AGRICULTURE TRANSITION AND WOMEN'S DECISION-MAKING POWER IN COFFEE-FARMING HOUSEHOLDS IN LAO PDR

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Abstract

The Lao government introduced a new period of economic liberalisation with the New Economic Mechanism (NEM) in 1986. The present study examines whether market liberalisation and women's participation translated into changes in women's decision-making power in the coffee growing region of the Bolaven Plateau in southern Lao PDR. While women have always been involved in coffee farming, their participation increased when the more labour-intensive arabica coffee plants were introduced to replace the less popular robusta variety in the region. Drawing on quantitative and qualitative data, the study examines gender decision-making within coffee-farming households. The findings show an increase in women's participation in decision-making with the introduction of the arabica coffee plants; however, men still hold higher decision-making power in farming households. While the NEM has brought about economic growth and provided better livelihoods for coffee farmers, this has not necessarily translated into women's empowerment. Economic growth is not enough to bring about gender equality, and there is still a need for specific policy interventions.

Keywords: agriculture transition, decision-making, gender equality, Lao PDR, New Economic Mechanism, women's empowerment

Introduction and Background

The government of Lao People's Democratic Republic (Lao PDR) introduced a new period of economic liberalisation with the New Economic Mechanism (NEM) in 1986 (Rigg, 2012). The agricultural sector has been transformed from subsistence to commercial production, substantially increasing agricultural exports (Ministry of Agriculture and Forestry, 2014). These agrarian reforms have brought about landscape and economic changes in the uplands, lowlands, and plateau regions of Lao PDR (Manivong, 2014; Rigg, 2009, 2012; Sisouphanthong et al., 2002).

Arabica coffee, which is much more popular in the international market than robusta, was introduced to the Bolaven Plateau in southern Lao PDR in the 1990s. Farmers transitioned from a subsistence economy of growing rice via shifting cultivation, to more labour-intensive arabica coffee agriculture that served the global market. The new crop has brought economic growth to the region and provided better livelihoods for farmers.

Both men and women are involved in farming work in Lao PDR. The work involved in arabica coffee planting and processing is divided up along gender lines (Douangphachanh, 2020). Men tend to focus on planting and pruning and other work involving machines, while women are involved in the picking and sorting process, which does not require heavy lifting but is tedious and timeconsuming. While women have always been involved in farming, the more labour-intensive arabica crop has expanded their participation in production.

This paper examines whether the region's economic growth and increased women's participation in agriculture labour translate to women's empowerment and greater gender equity in decision-making. Has the New Economic Mechanism brought about empowerment for women in Lao PDR? This study focuses on decision-making as an indicator of empowerment (Kabeer, 1999). To explore this question, the researchers conducted qualitative and quantitative surveys of decision-making at the household level in a coffee-producing village in the Bolaven Plateau. This research was conducted as part of a larger project examining the feminisation of agriculture and the impact of agricultural transition on women. It concludes with some recommendations towards achieving gender parity in Lao PDR.

Literature Review

Lao PDR is a developing country with an agrarian economy that employs approximately 75 percent of the total workforce (Food and Agriculture Organisation, 2017). A study by Southichack (2009) on the Lao coffee industry's development patterns in previous decades shows that the coffee sector has been

growing due to the expansion of the arabica variety. Thus, the number of rural households dependent on coffee production for their livelihood has climbed significantly since the 1990s (Southichack, 2009). Minoo (2014) found that the increased wealth of farmers was a result of the introduction of arabica coffee, and that the government-supported shift from robusta to arabica has induced dramatic growth in the coffee sector. Lokin and Nutters (2014) reported that the Bolaven Plateau Coffee Producers Cooperative (CPC) members in Champasak have benefitted from fair trade certification that has also facilitated the shift from robusta to arabica coffee crops. Advantages farmers enjoy include higher income, independence from middlemen, better market access through the CPC, and support for their children's education. In short, the introduction of arabica coffee has played a significant role in improving the livelihoods of the rural population in Lao PDR.

Women play an important role in the agriculture sector and account for 54 percent of its workforce (Ministry of Agriculture and Forestry, 2010). However, their contributions are often seen as secondary to men's (Ministry of Agriculture and Forestry, 2015). Traditionally, Lao women spend a significant amount of time working on their farms, but they must also devote themselves to raising children and caring for their family's needs. Hence, women carry a double burden as farmers and the main caretakers within their households (Asian Development Bank, 2001; Asian Development Bank and the World Bank, 2012; Gender Resource Information & Development Center, 2005). According to Evans (1990, 1999), the most important way to influence gender equality is to restructure the gender division of labour and caring contributions. Evans shows how during the collectivisation period (after Lao PDR's independence in 1975), Lao ethnic minority women equally contributed to farming cooperatives despite also being solely responsible for their households (Evans 1990, 1999, cited in Faming, 2018). However, men's contributions to the collectives were more highly valued, thus giving men more power within their households. Ireson-Doolittle (2004) made a similar conclusion in studying of Lao women's role over time, highlighting that socio-political changes since the early twentieth century, including colonialism and socialism, have influenced gender relations in Lao society (Ireson-Doolittle, 2004). While their role and representation in different spheres have increased, women still play a secondary role in society; as in many societies, women are still considered subordinate to men. Post-economic liberalisation, gender inequality has persisted in Lao PDR, and women's participation in decision-making processes in their households remains low (Ministry of Agriculture and Forestry, 2015; Ministry of Planning and Investment, 2016).

A Lao Women Union report published in 1989 provides insight into Lao women's status in the 1970s and 1980s. Their status was affected by the patrilineal tradition in which property was passed through the male line and upon marrying, women moved into their husband's family home or village to work on their farms. This made women economically dependent on men. Traditionally, women were not allowed to leave their homes and attend school, leaving very few literate. They faced many obstacles in attaining economic independence and educational progress as they were burdened with cooking, cleaning and child-rearing in a deeply patriarchal structure (Lao Women Union, 1989). Socialism may have increased women's participation in collectives, but this did not necessarily translate to elevating their position in the household (Ireson-Doolittle, 2004).

Studies over the last decade have focused on economic development and women's status in Lao society. Khouangvichit (2010) looked at gender relations after the NEM and investigated socio-economic transformations and changes in two local contexts of tourism and mining. This research found that economic development changed women's economic status as they started earning an income. However, it was inferred that gender inequality still existed because of the double burden of paid and child-rearing work in traditional cultures (Khouangvichit, 2010). In a study of the impact of the mining industry on gender relations, Pimpa, Moore, Phouxay, Douangphachanh and Sanesathid (2016) suggested that this industry improved Lao women's economic status since mining projects encourage skills development and training. Similarly, a study on a hydropower development project that resulted in a community resettlement found that women and men made more joint decisions regarding livelihood strategies after resettlement, as compared to earlier (Weeratunge, Joffre, Senaratna Sellamuttu, Bouahom, & Keophoxay, 2016). In contrast, Phochanthilath (2019) examined gender relation transformations under Lao socialism and the introduction of the market economy, and concluded that gender inequality and power relations remained the same due to the Lao patriarchal culture (Phochanthilath, 2019). In this case, because of embedded patriarchal social norms, economic development did not improve gender equality (Nguyen, Mortensen, & Pravalprukskul, 2019).

In Southeast Asia, women make up, on average, 50 percent of the agriculture labour force (Quaye, Dowuona, Okai, & Dziedzoave, 2016). They contribute actively to household agriculture work and towards household income earnings (Ireson, 2018). In fact, Southeast Asian women are more active in earning income outside the house than women in other parts of Asia (Booth, 2016). Studies have indicated that income-earning is an important factor that influences the increase of women's decision-making power in a household (Kabeer, 2016; Rao &

Kushwaha, 2016). However, this is not consistent everywhere. In a comparative study on gender equity among rice farmers in Thailand, the Philippines, Indonesia and Myanmar, Akter et al. (2017) found that women in these four countries had access to resources and control over their household income. However, when it came to agriculture, women in Thailand and the Philippines had more decision-making power than women in Myanmar and Indonesia. This was due to differences in socio-political history, culture, and religion.

A study by Roberts (2004) in upland Lao PDR found that women performed work equal to that of men in agriculture, but when it came to decisionmaking, women were not as well represented (Roberts, 2004, cited in Colfer et al., 2015). In a later study by Roberts (2011) in upland Lao PDR, changes in labour migration patterns impacted women's decision-making power in this region. Women from the Lao and Khmu ethnic minority group became important decision makers on issues related to land when their partners were away due to labour migration. With their husbands away, women took up most of the decisionmaking as well as labour work in their farms (Roberts, 2011).

Elsewhere in Southeast Asia, Lai (2011) found that in Malaysia, the introduction of large-scale oil palm plantations increased employment opportunities for both men and women in an Orang Asli community. This influenced the villagers' livelihood strategies in a way that involved both men and women as labourers tied to the market economy. Women's economic independence leads them to have greater power in decision-making (Lai, 2011). Similarly in Cambodia, women's cash earnings increased their decision-making power (Nahrgang, 2016). Case studies from South Asia also found that women's access to independent income increased their decision-making power in their households (Hazarika & Goswami, 2016; Khurana, 2015). In such cases, women gained more decision-making power within their household because of their "sweat equity" in agriculture production (Roberts, 2011). We explore here whether this is the same in the Bolaven Plateau in Southern Lao PDR.

Theoretical Framework

Development studies largely suggest a positive correlation between economic growth and gender equality. Researchers have observed that gender equality is linked to the scarcity of resources, and that women are often left behind in the competition for these resources. However, economic growth allows for a more equal distribution of resources among men and women in a household (Dollar & Gatti, 1999; Duflo, 2012; Kabeer & Natali, 2013; Rao & Kushwaha, 2016). Another perspective suggests that women's participation in the global labour market positions them as important contributors and thus `makes it worthwhile for

households to invest more resources in female members' (Kabeer & Natali, 2013, p.21). Additionally, women's access to paid labour and their position as economic contributors increase their bargaining power in households (Duflo, 2012). Economic development can also provide women access to technology that can free up their time, which in turn, can be used for other things such as a paid job or the pursuit of education (Duflo, 2012). Duflo concludes that 'genderblind policies that improve the economic welfare of households can improve gender equality, and diversifying the economy and increasing women's options in the labour market can cause households to adjust their behaviour, moving them toward gender equality' (2012, p. 1058).

On the other hand, in their multi-country study, Kabeer and Natali suggest that while there is an observed positive correlation between economic growth and gender equality, this correlation is not always consistent. Economic growth does not necessarily increase gender equality; however, gender equality positively contributes to economic growth (Kabeer & Natali, 2013). According to Kabeer (2016, p. 295), "evidence that gender equality contributes positively to economic growth was fairly robust, holding across a range of different countries, time periods, and model specifications. The evidence for the reverse relationship was less consistent and generally confined to high-income countries".

This research focuses on gender power relations through the decisionmaking dimension before and after the NEM, especially in the crop transition phase, and explores whether the NEM has contributed to women's empowerment. The data is analysed within the frameworks as explained by Kabeer (2016) and Duflo (2012) in examining the correlation between economic growth and women's empowerment. This study also draws on the concept of power by Kabeer (1999, 2001) which includes three dimensions: resources, agency, and achievements. Kabeer defines agency as 'the ability to define one's goals and act upon them' (Kabeer 1999, p. 438). Individuals gain power when they can exert agency through participation and negotiation in decision-making. This study examines the decision-making power of women in the household as a marker of empowerment.

This study also contributes to the literature on the impact of economic growth on women's empowerment by expanding the understanding of the impact of agriculture transition on gender relations. In addition, while much attention has been paid to economies coffee, given its global demand, less attention has been given to the impact of coffee production on gender dynamics in agrarian communities (Howland, Brockington, & Noe, 2020).

Methodology

This study drew on both qualitative and quantitative data collected between 2014 and 2018. The interviews, focus group discussions, and surveys were conducted in the Bolaven Plateau region in southern Lao PDR and were complemented by participant observations gathered during field visits. The interviews and surveys were conducted by local Lao speakers familiar with the region. The data for this research were gathered as part of a larger study referred to as the Feminization Agriculture Transition and Rural Employment (FATE)-Lao in which the authors are involved. The study is part of a multi-country FATE project. The survey tool used in the project was adapted from the Women's Empowerment in Agriculture Index (WEAI) developed by the International Food Policy Research Institute (IFPRI) and the Oxford Poverty and Human Development Initiative (Alkire et al., 2013). The research was conducted following the ethical principles of the Swiss National Science Foundation and guided by the principal of the Swiss Programme for Research on Global Issues for Development (r4d programme). Informed consent was obtained from all participants.

Study Site

The study was conducted in Itou village (also known as Lak 35), Pakxong district, Champasak Province, on the Bolaven Plateau in Southern Lao PDR (Figure 1). The study focused on Itou village, established in 1930, and in which farmers grew local varieties of coffee until arabica was introduced in 1992. The village has 205 families who are members of the Lao ethnic group and practice Buddhism.

Coffee has been grown on the Bolaven Plateau since the French colonial era beginning in the 1920s. After Lao PDR gained independence in 1975, the government established a collective economic development scheme for the agriculture sector (Evans, 1990). Various agricultural cooperatives were then established for coffee production and trading. The cooperatives were controlled by the central government which planned coffee production, collection, trade and export, and set pricing policies.

Coffee was not a commercial crop in Laos until 1986. Lao coffee exports were mostly used to pay debts to socialist countries, especially the former Soviet Union, and to Vietnam during the revolutionary war (Matsushima & Vilaylack, 2005). Meanwhile, farmers primarily grew excelsa and robusta coffees and tea, in addition to cultivating rice for household consumption. During this period, they focused on the quantity, not quality, of coffee produced using traditional coffee-farming methods. This production did not improve local farmers' living conditions pre-NEM; they earned less from coffee production before the NEM than they do now.

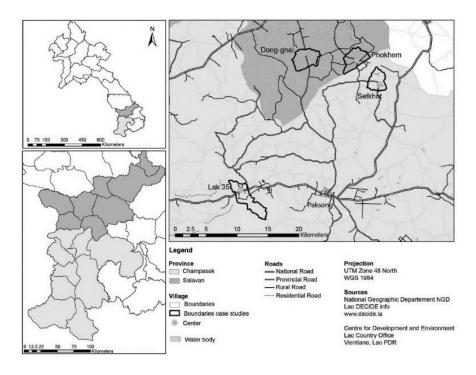


Figure 1: Study area map (Source: Based on data from www.decide.la)

After the implementation of the NEM in 1986, the government introduced and promoted arabica coffee via two main projects: the Lao Upland Agricultural Development Project (LUADP) from 1991–1995, and the Bolaven Plateau Rural Development (Projet de Dévelopement Rural du Plateau des Bolaven-PDRPB), from 1997–2002, to increase coffee exports. These projects helped farmers develop skills in planting, raising, harvesting, and processing arabica coffee among the Itou village farmers and in the wider Bolaven Plateau.

Around 1995, a few families in Itou began planting arabica coffee; however, the majority held onto robusta coffee, tea farms, and rice cultivation. Farmers who shifted to arabica coffee had to stop cultivating rice because the arabica plants were very labour-intensive. They could only cultivate rice during the early stages of the arabica plant's life cycle, i.e. before it began producing berries, as the farmers could not employ enough labourers to harvest the coffee and the rice at the same time. The government also set regulations to discourage shifting rice cultivation, which was the traditional way of planting rice in this region (Ministry of Planning and Investment, 2006, 2011, 2016). Farmers discovered that they made more income through arabica coffee and therefore could simply purchase rice. By 2010, most of the Itou farming households were growing arabica

coffee beans and no longer growing robusta beans or tea, and by 2020, almost all households were growing arabica. Based on data gathered in the Itou village, the arabica growing area increased from 236.15 ha in 2005 to 496 ha in 2015. Meanwhile, the robusta coffee growing area dropped from 85.54 ha in 2005 to 40 ha in 2015. Currently, the coffee sector is considered the primary source of income for households in the village.

Analysis

Qualitative Data

The qualitative data were collected through in-depth interviews, focus group discussions (FGDs), and participant observations. All the participants in the interviews and FGDs were arabica coffee farmers from the village of Itou. The participants for qualitative data collection were nine individuals and five couples. Five FGDs were conducted (Table 1), with each including between six and eight participants. The principal researcher conducted semi-structured interviews with nine individuals (five women and four men), five in-depth interviews, and five FGDs, all of which covered the transition to arabica coffee and how it impacted farmers' livelihoods and women's power before and after the NEM. A total of 56 individuals were involved in the interviews (32 women and 24 men). The qualitative interviews were transcribed, and the transcribed data were grouped into themes, coded, and manually analysed.

Activities	Details	Total number of interviews/FGD
In-depth interview	Individual	9
	Couples	5
Focus group discussions	Women's union group discussion, mixed age	1
	Men's group, aged below 55 years	1
	Women's group, aged below 55 years	1
	Men's group, aged above 55 years	1
	Women's group, aged above 55 years	1

Table 1: In-depth interviews and focus group discussions in Itou village, 2014 to2016

Quantitative Data

Quantitative data were used to compare the decision-making levels of female and male farmers before and after the NEM. The decision-making items in the productive domain consisted of the following: land acquisition; plots to plant in; technology use; fertiliser application; labour hiring; harvesting; selling farm products; children's education; and borrowing money from a bank or money lender. A 5-point Likert scale (1 - No input; 2 - Very limited input; 3 - Input to some decisions; 4 - Input to most decisions; 5 - Input to all decisions) was used to measure the level of decision-making. The total sample of the quantitative method contained 154 respondents from coffee farming households in Itou Village, comprising 73 men (47.4 per cent) and 81 women (52.6 per cent). The sample included only married women and men because the research focused on gender power relations in a household.

The quantitative data were analysed using the SPSS software. A t-test was used for mean comparisons, and results were used to compare the levels of decision-making for women and men. The significance level was set at $p \le .05$ (Rice, 1989).

Findings and Discussion

Better Livelihoods after the NEM

In addition to investigating the gender relations before and after the NEM, the team also conducted interviews to understand how the NEM impacted the livelihood conditions of the villagers. Researchers asked the villagers how the NEM improved and changed their lives and livelihoods. Findings from the interviews and focus group discussions indicated that farmers switched to growing arabica coffee which produce more and better-quality coffee beans that can be sold at a higher price than robusta coffee beans. The participants confirmed that this shift led to better livelihoods for them with an increase in income for their families. This allowed them to acquire household assets, owing to easier access to electricity and water, and purchase new vehicles or new homes. Some also reported being able to support their children's education, including tertiary education. Furthermore, the income was used to reinvest into agricultural needs such as milling and other farm equipment. The following are some excerpts from interviews with villagers which illustrate this observed improvement in livelihood and economic growth:

Since we planted arabica coffee, we earn more income and make a better living. For example, we can build a new house and buy a car, household equipment, and a milling machine. We can support our children's education. Our son completed his bachelor's degree at Champasak University and he now works there. (Husband and wife, both 56 years old, 14 July 2015) Family income has improved due to the new variety of coffee. People in the village make a better living now. (Women's union leader, 12 May 2016)

The family economy has improved with the new variety of arabica coffee because this variety earns quite a good income. (Woman 40 years old, 12 May 2016)

Since the transition to arabica coffee in the mid-1990s, people in the village can build new concrete houses because the new variety of coffee earns them more income. (Man 78 years old, 9 May 2016)

People can buy new cars and build new houses, and they can buy utilities for their homes because of the high-quality variety of coffee. (Participant in men's focus group discussion, 11 May 2016)

Decision-making Before the NEM

Many earlier studies of the Lao agrarian economy show that women play a crucial role; the village of Itou is no exception. Villagers reported that women and men worked together on their farms to grow rice, robusta coffee beans, and vegetables for home consumption. Typically, men performed tasks that required physical strength such as cutting down trees, digging holes for planting, transporting, and lifting heavy objects, while women performed time-consuming tasks such as harvesting, weeding, planting, and sun drying beans. Women also performed all the household chores and childcare. While they put in similar number of hours farming, they also had to spend hours cooking, cleaning and taking care of their children (Douangphachanh, 2020).

With regard to farming-related decision-making, participants reported that overall, men generally made decisions about land acquisition, plots to plant in, labour input, harvesting, selling farm products, and children's education. Men were considered the heads of their households and, thus, made the most important decisions for their families. They also assigned farm work to family members. All family members, including the women, were guided by the men's decisions. Conversely, women had limited decision-making power and often were not consulted in decision-making. As one elderly participant pointed out, "Women simply followed men's instructions".

The following statements describe the sole decision-making powers of men before the NEM:

In 1975, a husband had more rights than his wife. Mostly, the wife listened to her husband and followed whatever he said. Men were mostly the decision-makers within the household. This situation was dire because men made all the decisions as head of the household and formulated the family plan, dividing tasks among family members. All family members waited on the man, who informed them what tasks they were required to perform. The husband decided what his wife could or could not buy. He decided if she could go out, and she needed his permission. (Participant in men's focus group discussion, over 55 years old, 11 May 2016)

Men had authority within the household. A wife was guided by her husband's decisions. Men were the final decision-makers. (Husband and wife, husband 63 years old and wife 62 years old, 13 May 2016)

Women had limited decision-making power and men had power within the household. Women simply followed men's instructions. Everything relied on the husband's decisions. (Women's union leader, 12 May 2016)

According to the participants, men made the decisions about selling farm products because they transported the products to the state market. In addition, men decided on their children's education. Most wanted their sons to pursue an education and their daughters to stay at home to help their mothers with household chores and caregiving work. It was believed that girls were not to pursue any education beyond primary school because they needed to take care of their families. If a girl moved away from the village to study, she was deemed to be a "bad woman" (interview notes, 2016). This gender ideology, in which men were positioned superiorly to women, was the main factor determining women's status and power in Lao society at the time.

In the past, parents did not support their daughters' education. If they finished secondary school and wanted to further their education, it was difficult for them because they had to find a place to live away from home. Hence, they were expected to drop out of school (participant in men's focus group discussion, over 55 years old, 13 May 2016).

From the interviews and focus group discussions, participants confirmed that traditionally, women had little to no power in household decision-making before the NEM, while men made most of the decisions on matters related to farming and children's education. Participants attributed this to the belief that men held a superior position to women as head of the household, and thus should wield the power to make all decisions for the family. Women's lower education attainment and literacy reinforced their lower position.

Decision-making After the NEM

The NEM and economic liberalisation, through the introduction of high value arabica coffee, has brought changes to the villages of the Bolaven Plateau. The farmers now earn higher incomes as arabica beans command a higher price than robusta in the world market. The transition from robusta to arabica coffee increased farmers labour time in the field, as arabica requires more intensive care. Galindo et al. (2007) conducted a participative analysis of coffee supply chains in Lao PDR and reported that arabica coffee plants require 110 worker-days per ha for harvesting due to the requirements of intensive coffee picking, sanitary picking after harvest, pruning, and wet-processing (e.g., pulping, fermentation, washing, and sun-drying). In contrast, robusta coffee requires only 50 worker-days per ha for harvesting, requiring very little labour input, investment, or fertiliser. Farm work is undertaken by both men and women; however, farm tasks are still divided up along gender lines. Men engage in work that requires physical strength, while women take on the time-consuming work, such as harvesting. In addition, women are responsible for domestic and caregiving jobs within the household. Both men and women are involved in the farmers' cooperatives that were set up for processing coffee beans.

Villagers report that after the NEM was instituted, women became more involved in the decision-making processes of the farmers' cooperative. Women attended cooperative meetings and participated as committee members. They have, therefore, gained a voice and become more involved (Douangphachanh, 2020). The household survey showed that women have also gained more decisionmaking power in their households as compared to before the NEM, when only men made household decisions. Men now discuss household issues with their wives. However, in general, women are not allowed to make decisions on as high a level as the men in their households, and in most cases, men still make the final household decisions. In some households, women must ask their husbands' permission to make decisions.

The present study's qualitative data complements the quantitative survey and analysis. A t-test was used to analyse the levels of decision-making between women and men in coffee-farming households. The survey showed that men and women are both engaged in decision-making on a variety of surveyed items such farming, money, and children's education. However, there are significant differences in their degree of input, as seen in Table 2 (p = .012). Men generally have more say in household decisions; specifically, the data indicate that men make higher level decisions such as land acquisition, technology use, applying fertiliser, hiring labour, harvesting, and borrowing money from a bank or money lender. However, men and women share similar levels of decision-making power when it comes to selling farm products (e.g., when and where to sell for the best price) and children's education, a situation that has changed since the introduction of the NEM.

	Gender						t	p
Decision item	Men			Women			-	
	Ν	Mean	SD	N	Mean	SD	-	
Land acquisition	70	3.66	.849	77	3.23	.930	2.87	.005
Plots to plant in	73	3.68	.848	81	3.25	.874	3.15	.002
Technology use	73	3.68	.880	79	3.11	.891	3.97	.000
Fertiliser application	72	3.81	.833	81	3.17	.972	4.29	.000
Labour hiring	65	3.65	.926	73	3.34	.931	1.91	.050
Harvesting	73	3.70	.877	81	3.27	.895	2.98	.003
Sale of farm products	72	3.60	.944	81	3.47	.923	.84	.398
Children's education	70	3.63	.854	79	3.43	.827	1.43	.153
Borrowing of money	69	3.54	.884	77	3.21	.833	2.31	.022
Overall	57	3.58	.65	63	3.25	.80	2.53	.012

Table 2: Decision-making in coffee-farming households

Note: $p \le .05$ is significant (Rice 1989). Source: FATE household survey data 2018

The findings indicate that economic liberalisation has encouraged some changes in gender power relations. Table 3 shows the areas in which women have gained more decision-making power post-NEM. Women are now involved in decision-making on matters related to land acquisition, plots to plant in, technology use, fertiliser application, labour hiring, harvesting, and borrowing of money. However, men still have more decision-making power on these matters. Nonetheless, women and men have equal decision-making power when it comes to matters related to when and where to sell farm products, as well as their children's education.

No.	Decision-making area	Pre-NEM	Post-NEM
1	Land acquisition	*	+
2	Which plots to plant	*	+
3	Technology use	NA	+
4	Whether to apply fertiliser	NA	+
5	Hiring labour	*	+
6	Harvesting	*	+
7	Selling farm products	*	•
8	Children's education	*	•
9	Borrowing of money	NA	+

Table 3: Comparison of women's decision-making power before and after the NEM

Note: NA: Not Applicable; *=mainly made by men; •=made jointly; + = jointly, but men have more input or made the final decision

The research findings resonate with previous studies conducted in South and Southeast Asian countries. Women have a significant role in agriculture and are involved in decision-making; however, they have lower decision-making powers within the household than men (Fartyal & Rathore, 2016; Hamid, Khan, & Jahangir, 2021; Joshi, Dash, & Gangwar, 2016; Sharma, Chander, Meena, & Verma, 2016; Shaw, Das, & Dey, 2016; Tiwari & Tripathi, 2016; Yusof, 2015). In this Lao case study, women's rising participation in agriculture and economic growth has contributed to some changes, allowing a subsequent rise in women's participation in decision-making. Yet, there is still a large disparity in gender equity when it comes to decision-making power in the household.

The study is limited in scope because it examines only a specific set of items for household decision-making. Women may have more bargaining power in other aspects not investigated in the survey. It also does not examine the degree of bargaining and levels of cooperation in joint decision-making in the households (Doss & Quisumbing, 2020).

Conclusion and Recommendations

This study examined how the NEM and economic liberalisation led to a major crop growing transition and influenced women's participation in household decisionmaking. Both before and after the introduction of the NEM, women and men work together on their farms, but women perform work that is time-consuming, while men perform roles that require physical strength. The findings reveal that women were less involved in the decision-making processes within the household before the NEM, but since the NEM, have become more engaged in decision-making. However, men still hold higher decision-making power when it comes to land acquisition, technology use, fertiliser application, labour hiring, harvesting, and borrowing of money from a bank or money lender. An important difference post-NEM is that women's decision-making power is equal to men's on matters related to selling farm products and children's education. The research concludes that the NEM and economic liberalisation brought about some changes in gender power relations, yet men still retain more decision-making power than women in the household. This analysis illustrates that economic growth does not necessarily translate to women's empowerment and gender equality (Kabeer, 2016; Kabeer & Natali, 2013).

Conversely, evidence shows that increased women's empowerment leads to increased economic and community growth (Anik & Rahman, 2020). There is also evidence supporting the belief that an increase in women's empowerment results in increased agriculture production and food security (Anik & Rahman, 2020; Asadullah & Kambhampati, 2021). An investment in women's empowerment can therefore bring about a multiplier effect for community development. However, gender parity itself is an important goal as it stands, and countries, including Lao PDR, are striving towards the United Nation's Sustainable Development Goal #5 on Gender Equality.

The Lao government has made significant commitments to gender issues through policies, laws, regulations, and institutions (CEDAW, 2013, 2018; Gender Resource Information & Development Center, 2005) and considers gender mainstreaming as a critical component of promoting gender equality. It has implemented agriculture and forestry development programmes to enhance and provide opportunities for female farmers, and in some cases, has created a 30 percent quota for women in decision-making roles (Ministry of Agriculture and Forestry, 2015). Even though the government has increased women's access to political representation and social status, the gender gap still remains (Evans, 1990, 1999).

In Lao PDR, the patriarchal norm that positions men as superior to women persists, and women continue to take on the dual burden of productive and reproductive work. As pointed out by Kabeer and Natali (2013, p. 32), 'Gender inequalities continue, in most regions of the world, to reflect long-standing norms and values that govern relations between men and women in different socioeconomic groups.' Based on this observation, and given the Lao government's commitment to gender equality, this study recommends implementing policy interventions and programmes that consider cultural variables specific to Lao PDR.

Some recommendations include the following: first, women's labour participation in farm work should be acknowledged and valued. Women are not just 'helpers' in the field, but provide labour equally valuable to that of men. Women's access to land and business ownership should be encouraged and facilitated, and more opportunities of agricultural training should be given to female farmers, so that new knowledge and technology are not just limited to male farmers. Second, programs must be implemented to educate and socialise men to take up more care work so that women do not continue having the double burden of reproductive and productive work. Third, quotas for women in policy and decision-making roles should be created. This would need to go hand in hand with capacity-building programmes for women to take up leadership roles. Fourth, the government should increase educational opportunities for girls and women, which include encouraging families to send their daughters to school, and ensuring schools are accessible and safe. Scholarship programmes will also encourage girls to continue to the tertiary level. Such programmes and policy interventions should be implemented to take into account local contexts and aim to empower both women and men in society.

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