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"We know the taste of sugar because of cardamom production" Links among Commercial Cardamom Farming, Women's Involvement in Production and the Feminization of Poverty¹

By Sony KC², Bishnu Raj Upreti³, and Bashu Prasad Subedi⁴

Abstract

This paper analyses the impact of commercial cardamom farming on the livelihoods of women, revisiting the concept of the "feminization of poverty". For the analysis of cash crop farming in Eastern Nepal, both quantitative and qualitative approaches have been used. A quantitative survey was conducted in 513 households in Ilam district between November and December 2015 followed by qualitative data collection. A literature review on the feminization of poverty and cash crop farming has also been included. A descriptive data analysis has been conducted from the perspective of the feminization of poverty against the background of cash crop farming. The paper concludes that women of different ethnic backgrounds engaged in commercial cardamom farming have been able to improve their livelihoods, spend on their children's education, their family's health and invest in savings. For marginalized communities the impact is even more pronounced, as women have been able to step out of poverty. The high return from cardamom farming has changed the livelihood trajectories of these women. Engagement in cash crop farming has empowered women financially and socially through their visible participation in savings and community groups. This study also opens up pathways for further studies on issues of sustainable cardamom farming and its impact on women's livelihoods, particularly focusing on women and poverty. This study addresses that in developing or under-developed countries reliant on agriculture, their economic development can be improved if women's economic and social

¹ Acknowledgment: This research is a part of R4D, Research Project, Feminization of Agriculture, Transition and Rural Employment (FATE). The authors would like to acknowledge the entire FATE team for their direct and indirect support. The authors are grateful to the amicable people of Jirmale, without whom this research would not have been possible. We owe to the women of Jirmale who did not timid away to provide us the information despite their time constraints. And we owe deepest gratitude to the dedicated enumerators and the team from Nepal Centre for Contemporary Research (NCCR). This project involves the publication of several journal articles. Currently, two main articles have been prepared which were presented at the Second World Conference on Women in Sri Lanka. This article constitutes one of the two. The major gist of the project is to explore women's engagement and their economic and empowerment status in the process of transition from subsistence to commercial farming. Agricultural transition is a gradual process, and during such transition Nepal experienced a decade long armed conflict, which had an adverse effect in the market dimensions, as this paper indicates. The second paper, also published within this special issue of the JIWS specifically focuses on commercial cardamom as an export led cash crop, again examining women's engagement in this cash crop by exploring women's economic status, decision making power and their power to make use of their own income. Hence, each paper explores some dimension of women farmers in Nepal, one focusing on the post conflict scenario while the other examining their poverty status. ² Miss KC is a PhD Scholar, currently conducting her PhD research under the FATE project. She is based in Kathmandu University, Department of Development Studies, School of Arts Nepal. She can be reached at sonykayc@gmail.com

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conditions are understood and facilitated through policies inline with sustainable cash crop farming.

Keywords: Cardamom, Livelihoods, Nepal, Poverty, Women's empowerment

Introduction

Scientific studies demonstrate that the commercialization of agriculture is the key to economic development and poverty reduction in developing countries (Kristen et al 2012; Wiggins et al 2011). Enhancing peoples' participation in commodity based agricultural markets helps to reduce food insecurity and poverty (Omiti et al 2007). Cash crops produced for export contribute to livelihood improvement (Diao et al 2012). Hence, subsistence farming practices need to be transmuted to commercialization and export, following Africa's successful trend (Simmons 2003). This is because commercial products comparatively provide higher income to the poor (Cadot et al 2009), and help the rural poor to step out of poverty (World Bank 2008). Studies from China and South Africa reveal commercialization has led to increased income and household food consumption (see Baylis et al 2012; Hendriks and Msaki 2009). Commercialization, in this context means, the "ratio of percentage value marketed output to total farm production" (Bouis and Haddad 1990).

Agricultural commercialization leads to employment opportunities, mainly creating economic spaces for women, with improved livelihoods, increased participation and enhanced social standing in communities (Alam 2012; Kabeer 2012; WDR 2008). Ester Boserup highlighted women's visibility in the productive agriculture sector during the 1970s particularly bringing women's role and economic activities into the limelight (Boserup 1970). She highlighted the notion of women in development (WID) to show that women are key players in the agriculture sector; however, at the time of her writing their active participation had gone unnoticed by development "experts" to the detriment of development programs and projects. Empirical evidence shows small-scale women farmers in Guatemala, Kenya and other African countries have benefited economically through export led production (see Hamilton et al. 2002; Omosa 2002). Moreover, parts of Africa and Latin America have proved successful in establishing women as active participants of high value crops and commodity production (FAO 2012). In addition, women have been able to distinguish themselves in the agriculture sector as major contributors and producers of cash crops.

However, with the significant need to address the issues of both men and women, inclusive of their social and economic status and roles, the Gender and Development (GAD) perspective emerged in the 1980s. Despite better jobs and improved economic circumstances through a transition from subsistence to commercial farming, women's disadvantages in regards to roles, wages, land ownership, and employment conditions seem to persist across the globe (Razavi 2012; Li 2011; WB, FAO and IFAD 2009). Evidence from African territories shows men benefit more than women when it comes to production and marketing of both traditional and non-traditional crops (Fisher and Qaim 2012; Nijuk 2011; WB et al 2009). This could be supported by fact that rural women are deprived of education and training, which undermines their bargaining position or their ability to stand for their interest (Ajani and Igbokwe 2014; FAO 2011). On the positive side, a study of cocoa production in Ghana shows women were able to attain assets, mostly land, if they helped their husband in cocoa production (Quisumbing 2004).

The debate on the 'feminization of poverty,' a term coined by Pearce in 1978, addresses the issue of the differences in poverty levels between men and women, particularly addressing the developed world, including the United States. Evidence particularly from western countries shows that women are poorer than men (Medeiros and Costa 2008; Bradshaw et al 2003; Casper et al 1994). Medeiros and Costa (2008:4) refer to two main phenomena under which the feminization of poverty occurs. One, is the difference in poverty levels between men and women and another, is the difference in poverty levels between male-headed households and female-headed households.

Likewise, Chant (2010) finds three main observations from African nations as evidence of the feminization of poverty, where she compares the incomes of men and women as the main factors determining poverty. These observations are: i) increased gender disparities in the roles of men and women when it comes to work outside of home and domestic work, ii) increased disparity between men and women in their ability to make decisions and in their negotiating power, for example, negotiating about income at the household level, and iii) increased differences among men and women in terms of bargaining for individual needs, investment or even rewards (pp. 113-114). However, less often debated are issues surrounding poverty levels among women of different groups, and most importantly, issues around gender and social difference, which is a typical situation for Nepal.

In this paper, the term feminization of poverty will be understood in terms of shifts in poverty levels among women of different ethnic groups, pertaining to their economic involvement in cardamom farming as their means of livelihoods. Moreover, this analysis is important vis-à-vis Chant's (2010) observations of African countries, as aforementioned: women's roles in cardamom farming and their livelihoods can contribute to knowledge about role disparity between men and women, where it exists. This study sheds light on the interplay of gender, ethnicity and poverty alleviation in relation to women's commercial farming.

In Nepal, 72.8 percent of economically active girls and women (age 10 and over) are engaged in agricultural work compared to the 60.2 per cent of boys and men (Ministry of Agriculture and Cooperation [MoAC], 2009). In rural Nepal, women contribute approximately 70 percent of labor in agriculture (Bhadra and Shah 2007). Women's engagement in the agricultural labor force increased to 48.1 per cent in 2001 from 36 per cent in 1982 (GoN 2009). This shows an increase in the feminization of agriculture. While agrarian Nepal is significantly dependent on agriculture for income and food, commercial high value crops have prominently contributed to the Nepalese economy through exports. Increased commercialization of cash crops has assisted small farmers by addressing food security (Gautam 2011; Sharma 1997). This means those small farmers who have much less land, are able to gain high returns by producing very few cash crops. If they produced subsistence crops alone in the small area of land they own, they would not be able to fulfill their food needs. This is because selling small quantities of subsistence goods would not give them high returns, which they could obtain by selling cash crops. With the amount made from cash crops, these farmers can not only buy rice from the nearby market, which is the staple food but also other necessities such as oil, salt and edible goods. Also, market-oriented products have contributed to the socio-economic development of farmers through increased income and graduation from poverty (Dahal et al 2009).

Among various high value crops produced in Nepal, Large Cardamom (*Amonum Subulatum Roxb.*) has become a valuable commodity for export since its commercialization in 1953. Cardamom farming first started in Ilam during the 19th century, when the Nepali laborers in Sikkim introduced this crop. This district had been the highest producer of cardamom for centuries,

covering almost all the VDCs. This district is also prominent for high production of tea, ginger, fruits, chilies and vegetables due to its favorable climatic conditions. In yhr year 2013, Ilam itself produced 45,894 metric tons of ginger with business of 3 billion 410 million; cardamom of 690 million; oranges of 30 million, kiwi of 14.4 million; honey of 13.2 million and chilies of 160.1 million (Bhattarai 2014).

In recent years, there has been an increase in the demand for cardamom for export across Nepal. According to the latest data reports, in 2012/2013, Nepal produced 5763 Metric Tons (MT) of large cardamom of Rs 2528 million, thus becoming the largest producer of cardamom across the globe (Ministry of Agricultural Development [MoAD] 2015). Cultivating large cardamom for export can help alleviate poverty by bolstering the national economy and elevating the livelihoods of the poor and marginalized (Environment Conservation and Development Forum [ECDF] 2008). Cardamom production is effective in the eastern mid-hills creating employment for rural people. Though there is no concrete data on the number of people engaged in cardamom farming, estimates show that about 25,000 households in Ilam, Taplejung and Panchthar are involved in cardamom farming, while, the figure is 67,000 households across Nepal (Karobar news 2014). Around 6 percent of the total population (27.8 million) of Nepal lives in the eastern mid-hills (Central Bureau of Statistics [CBS] 2014).



Figure 1: Map showing Ilam, Taplejung and Panchthar districts

Source: Google Maps with adjustments

Commercialization of cardamom has no doubt contributed to the nation's economy. However, there is a paucity of research on the impact of cardamom farming in the lives of farmers. Moreover, there is a research gap in gender relations, pertaining to the division of labor of men and women in cardamom farming, as evidence only reflects on women's active engagement in cash crops farming (see Chapagain 2011; Karki et al 2009) without reflecting their roles. Additionally, the issue of women's engagement in cardamom farming for income and its impact in their livelihoods, particularly in relation to different ethnic groups, is nuanced.

This paper contributes to a growing body of empirical research exploring the relationship between women's engagement in cash crop farming and the feminization of poverty, by filling in knowledge gaps through a case study of Nepal's cardamom commercial farming. It employs mixed methods to address the following objectives:

- i. to examine women's engagement in commercial cardamom farming,
- ii. to assess the impact of cardamom farming in the livelihoods of women, distinguishing among women of distinct ethnic groups,
- iii. to identify the relationship between cardamom farming and feminization of poverty.

We hypothesize that women's engagement in commercial cardamom farming improves their livelihoods and contributes to poverty reduction through income generation. In this paper, women's engagement in cardamom farming will be assessed through the lens of the feminization of poverty. We achieve this by examining women's economic status and comparing it to that of men, to determine whether or not there are disparities in the roles in economic activity; income, and negotiations of income for household use; decision-making to choose roles and the bargaining power and cultural barriers that restrain women, for example, in selecting their economic activities or roles. We regard these indicators as the foundation of gender equality or disparities. More specifically, this paper will compare changes in livelihoods as a result of commercialized farming for different social groups.

Nepal holds a centuries-old unique caste and ethnic history. There are four main castes or ethnic groups with sub-castes. The four main caste stratifications are known as Brahmin, Chhetri, Vaisya and Sudras. The Brahmins are well known as priests; Chhetri's as warriors; Vaisya's as merchants and Sudras as lower class or untouchable groups (Subedi 2010). Under these four castes are various sub-castes.

A brief background will assist readers in contextualizing the ethnic/caste impacts that we discuss later in the paper. The Malla dynasty Kings ruled over Kathmandu, Bhaktapur and Lalitpur. It was during this time that King Jayastithi Malla (1380-1394) initiated the caste system in the Kathmandu Valley. He assigned different statuses and roles to the 64 castes based on their hierarchy (Bennet et al 2008). The Kiranti Kings ruled over western Nepal. Both the Mallas and Kiratis fall under Vaisya caste. The Malla fall under Newari ethnic group while the Kirants fall under Janjatis or indigenous groups. The Newars are considered the original inhabitants of Kathmandu, Bhaktapur and Lalitpur.

The Sudras, also known as Dalits are considered untouchables and are known by their occupational groups such as tailors, sweepers and Badis or prostitutes. These are the marginalized groups who are categorized as the Hill Dalits or the Terai Dalits. Apart from the Sudras being the untouchable groups, there are also untouchable groups based within the Janjatis or the Newari caste as well, who are not Dalits but there is nonetheless a hierarchy within these ethnic groups.

In Nepal, the Dalits and Janjatis have been considered a marginalized group, deprived of services and various rights while the Brahmins and Chhetris have been considered the educated and knowledgeable people with higher standings and jobs in the society. However, with the end of the monarchy, ruled by Ranas (1856-1951) and Shahs (1951-2008), under the attempt of the Maoists (1996-2008), the issue of untouchability and rights to marginalized people became visible. Moreover, Nepal was no longer under the monarchy but instead a Federal Democratic Republic. Providing equality to marginalized and disadvantaged groups and framing non-discriminatory policies became the major agenda in the political debate, particularly during the insurgency and post-insurgency periods.

This paper is structured in four parts. Part one is the introduction section, which introduces commercialization, and its impact on farmers, particularly on women, by drawing from the literatures. The second part discusses the research methodology; part three identifies the findings

and analysis based on the objectives. Finally, the paper concludes by discussing the impact of commercial cardamom farming on women.

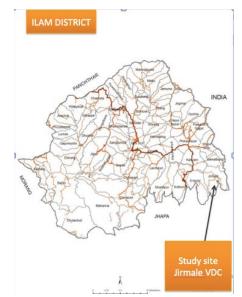
Methodology

The study was carried out in the Ilam district in the eastern hills of Nepal. Ilam lies about 600 kilometers (km) East of Kathmandu. The district covers an area of 1,703 square kilometers (kms) and has a population of 290,254. There are 48 Village Development Committees (VDCs) and one municipality in Ilam. The major ethnicity of this district is Rai followed by Brahmin, Limbus, Tamangs and Chhetri (CBS 2011).

To carry out this study a mixed method-framework has been applied. The use of mixed methods helps create evidence that only one method cannot address, as one method complements the other (Creswell et al 2006). For the particular problem addressed in this paper, the authors added a quantitative strand within a qualitative design. Quantitative design, prepared through a multi-stage sampling strategy (see Fig. 3) followed by a survey questionnaire, has been added to enhance the overall design of the research, with aim of maintaining a database on the subject matter (Creswell and Plano Clark, 2011). The survey questionnaire had two parts: the first part was related to household information and in the second, there were questions related to individual heads of the family. Regarding the first part of the questionnaire, data were obtained from 513 male or female respondents from the household. Using the second part of the questionnaire, 439 male and 475 females were surveyed to obtain data. Technically, these numbers would have been 513 males and females, but not all households had men and women present at the time of the survey.

In single-headed households, a questionnaire (part A and B) was administered to available respondents. Also, some households only had a male or female respondent during the time of the survey, either due to temporary or permanent migration. Moreover, a few households had disabled members; particularly speech and hearing impaired individuals who could not participate in the survey. In such cases, the available respondent was interviewed.

Figure 2: Map of Ilam District, VDC wise and Study Site



Source: Google Maps adapted

At the micro-level, the Jirmale Village Development Committee (VDC) of Ilam was purposively selected due to its high production of cash crops such as cardamom and ginger. The Jirmale VDC has 1069 households (CBS 2012). Out of 1069 households, about 300 households of ward no 1, 2, and 3 have been engaging in producing Cardamom/Ginger. A household list of Cardamom/Ginger growers and non-growers was not available in the VDC. The ward level profile published by the CBS is limited to listing the number of households in each ward. Since it was difficult to create a sampling frame of households to apply a simple random or systematic random sampling for selection, a multistage sampling (Collins 2010) strategy was proposed for the study. The following flow chart clarifies the multistage sampling strategy.

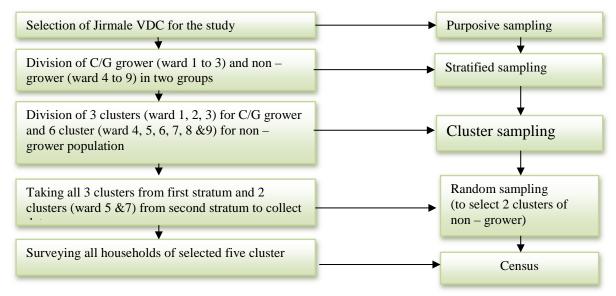


Figure 3: Multi-stage Sampling Strategy

Source: Authors 2016

For the qualitative study, in-depth interviews (IDI) and focus group discussions (FGD) were employed in randomly selected households of different ethnic groups from the wards. IDI was used to gather data that would permit participants to express what they could not during the quantitative survey. Also, IDI supported the quantitative data by producing reliable and comparable data. Twenty-four interviews were conducted with small cardamom farmers in Jirmale VDC. Similarly, FGD was applied to gather a varied range of concentrated data through various respondents and to explore the similarities or differences in experiences of this wide dataset engaged in large cardamom farming.

The households for IDI was selected based on information screening from the quantitative survey and the importance of information required for the study. For the in-depth interviews, questions on the use of income such as "how do you make use of your income?; who makes decisions about the use of the income, you or your spouse or other family members?; questions on participation in institutions such as "what motivated you to become a part of the institution you are involved in?; how has it helped your daily life?; what are your expectations from the institution." Similar questions were asked for the in-depth interview.

Focus group discussions were carried out to understand the overall impact of cardamom farming in the lives of people in the study areas along with the changes experienced over the years. A total of three FGD meetings were conducted. One FGD was held with a homogenous farming group including all women performing various roles in large cardamom farming. These women, however came from various ethnic groups, represented different ages, education levels and marital status. One FGD was held with a heterogeneous group including men and women engaged in large cardamom farming. They were also representative of different ethnic groups, ages, education levels and marital status. One FGD was held with stakeholders engaged in large cardamom trading, policymaking or representative of large cardamom institutions. These stakeholders were heterogeneous in terms of their gender, age, ethnic group and education. In the focus group discussions, questions such as, "how is the situation of different ethnic groups in this village and how has it changed over the years?, "has it changed with the transition in farming status from subsistence to commercial farming?", "how about the situation of men and women in the same context?" has it changed?".

The interviews concluded after meeting a saturation point when responses to questions were obtained, meeting the objectives and themes of the study (Glaser and Strauss 1967). Moreover, the qualitative interviews were also timed and given an hour to an hour and half; hence, the interviews had to be concluded given the time limit.

Results

Agricultural Transition from Subsistence to Commercial Farming in Jirmale

The agricultural practices of Jirmale VDC show a profound transition from subsistence to commercial farming systems over centuries. Between 1903 and 1950, when Nepal was under the Rana regime, the major subsistence crop cultivated was local maize and millet. Households cultivated maize and millet in their *khet* (farmland that requires intense and continuous irrigation) and produced vegetables such as carrots, spinach and greens, chillies, black lentils and fruit such as oranges in their *bari* (land that does not require irrigation). Very few households produced rice due to lack of irrigation. Rice, cultivated or bought from other households, was stored in a bamboo basket and was cooked for guests. Rice farming became a major plantation crop for households only in 1943. But the harvests were not sold in the market but used for household consumption.

In the midst of practicing rice farming, ginger was introduced into this village during the 1960s, and became commercial in 1981. Production increased significantly by 30 percent between 1983 and 1993. The value of ginger was high and the export market, India, had a huge demand for this crop. During the process of ginger farming, rice cultivation lost its value. Also, households started substituting their vegetable gardens with ginger. Unfortunately, farmers noticed a decline in ginger production due to disease early in 2000 and by 2005 there was no ginger for commercial use. Today (2016), very few households, particularly the Rai community plant ginger in a very small area for religious purpose.

In 1984, a villager brought a cardamom sapling to Salakpur village (wards 1, 2 and 3) of Jirmale from Darjeeling, India. During that time Darjeeling was going through political unrest and Nepalese in Darjeeling migrated back to Nepal. After a few years, locals started planting cardamom saplings. In 1995, the first batch of cardamom from Salakpur was sold in a local market. By 2003, cardamom commercialization had taken over Salakpur and other wards of Jirmale. By this time more than 95 percent of farmers had substituted their rice farms (khet), vegetable and ginger farms (bari) with cardamom and were growing oranges as a shed for cardamom.

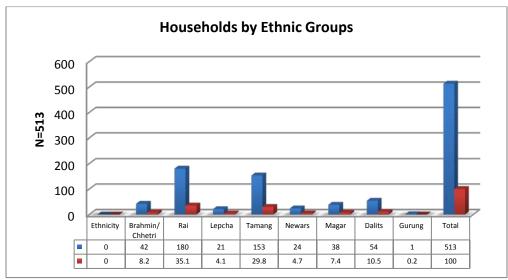
For the past 13 years, Salakpur has been a major producer of cardamom obtaining high revenue. Interestingly, the transition has become so significant that a majority of households has given up subsistence vegetable farming. This is because of the high return. For example, 1 kg of cardamom costs Rs. 2200 (USD 20.5), which is one of the most expensive cash crops in the country.

At present, agriculture still is the main occupation of the majority of people in Jirmale. Very few people are engaged in other types of economic activities such as teaching or government service.

Ethnic Groups in Jirmale

In Jirmale, the majority of people consist of indigenous groups comprised of ethnicities including Rai, Tamang, Magar, Gurung, Lepcha and Newars. More specifically, Jirmale is well known for the residency of Rai and Tamang peoples. Interestingly, marginalized groups, that is, the Dalits, are also visible in this VDC. The representation of Brahmin and Chhetri, however, is nominal in Jirmale. This analysis of this paper is based on indigenous groups, the Dalits and Brahmin and Chhetri.

Figure 4: Households in Jirmale by Ethnic Groups



Source: Field Survey 2015

Moreover, based on the quantitative survey, the study site includes a significant number of households were headed by women of different ethnic groups. Of the 513 HHs, 306 (59.6%) respondents were male and 207 (40.4%) respondents were female. Moreover, respondents reported that 219 HHs (42.7%) were both male and female headed, 215 HHs (41.9%) were male headed, and 79 HHs (15.4%) were female headed. Also, in the 513 HHs, the total recorded households' members were 2068 of which 1045 were male and 1023 were female.

Ethnicity	Number of Female Headed Households
Brahmin/ Chhetri	5 (6.3)
Rai	34 (44.7)
Lepcha	5 (6.6)
Tamang	21 (27.6)
Newars	3 (4.0)
Others (Dalits)	11 (14.5)
Total	79 (100.0)

Table 1: Female Headed Households by Ethnicity

Source: Field Survey 2015

Traditionally, though unrecorded, it is believed that male-headed households, particularly from Brahmin/Chhetri households, have dominated Nepal for a long time. The national data shows 28.2% female-headed households in 2011 (WB 2015). Though there is a lack of disaggregated national data on female-headed households by ethnic groups, it is interesting to know that in Jirmale there is a significant number of household headed by females from different ethnic groups (N=79). The majority of households were from indigenous groups also termed Janjatis (N=63, 83%) classified as Rai, Tamang, Newars and Lepcha. Other major ethnic groups include the marginalized ethnic groups or the Dalits (N = 11, 14.5%). The national data shows major ethnic groups in Ilam are Rai and Limbu followed by Brahmin and Chhetri and other indigenous groups such as Tamangs, Magars and Newars (GoN, NPC and CBS 2014a). In Jirmale VDC, the major ethnic groups are Rai followed by Tamang, Newar, Kami (Dalit), Limbu, Chhetri and Brahmins (GoN, NPC and CBS 2014b).

Crops	Land cultivated by HH				Number of	
	Below 0.25	0.25 -0.5	0.5 -0.75	0.75 -1.0	1 +	HH
	Hector	Hector	Hector	Hector	Hector	N =513
Broom Grass	166(41.1)	114(28.2)	70(17.3)	27(6.7)	27(6.7)	404(78.8)
Cardamom	192(59.6)	76(23.6)	33(10.2)	9(2.8)	12(3.7)	322(62.8)
Oranges	56(53.8)	37(35.6)	5(4.8)	6(5.8)	-	104(20.3)
Beetle Nuts	63(80.8)	13(167)	2(2.6)	-	-	78(15.2)
Vegetable Farming	44(80.0)	10(18.2)	1(1.8)	-	-	55(10.7)
Ginger	13(86.7)	2(13.3)	-	-	-	15(2.9)
Tea	4(80.0)	1(20.0)	-	-	-	5(1.0)
Maize	3(100.0)	-	-	-	-	3(0.6)
Paddy	-	1(100.0)	-	-	-	1(0.2)

 Table 2: Main crops cultivated by Households during last year (2014)

Source: Field Survey 2015

The table above reveals cardamom as the second largest crop in Jirmale, following beetle nut. However, cardamom is viewed as the major source of income due to its high returns. The majority of households (60%; N =192) had below 0.25 hectares of land for cardamom production. Most Dalit households and indigenous groups fell in this category. Despite having small pieces of

land, these households obtained significant returns from cardamom farming. The return from cardamom was crucial in meeting the needs if compared with cultivation of other crops with less value than cardamom.

Overall, on the basis of the qualitative and quantitative information obtained in the field linkages among commercial cardamom farming, women's engagement and the feminization of poverty are explained under three broad themes namely: roles and livelihoods of women engaged in cardamom farming; impact of commercial cardamom farming in the livelihoods of marginalized women; and cardamom farming and women's economic and social standing. Results are presented below under separate themes, based on both blending qualitative and quantitative data.

Roles and Livelihoods of Women Engaged in Cardamom Farming

The field survey shows that a majority of both men and women of Jirmale were selfemployed in the agriculture sector (see Table 2). The number of women or men engaged in casual labor on farm or off farm is negligible. Moreover, within the self-employed agriculture sector, cardamom farming is the major source of income for livelihoods.

Occupation	Gender		Total	
	Male	Female		
Self-employed (Farming)	595 (56.8)	606(59.2)	1201 (58.1)	
Trade	5(0.5)	3(0.3)	8(0.4)	
Handicraft	1(0.1)	2(0.2)	3(0.1)	
Construction	3(0.3)	1(0.1)	4(0.2)	
Casual labor (farm)	7(0.7)	7(0.7)	14(0.7)	
Casual labor (off- farm)	8(0.8)	3(0.3)	11(0.5)	
Formal job	14(1.3)	9(0.9)	23(1.1)	
Student	258(24.7)	285(27.9)	543(26.3)	
Family labor	8(0.8)	10(1.0)	18(0.9)	
Others	57(5.5)	28(2.7)	85(4.1)	
Not Applicable	89(8.5)	69(6.7)	158(7.6)	
Total	1045(100.0)	1023(100.0)	2068(100.0)	

 Table 3: Economic Activities of the Sampled HH Members

Source: Field Survey, 2015

In addition, a majority of household members engaged in self-employment (farming) for livelihoods. The table shows a small number of men and women are engaged in formal jobs such as teaching or local organizations. A significant number of household members are students. The "not applicable" category refers to economic activities for the elderly, the disabled and children.

In Jirmale, both men and women have been engaged in cardamom farming over the past decade. Prior to cardamom farming, Jirmale was known for subsistence rice farming. However, with the boom in cardamom farming across Ilam, there was a massive transition from subsistence

to commercial farming. Both men and women reported being equally engaged in cardamom farming. According to the qualitative data, women who contribute to cash crop farming performed value addition tasks. For example, in the large cardamom chain there are various steps of work such as preparing the farms; planting the saplings and weeding the farm; watering or irrigating the farms; harvesting--picking the flower-bearing cardamom fruits and separating the fruits from the flowers; drying the cardamom by putting the separated flower into the traditional dryer; cutting the tail of the dried cardamom when required and marketing of the product with traders. Women were seen in the value addition tasks, which include cleaning, cutting and grading of large cardamom. This data coincides with previous findings, which show that it is mostly women who work in the processing centers to carry out the value addition work of the commodity (see GoN and MOICS 2010a; Mercy Corps Nepal 2010).

However, there are variations in the roles of men and women in addition to processing work. It was observed that both men and women prepare the land for cardamom and plant the saplings. Men mostly engage in irrigation work if they have large areas of land, whereas men and women water the fields of smaller plots. Our survey data show, of the 513 households, 322 households produce cardamom in land areas ranging from less than 0.25 hectare to more than one hectare (see Fig. 5).

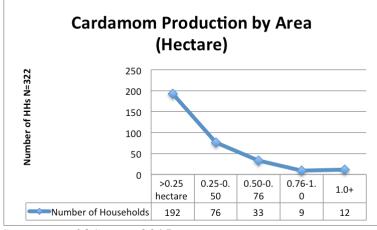


Figure 5: Cardamom Production by Area

Source: Field Survey 2015

Households with large areas of land for cardamom used rotating sprinklers set in their farms for irrigation, while households with less land devoted to cardamom also used rotating sprinklers if they only owned one; or they simply used pipe water or manual sprinklers. Households with less than 0.25 hectares of land were mostly Dalits, Magars or even migrants of different ethnic groups. Households with 0.5 to 1 (and above) hectares of land were mostly Tamang, Rai, Brahmins and Chhetri. These households were also considered knowledgeable and educated because some were teachers and private jobholders.

Moreover, during the harvest time, men usually pick the fruit using special knives, though the majority reported that men and women performed this role equally. After the harvest, it is mostly women who separate the fruits while men carry the fruit to the dryer. After the cardamom is ready to be sold, it is mostly men who take it to market. There were no women cardamom traders seen in Jirmale. This is because, according to interviews with men and women: "women do not want to take up with these responsibilities," "women cannot bargain well in the market," "the men are better at this." This implies the persistence of patriarchal practices of designating gender roles, embedded in peoples' associations of masculinity and femininity. This also suggests the lack of women's integration in markets, which might be due to factors such as lack of capacity and financial literacy, but also because of cultural barriers. Cultural barriers in the gendered division of labor contribute both to lack of capacity and financial literacy. Findings show that men still dominate these activities, which lead women to other roles rather than developing the necessary skills to participate. These conditions reproduce some forms of gender role inequality, which persist in spite of the changes occurring. Nonetheless, though women are not a part of the market, it is evident from the findings that their participation in large cardamom cash crop farming has helped them earn some share compared to alternative work such as tailoring or even selling other products such as oranges or broom grass.

Cash crops such as cardamom have improved the livelihood situation of farmers in Jirmale, particularly, women from different ethnic backgrounds. Women, in general, have experienced the economic change caused by the transition in their farming practices. For instance, subsistence rice farming was labor intensive compared to commercial farming which is considered easier farming. Moreover, commercial farming provides high returns, which is one of the reasons for women being a part of such change since they can make their own income. Also, marginalized women in particular, have experienced some changes in their social standing along with economic changes. For example, Dalit women who faced discrimination both for being women and a Dalit in the past have been welcomed to participate freely in the household labor of higher castes such as Brahmin and Chhetri. This may be due to requirements of seasonal labor in cash crop farming where household labor is not enough to participate in harvests. Moreover, it was reported that higher caste households cultivating subsistence products such as rice, maize or millet would not allow Dalits, considering the latter as untouchable, to harvest their crops because these harvests are consumed in the household. But cash crops, which are sold instantly without consuming in the households, do not hold cultural barriers. This automatically welcomes the Dalits or marginalized groups to participate in labor, further creating economic spaces for them. Another reason for Dalit women being able to participate freely could be due to the anti-discriminatory policies initiated by the Maoists during their insurgency period between 1996 and 2006, though the impact of such policies still needs to be measured across Nepal. Since the decade-long war, significant progress has been made to address the issue of social exclusion. The government of Nepal has declared any forms of discrimination to be an illegal matter to be dealt with by the State. Nevertheless, from the social perspective, much needs to be explored on whether the Dalits are allowed to enter the households of other ethnic groups and share food in the same kitchen along with the economic opportunities they have in commercial farming.

Evidence suggests that women have been able to benefit from the returns, and expend on household needs, their children's education and accumulate savings. One woman expressed her satisfaction with cardamom farming compared to other farming:

"What could I do producing rice? It would only be enough to feed the household members. I can produce cardamom and not only buy rice but also oil, salt, clothes and meet other household expenses. Rice is rice but cardamom is more than only rice". [IDI, Female Respondent, 27, Tamang ethnicity] Additionally, there were also opinions regarding the use of expenses. Women spend their money on their household food needs as well as immediate health needs. For example:

"...Because of the return from cardamom, last year, I could pay the loans I had taken for my son's treatment. He has been seriously ill for years. I am credit free and I save some money in the co-operative..." [IDI, Female Respondent, 35, Rai ethnicity]

"... My family has a very small piece of land. Once we started cardamom farming in that small area, we could eat better food and wear better clothes. I am a student today, and I also do wage work during cardamom season. I buy good food for my family and also save some money..." [IDI, Female Respondent, 19 Dalit]

"... Ever since we started cardamom farming, I have been able to see better days for my family. After the death of my husband I was completely lost and I did not know how to live life further. But like others in the village, I took up with cardamom farming and with the help of my son and daughter, I have been able to manage my household..." [IDI, Female Respondent, 36, Newar]

Women have been able to spend their earnings from cardamom on household food needs, children's education, health care, paying loans or adding assets such as jewelries. Most women revealed that their first priority would be household food needs such as buying rice, oil, salt and vegetables. There were opinions about priorities changing, sometimes, depending on their household needs such as investing in tanks to store water and sprinklers for irrigation. However, after the basic food needs, the majority of women with school-age or college going children put their children's education as the most important source of investment. There are also cases where women have been able to influence their husbands in making decisions on various issues such as sending their children to school or investing in other needs.

"...I told my husband that we should send our son to a good school in Kathmandu since we have been getting better income from cardamom. What is the point of earning money, if our children cannot be educated? My son is in a good school in Kathmandu today..." [IDI, Female respondent, 38 Brahmin]

"...Last time when my husband and I received money by selling cardamom, I insisted him we buy a motorbike for our son. My son has completed his high school. He is 24 now and does not show interest in continuing his studies. If he wanted to go to college, we would blindly invest in his education. He wants to do business and he is helping us with cardamom production. So, we bought him a motorbike recently..." [IDI, Female respondent, 41 Tamang]

"... Every time we sell cardamom, I think about our son's education. We want him to be a doctor and we want to keep producing cardamom so we make enough money to invest in his education..." [IDI, Female respondent, 34 Newar]

The above testimonies demonstrate that the impact of cardamom farming has proved

positive for women in Jirmale. There were reports that men mostly traded cardamom and brought money home to hand it to the women. In this way they could jointly use the money. This finding concurs with previous evidence that women's access to income and resources is positively related to their satisfaction with life, their investment in their children's education, nutrition and health (Alam 2012; Duflo 2012; Sinha et al 2007; Quisumbing 2003; Haddad et al 1997). Moreover, this finding also challenges the idea that men inevitably takeover the income, marginalizing women when the production is commercialized (Fischer and Qaim 2012; World Bank et al 2009; Doss, 2001; Lilja and Sanders 1998; von Braun and Webb 1989), and that men benefit more than women in the production and marketing of traditional and non-traditional crops (Fisher and Qaim 2012; Nijuk 2011; WB et al 2009). While this may be the case elsewhere, it is not the case in the context of the study site.

In cardamom production, though roles are gendered within the cardamom value chain, the majority of women in the households have handled the return with support from men. However, this was not the case in the past when the farming practice was limited to subsistence rice farming for household consumption, and vegetables and other crops for selling in the local market. Women did not have bargaining power with their male counterparts who brought home their income from work or by selling household products such as vegetables. As households started producing cash crops such as ginger and cardamom, there was a paradigm shift in the status of farmers, and particularly women. First, economic change led to creating space for women including marginalized groups to work outside of the home. Second, women started earning and contributing their income to household and other expenses. Finally, women became part of saving institutions and cooperatives, thus raising their awareness and ability to invest in savings, further honing their financial literacy skills.

Such significant gender role transformations for women, reveal that women's status has changed due to cash crop farming thus complying with Chant's (2010) observation that income (rather than other productive resources) is what determines poverty among men and women. As aforementioned, Chant's (2010) observation that women are discriminated against in terms of roles, power to negotiate and ability to bargain for investments, leads to the feminization of poverty. So when women's participation in the labor market increases through economic development, as in the case of cardamom in this context, their poverty levels change. The effect of income is much more positive among women from marginalized groups whose access to land and resources has been limited in the past. Hence, their poverty levels have declined, rendering them capable of fulfilling their needs. Moreover, the phenomenon of shifting poverty levels, for example, from the very poor to the not so poor cannot be possible just through economic development. In the researched area, institutions have played a major role in implementing this process.

"... Everything has changed with cardamom farming. Women did not get to see money in the past. Now they are paid for their effort..." [Female respondent, 65 Rai]

Moreover, women, particularly from Tamang and Rai ethnicities are well known for managing finances and active in decision-making within their households compared to other ethnic groups. These groups are often regarded as matrilineal in terms of women heading the households and acting as the key decision maker. When asked why women were so active in managing finances, a woman from Tamang ethnicity replied, "We are "matwalis" and this is what happens in matwali community. Even if men earn, women handle the earnings. That has been the way for a long time, I think."

These ethnic groups are also tagged as "matwali" meaning liquor drinkers. In Nepal, Brahmins and Chhetris were considered clever people and non-liquor drinkers in the past. Though things have changed in the practice of drinking alcohol, ethnic groups such as Tamangs, Rai and other indigenous groups are still considered as "matwalis". These ethnic groups are also seen brewing alcohol at their houses. Since, in Jirmale the majority of households are from these groups, women tend to handle financial returns in the households.

In the Dalit households, or poorer households, where the return is spent immediately, joint decisions by men and women or family members regarding purchases for the household are made.

"...My husband is in India for labor work. We have very little piece of land for cardamom and this time we harvested only 1-2 kilograms... Every time I receive remittances and get money by selling cardamom, I call my husband and talk about financial use. We both decide on what to do. We do not have to pay our children's fees since the government provides free education but we have to discuss about what to spend on besides food and whose loans to pay first...[Female respondent, 24 Dalit]

"...I do seasonal wage work and the same is the case with my husband. We do not have land to produce anything. After we are home from work, we put the money together and decide on what to buy. Our earnings are just enough to fulfill our family's food needs. This happens on a daily basis..." [Female respondent, 36 Dalit]

"...There is no way I can use the money I earn on my own. Neither can my husband do this. We have to think through it and spend carefully in the market. I also save Rs 100 per month in the saving cooperative and we have to decide on the budget..." [Female respondent, 58 Dalit]

Moreover, another reason for this increase in financial stability may be the institutional encouragement women receive, leading to women's investments in savings and participation, particularly in cooperatives. In Jirmale, various institutions serving a variety of purposes have proved to be an essential platform for women to raise their concerns on various issues such as financial investments and savings, and skill training in both the agriculture and non-agricultural sectors, among other needs. Such institutions are in the form of cooperatives and women's groups. The cooperatives are open to membership for both men and women. However, the membership is open to only one member of the household, either male or female. Cooperatives in Jirmale are mostly focused on promoting monthly savings, trainings on agricultural issues and sometimes addressing concerns about contemporary agricultural problems faced by the community. The women's group invites any female member of the households to become a member and is focused on providing skill based non-agricultural trainings such as sewing, awareness about health or other pertinent community issues. Having access to these institutions might have led women to focus on savings for the households and make rational decision of financial use.

This implies that, in contrast to the previous studies, cash crops have generated income opportunities for women and improved women's livelihoods (see Alam 2012; Kabeer 2012; Hamilton 2002). Also, women have been able to acquire financial resources from their husbands to run their households, improve their livelihoods and invest in their children. This correlates to the concept of "women's economic empowerment" which is defined by women's economic ability to be a part of growth processes and be able to gain recognition for their contributions with respect and appreciation. Moreover, women are better able to negotiate for their own needs and household needs as a result of their income generation (Mahon 2011, WDR 2012). Overall, having access to income shows that women's contributions in the cardamom sector have been recognized at the household level, further creating positive impacts in their livelihoods.

Impact of Commercial Cardamom Farming in the Livelihoods of Marginalized Women

Among the women of different ethnic groups, were Dalits contributing to cardamom farming. The Dalit households (N=54) have either no land or less land compared to households of other ethnic groups. These households produced cardamom in small quantities and worked as seasonal laborers with daily wage earnings of Rs 200-300. Women could work on farms with their husbands and produce cardamom, and they could work as wage earners in other cardamom-producing households with large land areas, contributing to their households.

Women thus engaged in dual roles as self-employed by their own small businesses as well as wageworkers in the cardamom sector. In their interviews, the women claimed that the cardamom sector was one of the most significant income sources for their families.

"... [We] are tailors and [we] do not have land. I sew clothes and during the cardamom season I go to my neighbors' to harvest cardamom. The money I earn from cardamom is more than what I make as a tailor. I do not have many customers for my tailoring job. Sometimes, it is hard to fulfill household food needs if my tailoring does not go well. With the money from cardamom, I can feed my daughter well and fulfill household expenses during the season. If I had land I would produce my own cardamom. I am at least content that I can fulfill my household need because of cardamom..." [Female 25, Dalit]

Dalit women also reflected on the importance of having a small piece of land in their households and cardamom farming. In general, land is considered a valuable asset and an indicator of poverty or lack of it. Even small landholdings producing a small quantity of cardamom have helped women fulfill their household needs. As a number of Dalit women opined,

"... My family has a very small piece of land. Once we started cardamom farming in that small area, we could eat better food and wear better clothes. I am a student today, and I also do wage work during cardamom season. I buy good food for my family and also save some money..." [IDI, Female Respondent, 19 Dalit]

"... If we did not have this piece of land for cardamom farming, we could have gone hungry for days. We produced vegetables in the past, but what could we get selling the vegetables? A penny that does not even buy salt. There is no market for vegetables here. Today we know the taste of sugar because of cardamom production. The value has risen and that is very good for us. We hope the value does not go down..." [Female Respondent, 42 Dalit]

The requirement of labor, since farming of large landholdings require additional labor, has also created an impact in breaking stereotypes of Dalits considered untouchable. Women were able to participate freely as wage laborers in the households of other ethnic groups in Jirmale. A woman described about the situation linked to cardamom farming as,

"... The situation for [us] has improved a lot. In the past we had different treatment. We could not go to farms of other ethnic groups. These days we are treated well. Only very few older generations still practice "untouchable" things but others welcome us. We go to houses with cardamom farms and work there for wage. We are provided food and daily wage. There has been no evidence of direct hatred unless people say something without us knowing..." [FGD, Dalit women]

The above data implies that the impact of commercial cardamom farming has proved positive for Dalit women since testimonies show their graduation from the poorest situation to an improved one. Marginalized households that could not fulfill their basic needs in the past have improving their livelihoods due to cardamom farming. There is also a noticeable change in the caste system as Dalits have been able to enter the field of other castes to work as wage laborers along with workers from other castes. They earn an equal amount of money for the type of labor, reporting Rupees 200 per day for separating cardamom fruits from picked flowers. The marginalized groups have been able to gain economic opportunities through their engagement in cash crop farming and have been able to meet their food needs. As studies suggest, commercial farming has helped address food security (Gautam 2011; Sharma 1997) and improve socio-economic conditions by graduating women from poverty (Dahal et al 2007).

Moreover, previous research have positively substantiated that poverty reduction is directly related to gender equality (Berik 2011; Smith et al 2011; Kabeer 2007; Elson 1999). In this case, it could be inferred that poverty reduction might take place with equal opportunities created for marginalized groups, particularly women. Among the poor, the most vulnerable groups tend to be marginalized women, deprived not only as a result of gender discrimination but also from social inequality related to ethnic marginalization. Empirical evidence indicates that marginalized communities, with little or no access to land and property, could potentially benefit by being a part of commercial high value crop production due to its high return compared to other forms of employment such a tailoring, shop keeping or selling other crops such as oranges and broom grass.

In Nepal, under the Maoist insurgency, anti-discrimination efforts came into the limelight as part of the communist ideology, providing a platform for disadvantaged groups to raise their voices concerning economic and social status. In the past decade, implementations of antidiscriminatory laws were visible across the country, which is after the post conflict. In spite of Maoist efforts, ethnic marginalization of indigenous groups persisted and it has only been in the post-Maoist period, through economic reforms including cardamom farming that there is the beginning of ethnic egalitarianism. Moreover, the anti-discriminatory efforts in Nepal could not have had the same effect without the improvement of the economic situation of marginalized groups fostered through, for instance, cash crops such as cardamom farming. In other words, for the marginalized communities, change in policies with anti-discriminatory laws in the society could help improve their wellbeing, given that there are economic opportunities for them.

Cardamom Farming, Institutions (women's cooperatives) and Women's Economic and Social Standing

During the study, women of various ethnic groups reported their economic status and social participation through their engagement in cardamom farming. Women have been able to participate in social groups, particularly cardamom co-operatives, and savings group such as Dalit women's savings group and women's saving groups.

The survey indicates that both men and women were involved in various social groups such as cooperatives, agricultural groups and community forest user groups. There were specific groups such as mothers' groups and women's unions, which had only women.

Groups	Male (N=439)	Female (N=475)
Cooperatives	60 (13.7)	123 (25.9)
Mother Groups	-	86 (18.1)
Agriculture Group	10 (2.3)	30 (6.3)
Community Forestry User	5 (1.1)	13 (2.7)
Group		
Women Union	-	6 (1.3)
Total	80 (18.2)	265 (55.8)

Table 4: Institutional Involvement of Men and Women

Source: Field Survey 2015

Table 4 demonstrates women outnumber men in terms of their engagement in cooperatives, agriculture groups, group of community forestry and others, such as the women's union in the overall study area. Women have actively participated in cooperatives involving savings, training and skill provision for women. These trainings are provided by the government funding free of cost. Such activities are the possible indicators of livelihood improvement, women's inclusion in groups and well-being enhancement.

Being a part of social institutions and organization, women have been able to practice savings and take loans with low interest. Their savings have made women financially literate, encouraging them to continue to save more for their future security. As some women opined,

"...I became a part of the cardamom, ginger and orange co-operative because I wanted to save some money by working in cardamom sector. Being a part of this co-operative helps women to take credit or loans when needed for farming. I also attend meetings everyday..." [IDI, Female, 27, Rai]

"...Once I became a member of Dalit women's group, I learned about the importance of saving and financial management. I feel better because I can raise my voice during the meetings which I could not years ago..." [IDI, Female, 28, Dalit]

Moreover, the importance of being a part of a co-operative has also helped women acquire technical and knowledge related skills. Through these institutions women have also acquired agricultural training including techniques on planting crops and using appropriate amount and mixture of organic fertilizers that cardamom requires. Also, women have been able to raise their concerns, share ideas and speak freely on being part of these institutions:

"... Without institutions, we could not have learned about savings and credit. There are many of us who have taken loans from the cardamom cooperative when needed. The cooperative charges much less interest when loans are taken. Also, cooperatives provide training for women especially regarding crop plantation. Being a part of the institutions has made many women open up in the society. Things have changed because of these institutions..." [FGD, Females]

"... If you came here five or six years ago, you would see very few women in this co-operative. Women would shy away and would not want to become a part of any institutions. Things have changed now and we have worked hard to provide awareness about financial savings and importance of institutions to women..." [IDI, Female, 35 Tamang]

The evidence suggests that commercial cardamom farming has provided two-fold support for women in Jirmale. First, households with land have women as active producers of cardamom. These women gain benefits of the return shared by their male counterparts. Second, household with very little or no land, particularly, Dalit women, have been able to participate as wage laborers in cardamom farming. This practice has made women financially stable to fulfill their basic needs.

Moreover, evidence also suggest that commercial farming has encouraged women to work freely, outside of their homes. Women expressed that being able to work and earn has empowered them since they have been able to spend and invest by being part of saving institutions. Previous findings also suggest a similar notion about a direct correlation between women's empowerment and being able to work outside of the house (Kabeer 2012; Scoone 2005). Overall, these findings relate to Amartya Sen's indicators of empowerment: a strong link among income, production and social recognition. Income refers to wage provisions for the employed; production refers to the output and recognition refers to rewards obtained for contributions (Sen 1975). Women's empowerment is crucially linked both to their ability to earn and recognition received for their contributions.

Women's cooperative institutions are crucial in motivating women to raise their concerns and learn about financial management and savings, further adding to empowerment. In this context, such institutions can be defined as formal entities that facilitate human interaction, further creating exchanges in social, political or economic debates (North 1990). Moreover, institutions have set policies, which shapes human behaviors. The importance of institutions are stressed in the literature, particularly in the agriculture sector, stressing on that fact that they act as a channel to transfer knowledge (Akanda and Howlander 2015; Coulibaly et al 2015; Oluwatusin 2014; Okonya et al, 2013; Codjoe et al 2013; Oyekale and Oladele 2012). As Pathak (2014) indicates institutional innovation should act as a channel beneficial to the poor, as has been the case for cardamom farmers. Institutions tend to be effective when they are established at the local level close to the community. At the local level, farmers' actual situations can be analyzed to provide need-based support (IICA 2014; Ekboir 2012; Barret et al 2012), as with women's engagement in cooperatives or savings groups in the cardamom sector. In a nutshell, being a part of cardamom farming has secured women financially and provided them spaces in social institutions ultimately transforming women's roles.

Discussion

This study points out to women's improved livelihood conditions due to economic opportunities caused by transition from subsistence to commercial farming in Jirmale. However, we found little association between women's improved social status in line to cultural barriers and performing roles in the commercial cardamom farming. Evidences suggests that women have been able to earn as much as men but the evidence does not demonstrate that women have been able to participate in the markets freely coming out of the cultural barriers or be it other factors which need meticulous attention. Also, the cultural barriers associated with traditional practices or gender-stereotyped practices require more analysis in this context. Our continuing research further aims to understand the hypothesis that women's engagement in cash crop farming allows them to accept bigger roles such as marketing of the products and handling finances independently.

Moreover, the change in treatment of marginalized groups or the Dalits by letting them participate, as farm labor does not necessarily point that their social standings are fully improved. This raises a counter-discriminatory issue that the Dalits are welcomed as labors because of the need for labor rather than a humanitarian associated social bargain. This means that a Dalit labor can only be allowed to work in the farm but still considered untouchable when it comes to entering a different caste's household. Our further research aims to understand the treatment of these marginalized groups within the households of those providing them labor work. Additionally, we aim to understand the perceptions of these marginalized groups about what it takes to be labor in households that strictly followed the discriminatory practices by not letting Dalits enter their households.

This research shows satisfaction among women and marginalized groups by being a part of the commercial cardamom farming, particularly through earnings and fulfilling their basic needs. However, it is still a matter of further research on whether women and various social groups denote income equality as a means of well-being or whether they prefer equal recognition and status as men in the entire commercial farming sector, starting from farm level work to marketing. Additionally, stepping out of poverty by grabbing economic activities that provides high return might not be the only thing women and marginalized group expect. Our continuing research looks at issues such as social acceptance and recognition, anti-discriminatory practices caused by cultural barriers, women's ability to make decision on finances and their earnings and equal status between men and women, taking these as the indicators of well-being. Hence, we hypothesize that besides economic opportunities in the cash crop farming, women's well-being are well defined if they are given equal treatment and status as men in any sector.

Our ongoing research also aims to broaden the understanding of large cardamom farmer's and the benefits they gain through their involvement in institutional channels, particularly cooperatives. At this point it is identified that cooperatives particularly have been acting as agencies promoting savings and helping women voice themselves, taking up debates on women empowerment through institutional support. Hence, we hypothesize that women's empowerment is possible in the cash crop farming, given that there is a direct institutional support to assist these women. Farmer's perception on the importance of private or government run institutions to sustain their farming occupation is also a matter of further research.

This study highlights the need for further research regarding sustainable large cardamom farming and its impact on women's poverty. It is important to examine to what extent women will be able to move out of poverty through cash crop farming over the long-term. For example, it will be important to explore the nature of women's empowerment in arenas that currently still evidence male domination, such as market spheres. Moreover, to support this idea, government initiatives

on agriculture, particularly with respect to large cardamom—declared as the top cash crop in Nepal—will be reviewed and analyzed through a political economic framework, as the current team continues the research. Overall, additional research and analysis stemming out of the proceedings of this paper would be beneficial in framing and designing policies in the gender and commercial labor market sector, particularly for rural Nepal.

References

- Acharya, M. (2011). Approaches to development and gender- an impact in Nepal's policies. In the seminar on Economic empowerment of youth: an analysis from gender perspective, Kathmandu: FES.
- Ajani, E.N. and Igbokwe, E.M. (2014). Constraints to Occupational Diversification among Rural Women in Anambra State, Nigeria. *Journal of Agricultural Extension* 18 (2).
- Akanda, M. G. R. and Howlader, M. S. (2015). Coastal Farmers' Perception of Climate Change Effects on Agriculture at Galachipa Upazila under Patuakhali District of Bangladesh. *Global Journals of Science Frontier Research: Agriculture and Veterinary* 15(4).
- Alam, S. (2012). The effect of gender-based returns to borrowing on intra-household resource allocation in rural Bangladesh. *World Development* 40 (6), 1164-1180.
- Barrett, C. B., Bachke, M.E., Bellemare, M.F., Michelson, H.C., Narayanan, S. and Walker. T.F. (2012). "Smallholder Participation in Contract Farming: Comparative Evidence from Five Countries." World Development 40 (4), 715-730.
- Baylis, K., Fan, L., and Nogueira, L. (2012). The effects of Agricultural market liberalization and commercialization on household food security in rural China. Selected poster prepared for presentation at the Agricultural and Applied Economics Association (AAEA) meeting, Seattle, Washington, August 12-14, 2012.
- Bouis, H.E. and Haddad, L.J. (1990). *Agricultural commercialization, nutrition and the rural poor: A study of Philippine farm households*. International Food Policy Research Institute (IFPRI), Washington, DC.
- Bhadra, C. and Shah, M. T. (2007). *NEPAL: Country Gender Profile: Final Report*. From JICA, Nepal.
- Berik, G. (2011). Inequality, Development, and Growth. London, Routledge.
- Boserup, E. (1970). Woman's Role in Economic Development. New York: St. Martin's press.
- Cadot, O., Dutoit, L. and Olareagga, M. (2009). *Barriers to Exit from Subsistence Agriculture*. World Bank Research Programme.
- Casper, L. M., McLanahan, S., and Garfinkel, I. (1994). The gender-poverty gap: What can we learn from other countries. *American Sociological Review*, 59(4), 594-605.
- Central Bureau of Statistics [CBS] (2012). National population census 2011: Households and population by sex, ward level. Kathmandu: Author.
- Central Bureau of Statistics [CBS] (2014). Population Atlas of Nepal. Kathmandu: Author.
- Codjoe Francis Nana Yaw, Ocansey, C. K., Boateng, D. O., & Ofori, J. (2013). Climate Change Awareness and Coping Strategies of Cocoa Farmers in Rural Ghana. *Journal of Biology, Agriculture and Healthcare*, 3(11), 19-30.
- Collins, K.M.T. (2010). Advanced sampling designs in mixed research. In A. Tashakkori & C. Teddlie (Eds.), *SAGE Handbook of mixed methods in social and behavioral research* (2nd ed., pp. 353-377).
- Coulibaly, J., Gbetibouo, G., Kundhlande, G., Sileshi, G. and Beedy, T. (2015). Responding to Crop Failure: Understanding Farmers' Coping Strategies in Southern Malawi. *Sustainability*, 7(2), 1620-1636. http://doi.org/10.3390/su7021620
- Creswell, J. W. and Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. United States of America: Sage Publication.
- Creswell, J. W., Shope, R., Plano Clark, V. L., and Green, D. O. (2006). How interpretive qualitative research extends mixed methods research. *Research in the Schools*, (13) 1-11.

- Dahal, B. M., Nyborg, I., Sitaula, B. K., and Bajracharya, R. M. (2009). Agricultural intensification: food insecurity to income security in a mid-hill watershed of Nepal. *International Journal of Agricultural Sustainability*, 7(4), 249-260.
- Diao, X., Thurlow, J., Benin,S., and Fan, S. ed. (2012). Strategies and Priorities for African Agriculture: Economywide Perspectives from Country Studies. Washington, DC: International Food Policy Research Institute. http://www.ifpri.org/publication/strategiesand-priorities-african-agriculture.
- Doss, C. (2001) 'Designing Agricultural Technology for African Women Farmers: Lessons from 25 Years of Experience', *World Development*, 29(12), pp. 2075-2092.
- Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic Literature* 55(44): 1051-1079.
- Ekboir, J. (2012). "Thematic Note 4: Building Innovation Capabilities in Farmer Organizations." in Agricultural Innovation Systems: An Investment Sourcebook. Edited by The World Bank. Washington, DC: The World Bank.
- Elson, D. (1999). Labor markets as gendered institutions: equality, efficiency and empowerment issues. *World Development* 27(3): 611-627.
- FAO [Food and Agriculture Organisation). (2011). Women in agriculture. *The State of Food and Agricultural Report 2011*. Rome, Italy: Food and Agriculture Organization.
- FAO [Food and Agriculture Organisation of the United Nations]. (2012). Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome: FAO.
- Fischer, E. and Qaim, M. (2012). Gender, Agricultural Commercialization, and Collective Action in Kenya Gender, Agricultural Commercialization, and Collective Action in Kenya. Selected Paper prepared for presentation at the International Association of Agricultural Economists (IAAE) (pp. 18-24).
- GoN, NPC and CBS. (2014 a). National Population and Housing Census 2011. Social Characteristics Table: Caste/Ethnicity, Mother Tongue and Second Language.
 Kathmandu: Government of Nepal, National Planning Commission and Central Bureau of Statistics.
- GoN, NPC and CBS. (2014 b). *National Population and Housing Census 2011. Village Development Committee/Municipality.* Kathmandu: Government of Nepal, National Planning Commission and Central Bureau of Statistics.
- Haddad, L., Hoddinott, J., and Alderman, H., eds. (1997). *Intra-household Resource Allocation in Developing Countries: Models, Methods, and Policy*. Baltimore MD: John Hopkins University Press.
- Hamilton, S., Barrios, de A. L. and Sullivan, G. (2002). "Nontraditional Agricultural Export Production on Small Farms in Highland Guatemala: Long Term Socioeconomic and Environmental Impacts." Working paper 02. Virginia polytechnic Institute and State University, IPM CRSP, Blacksburg, Va.
- Hendriks, S. L. and Msaki, M. M. (2009). The impact of smallholder commercialization of organic crops on food consumption patterns, dietary diversity and consumption elasticities. *Agrekon*, Vol 48, No. 2, June 2009.
- Glaser, B. and Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research.*, Chicago, Aldine Publishing Company.

- GoN [Government of Nepal]. (2009). *Report on the Nepal Labor Force Survey 2008*. Government of Nepal, Central Bureau of Statistics. Nepal. www.cbs.gov.np/Surveys/NLFS-2008%20Report.pdf.
- Gautam, Y. (2011). Food Security in the Context of Agricultural Commercialization in Ilam, East Nepal. (M. Phil. Thesis), University of Bergen.
- IICA [Inter-American Institute for Cooperation on Agriculture]. (2014). "Innovation in Agriculture: A Key Process for Sustainable Development". Institutional position paper, San Jose: Inter-American Institute for Cooperation on Agriculture.
- Kabeer, N. (2007). Marriage, motherhood and masculinity in the global economy: reconfigurations of personal and economic life. *IDS Working Papers* (290).
- Kabeer, N. (2012). Women's economic empowerment and inclusive growth: labor markets and enterprise development. SIG Working Paper.
- Kirsten, J., Mapila, M., Okello, J. and De, S. (2012) 'Managing agricultural commercialization for inclusive growth in Sub-Saharan Africa', Policy research paper 1. Washington DC: The Global Development Network.
- Koopman, J. (1993). "The Hidden Roots of the African Food Problem: Looking within the Rural Household." In Women's Work in the World Economy, ed. Nancy Folbre, Barbara Bergmann, Bina Agarwal and Maria Floro, 82-103. New York: New York University Press.
- Lilja, N. and Sanders, J. (1998). 'Welfare Impacts of Technological Change on Women in Southern Mali', *Agricultural Economics*, 19, 73-79.
- Li, T. M. (2011). Centering Labor in the Land Grab Debate. *The Journal of Peasant Studies* 38(2), 281-298.
- Mahon, R. (2011). *Feminist ethics and social policy: towards a new global political economy of care*. Vancouver, UBC Press.
- Mertens, D. M. (2015). *Research and Evaluation in education and psychology* (4th ed.). New Delhi: Sage.
- MoAD. [Ministry Agricultural Development]. (2014). *Statistical Information on Nepalese Agriculture*. Ministry of Agricultural Development. Nepal.
- MoAC. [Ministry of Agriculture and Cooperatives]. (2009). *Selected Indicators of Nepalese Agriculture and Population*. Ministry of Agriculture and Cooperatives. Nepal.
- Njuki, J., Kaaria, S., Chamunorwa, A. and Chiuri, W. (2011). Linking Smallholder Farmers to Markets, Gender and Intra-Household Dynamics: Does the Choice of Commodity Matter? *European Journal of Development Research*, 23(3), 426-443. doi:10.1057/ejdr.2011.8
- Okonya, J. S., Syndikus, K. and Kroschel, J. (2013). Farmers' Perception of and Coping Strategies to Climate Change: Evidence From Six Agro-Ecological Zones of Uganda. *Journal of Agricultural Science*, 5(8), 252-263. http://doi.org/10.5539/jas.v5n8p252
- Oluwatusin, F. M. (2014). The Perception of and Adaptation to Climate Change among Cocoa Farm Households in Ondo State, Nigeria. **Academic Journal of Interdisciplinary Studies**, 3(1), 147-156. http://doi.org/10.5901/ajis.2014.v3n1p147
- Omiti, J.M., Otieno, D.J., McCullough, E and Nyanamba, T. (2007). Strategies to promote market oriented smallholder Agriculture in Developing countries. A case of Kenya. *AEE Conference Proceedings*. 2007; 259-264.

- Omosa, M. (2002). "Export Horticulture and livelihood Strategies: A Focus on the opportunities and Constraints Facing Smallholder Farmers in Kenya." Working paper. University of East Anglia, Norwich, UK.
- Oyekale, A. S. and Oladele, O. I. (2012). Determinants of Climate Change Adaptation Among Cocoa Farmers in Southwest Nigeria. APRN Journal of Science and Technology, 2(Special Issue), 154-168.
- Pathak, A. (2014). Value chain Analysis of Amomum Subulatum (Alainchi) in MSFP Lot 1 Districts. Forest Action Nepal.
- Quisumbing, A., Payongayong, E., and Otsuka, K. (2004). "Are Wealth Transfers Biased Against Girls? Gender Differences in Land Inheritance and Schooling Investment in Ghana's Western Region". IFPRI, FCND Discussion Paper 186.
- Quisumbing, A. (2003). *Household decisions, gender, and development: a synthesis of recent research*. Washington, D.C., International Food Policy Research Institute (IFPRI).
- Randolph, S. and Rickie, S. (1988). "Constraints to Agricultural Production in Africa: A Survey of Female Farmers in the Ruhengeri Prefecture of Rwanda". *Studies in Comparative International Development*, 23 (3), 78-98.
- Razavi, S., Arza, C., Braunstein, E., Cook, S. and Goulding, K. (2012). Gendered Impacts of Globalization. Employment and Social protection. Gender and Development, Paper Number 3. Geneva, UNRISD, United Nations Research Institute for Social Development.
- Sharma, S. (1997). Agricultural transformation processes in the mountains of Nepal: Empirical evidence from Ilam District. International Centre for Integrated Mountain Development (ICIMOD).
- Scoones, I. (2005). Sustainable rural livelihoods. A framework for analysis. *IDS Working Paper* (72).
- Sen, A K. (1975). Employment, technology and development. London, Clarendon Press.
- Simmons, P. (2003). *Overview of Smallholder Contract Farming in Developing Countries*. University of New England, Australia.
- Sinha, N. Raju, D. and Morrison, A.R. (2007). Gender Equality, Poverty and Economic Growth. World Bank Policy Research Working Paper No. 4349.
- Smith, N. and Mpedi, L. G. (2011). Decent work and domestic workers in South Africa. International Journal of Comparative Labor Law Industrial Relations 27 (3): 315-334.
- Subedi, M. (2010). Caste System: Theories and Practices in Nepal. *Himalayan Journal of Sociology & Anthropology*. IV: 134-159.
- von Braun, J. and Webb, P. (1989) 'The impact of new crop technology on the agricultural division of labor in a West African setting', *Economic Development and Cultural Change*, 37(3), pp. 513-534.
- WDR. (2008). Agriculture for Development. World Development Report 2008. World Bank.
- WB. [World Bank]. (2008). Agriculture for Development. The World Bank Washington, DC.
- WB, FAO and IFAD. (2009). Gender in Agriculture Sourcebook. World Bank, Food and Agriculture Organization and the International Fund for Agricultural Development, 170-177.
- WB. [World Bank]. (2015). Female headed households (% of households with a female head). Retrieved from http://data.worldbank.org/indicator/SP.HOU.FEMA.ZS on May 12, 2016.
- WDR. (2012). Gender equality and development. *World development report*. Washington, World Bank.

Wiggins, S. Argwings-Kodhek, G. Leavy, J. and Poulton, C. (2011) 'Small farm commercialization in Africa: Reviewing the issues', Research paper 023. Available at www.future-agricultures.org [Accessed 22 January 2015].