals' incursions. Our findings corroborate Moser (1989)'s assertion that women envision education and health as cornerstones to leveraging gender equality and overcoming their subordinate position.

The group findings reinforced that education has the potential to illuminate women's lives bringing them closer to men's world. Education can empower women to make rational social, economic, and political decisions (Yangden and Gurung, 2023). According to UNESCO (2007), education is crucial to women's empowerment, enabling them greater access to and control over material

and knowledge resources to improve their lives and challenge the ideologies of discrimination and subordination in South Asia. Sinha (2009) also noted that ICT education can have profound influence on existing gender norms, opening women's eyes to social networks and employability in Bhutan.

5. Conclusion

This study concludes that while both men and women in rural Bhutan are engaged in productive and socio-political activities, women are overwhelmingly engaged in reproductive activities, particularly cooking, childcare, health, and sanitation. This heavy burden of unpaid work constrains them from fully benefiting from opportunities for empowerment through capacity building on leadership and entrepreneurial skills, and participation in policy discourses.

Although statutory laws grant equal access to and control over land and natural resources, this study found that in practice, women often have less control over economic assets, e.g., land. Access to and control over the benefits arising from land and natural resources are reportedly equally shared between men and women, yet off-farm benefits accrue more frequently to men.

Women's practical needs were largely similar to men's, but their strategic priorities differed significantly. Women prioritise education and health, leveraging gender equality, equity, and social and economic empowerment whilst men tend to prioritise immediate infrastructural needs such as farm roads and solar/electric fences for improving accessibility and preventing wild animal incursion into farms. Consequently, the paper contends that understanding these common yet differentiated roles, access/control dynamics, and strategic priorities is crucial for formulating effective gender-responsive policies and programmes that can address these structural inequalities and genuinely advance women's empowerment in Bhutan.

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References

Acharya, S., Pathak, K. and Pandey, C.L. (2021) 'Does high-value agriculture build resilient livelihood? Insights from the study of cardamom and vegetable farmers of Nepal.' *Journal of Forest and Livelihood*, 20(1), pp. 1-15.

ADB (2024) *Engaging men and transforming masculinities to achieving gender equality and women's empowerment. A stocktaking initiative in South Asia.* Manila: Asian Development Bank.

Akter, S. et al. (2015) 'Women's empowerment and gender equity in agriculture. A different perspective in South-East Asia', *Food Policy*, 69, pp. 270-279.

Cheizom, P. and Choden, T. (2014) *The role of rural women in sanitation and hygiene: A gender*

study from Bhutan. Thimphu: SNV Netherlands and Royal Government of Bhutan.

Choden, T., Dutta, S. and Phuntsho, T. (2012) *Gender review of national energy policies and programmes in Bhutan*. Thimphu: Department of Renewable Energy, Ministry of Economic Affairs, Bhutan.

ECB (2014) *Study of the determinants of voter's choice and women's participation in the elective offices in the Kingdom of Bhutan.* Thimphu: Election Commission of Bhutan. Available at: https://www.ecb.bt/study-of-the-determinants-of-voters-choice-and-womens-participation-in-elective-offices-in-the-kingdom-of-bhutan/(Accessed: 3 February 2020).

FAO (2013) *FAO policy on gender equality: Attaining food security goals in agriculture and rural development.* Rome, Italy: Food and Agriculture Organization of the United Nations.

GNHC (2011) *Gender study in Bhutan.* Thimphu: Gross National Happiness Commission.

GNHC (2013) *Eleventh Five Year Plan 2013-2018.* Thimphu: Gross National Happiness Commission.

Gurung, J.D. (ed.) 1999 *Searching for women's voices in the Hindu Kush-Himalayas.* Kathmandu: International Centre for Integrated Mountain Development (ICIMOD).

HELVETAS (2010) *Gender Strategy 2010-2030.* Thimphu, Bhutan: Helvetas Program Office.

IMS (2011) *Study report on women's political participation in the 2011 Local Government election.* Thimphu: National Commission for Women and Children.

Khadka, M. and Verma, R. (2012) *Gender and biodiversity management in the greater Himalayas: Towards equitable mountain development.* Kathmandu: ICIMOD.

Leduc, B. (2011) *Mainstreaming gender in mountain development: From policy to practice. Lessons learned from a gender assessment for four projects implemented in the Hindu Kush Himalayas.* Kathmandu: ICIMOD.

March, C., Smyth, I.A. and Mukhopadhyay, M. (1999) *A guide to gender-analysis frameworks.* Oxfam.

Moser, C. (1989) 'Gender planning in the Third World: Meeting women's practical and strategic needs', *World Development*, 17(11), pp. 1799-1825.

MoLHR (2015) *Labour force survey report.* Thimphu: Ministry of Labour and Human Resources.

NCWC (2008a) *National Plan of Action for Gender 2008-2013.* Thimphu: Gross National Happiness Commission and National Commission on Women and Children.

NCWC (2008b) *Study of gender stereotypes and women's political participation.* Thimphu: National Commission on Women and Children.

NCWC (2017) *Gender Equality Policy*. Thimphu: Royal Government of Bhutan.

NCWC (2023) *Gender equality in Public Administration in Bhutan.* Thimphu: National Commission on Women and Children, United Nations Development Programme, and United Nations Department of Economic and Social Affairs.

NCWC (2024) *National Action Plan to promote gender equality in Public Administration.* Thimphu: United Nations Development Programme and Department of Economic and Social Affairs, United Nations.

Nie, N.H., Bent, H.B. and Hall, C.H. (2007) *Statistical Package for Social Sciences*. Chicago, IL, USA.

Norbu, L. and Moktan, M.R. (2012) *Gender role transition and sustainability of shifting cultivation land use in Bhutan.* Thimphu: Council for Renewable Natural Resources Research of Bhutan.

NSB (2018) *Population and Housing Census of Bhutan.* Thimphu: National Statistical Bureau.

NSB (2017) *Bhutan Living Standard Survey Report.* Thimphu: National Statistical Bureau.

NSB (2019) *Statistical Year Book of Bhutan*. Thimphu: National Statistical Bureau.

Sachs, J. (2005) *The end of poverty: How can we make it happen in our lifetime?* London: Penguin Group.

Sinha, C. (2009) *Effects of education and ICT use in gender relation in Bhutan.* Canada: International Development Research Centre.

Sraboni, E. et al. (2014) 'Women's empowerment in agriculture: What role for food security in Bangladesh? *World Development*, 61, pp. 11-52.

Thinley, D. et al. (2014) *Improving women's participation in local governance: An explorative study of women's journey in eight districts of Bhutan*. Thimphu: Institute for Gross National Happiness Studies.

Tiwari, B.K., Tynsong, H. and Phanbuh, S. (2006) 'Impact of cash crops cultivation in gender relations dynamics in Kashi Community- a matrilineal tribe in Meghalaya, India', *International Symposium on Towards Sustainable Livelihoods and Ecosystems in Mountainous Regions*, Chiangmai, Thailand, 7-9 March.

UNDP (2014) *Report on mainstreaming gender into the energy and environment portfolio of UNDP Bhutan.* Thimphu: United Nations Development Programme.

UNDP (2016) *Population and land cover information for the GEF/LDCF/UNDP project landscapes, Bhutan*. United Nations Development Program.

UNESCO (2007) *Education gender and empowerment: Perspectives from South Asia.* New Delhi, ADHAYAN.

Wangdi, J. and Pelgen, S. (2017) 'Lachu-Yuwa Irrigation Scheme, Bjena Gewog, Wangdi Phodrang', in: Wangdi, J. and Wangdi, S. (eds.) *Case studies: Policy impact assessment of irrigation schemes.* Volume II, Thimphu: Policy and Planning Division, Ministry of Agriculture and Forest.

WEF (2018) *Global gender gap report.* Geneva, Switzerland: World Economic Forum.

WEF (2020) *Global gender gap report.* Geneva, Switzerland: World Economic Forum.

Yangzom, T. (2017) 'Case study report-Silsiley Kulo Irrigation Scheme in Jigmecholing Gewog, Sarpang' in: Wangdi, J. and Wangdi, S. (eds.) *Case studies: Policy impact assessment of irrigation schemes.* Volume II, Thimphu: Policy and Planning Division, Ministry of Agriculture and Forest.

Yangden, T. and Gurung, T. (2023) 'Transformation of women's role in Bhutan', *Journal of Namibian Studies*, 33.