

RESEARCH ARTICLE

Gender Dynamics and the Complexities of Cattle Ownership in North-Eastern Thailand

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Abstract: The purpose of this study is to extend the debate about gender dynamics and the complexities of livestock ownership, production, and markets in rural Northeast Thailand. Particular attention is paid to gender norms in specific contexts, such as the transition between rural subsistence to a market-based economy, the diversification of livelihoods, and the prevalence of a matrilineal system. The data was obtained from qualitative methods. The researcher conducted in-depth interviews and non-participant observation with 25 key informants in Si Sa Ket Province of Thailand. The results show that a range of contextual factors influences the division of labor, as well as gender roles associated with beef cattle production and trading. The importance of women's roles in the livestock sector is demonstrated, in contrast with the limited level of government support that is offered to poor and middle-income women. The paper concludes that gender mainstreaming may be better promoted via the use of sex-disaggregated data to enable a detailed analysis of the hierarchical positions of men and women in the beef cattle sector.

Keywords: gender dynamics, complexities of ownership, Thailand

This paper extends debates on gender dynamics and the complexities of ownership related to livestock production and markets. It pays particular attention to how gender norms and a matrilineal system influence women and men in different ways. These norms arise from different socioeconomic classes and shape the hierarchical positions of women and men (Nightingale, 2011) within livestock systems. For instance, women play an important role in livestock production yet receive only limited government support. This limits how women may benefit from cattle production and markets. Thus, this paper seeks to contribute to a discussion on how resource ownership may enable

more profitable livelihood strategies for women. It also seeks to understand how women and men of different socioeconomic profiles may be supported by different institutions in distinct ways. Data presented in the paper was derived from a research project undertaken in the Isan (Northeastern) region of Thailand between 2019 and 2020.

The Isan region has the highest number of beef cattle farmers in Thailand, with most considered to be small-scale household producers. Livestock, as a component of the agricultural sector, is currently growing in value by between 1.5% and 2.5% annually. Up until 2018, Thailand still needed to import beef

cattle to meet domestic demand for meat. However, recently, farmers have been incentivized to substitute less profitable crops, such as rice and rubber, with beef cattle production to meet the increasing demand for beef from urban residents in Thailand, Vietnam, and China. There is now an increasing concentration of beef cattle farmers in the Isan region (FAO, 2018). This is broadly reflective of the Mekong region as a whole, where livestock production is currently one of the fastest-growing economic activities (Bunmee et al., 2018; Khamnu, 2019).

Over the past 30 years, a market economy has become more established in the Isan region as a result of agrarian change and rural economic restructuring. Rural livelihoods now tend to be aligned with production for the market, rather than household consumption, as investments in new technologies have resulted in increased productivity (Rigg, 1998, 2019; Rigg et al., 2012; Rambo et al., 2017; Ganjanapan, 2011). As this has occurred, gender relations in the Isan region have become more dynamic and complex. Women have enthusiastically engaged in both off- and on-farm activities and played an increasing role in managing household finances. Land ownership has been a key factor in driving changes in gendered participation within agriculture. This has made it possible for women to secure investments in more sustainable livelihoods (Mills, 1997; Curran & Meijer-Irons, 2014). However, gender norms regarding ownership still prevent women from fully enjoying the benefits of the market economy.

Literature Review

Gender and Livestock Ownership

Most research on gender and livestock ownership suggests that women contribute significantly to the sector. This participation enhances gender equality, household food security, asset ownership, and poverty reduction (Njuki & Sanginga, 2013). However, women generally have less visible decision-making power in agricultural activities. This represents an unequal power relationship between men and women within households, as well as in relation to the control of resources and rights to ownership (Akter et al., 2017; Galiè et al., 2015). Minimal ownership of livestock assets vastly limits the access of women to market information, prices, and livestock support programs

provided by government extension staff, indicating the presence of gender inequalities (FAO, 2011, 2013, 2019; Kinati & Mulema, 2018; Galiè et al., 2015; Njuki & Sanginga, 2013; IFAD, 2009).

Meanwhile, livestock production has become more commercialized, creating greater opportunities for income and employment for both women and men. However, men tend to benefit more from these opportunities, as they own a greater proportion of livestock assets (Yisehak, 2008; Deere et al., 2012; Waithanji et al., 2013; Nunow, 2000; Njuki, Waithanji, et al., 2011; Njuki, Kaaria, et al., 2011b; Njuki, Waithanji, et al., 2013). Comparatively, this restricts women's participation in livestock value chains (Njuki, Waithanji, et al., 2013) and access to markets (Galiè et al., 2015; Waithanji et al., 2013).

Galiè et al. (2015) suggested that an improved understanding of local ownership arrangements can overcome a range of specific aspects of gender inequality related to livestock production and trade by enhancing agricultural productivity, intra-household gender relations, and food security. Yet, this has rarely been the focus of an academic study. Ownership has multiple, complex meanings that vary with age, personal circumstances, geo-cultural location, legal status, gendered perceptions of knowledge, physical strength, and labor allocation. For instance, the term "joint ownership" in Ethiopia may be translated as "shared labor tasks" in Ethiopia; "shared legal rights" in Tanzania; and the "legal rights of the household head in conjunction with informal rights of other household members" in Nicaragua (Galiè et al., 2015, p.11).

Livestock ownership improves the level of benefits received from markets and enables investment in improved livelihood outcomes. This can improve social status and recognition within a community, enhance decision-making power, and create a more equitable division of labor and distribution of knowledge. Agarwal (1995) defined asset ownership as an ability to retain control of an asset through mechanisms such as a land title. For instance, this enables a capacity to sell, give, use, or dispose of an asset. Further, Ribot and Peluso (2003, pp. 153–154) defined the concept of access (to land or livestock ownership) as "the ability to benefit from things—including material objects, persons, institutions, and symbols." Access is closely related to power relations, whereby it enables "the ability to derive benefits from things," which is

broader than a classical definition of property as “the right to benefit from things.” By this definition, access to ownership is more akin to “a bundle of powers” than the notion of a “bundle of rights.”

Women’s access to livestock ownership is restricted by gender norms. There is a large body of research that suggests that women contribute more to daily livestock production activities than men (FAO, 2019; Oparaocha, 1998; Njuki & Sanginga, 2013; FAO, 2013; Waithanji et al., 2013; Kinati & Mulema, 2018; Quisumbing et al., 2015). For example, in Nepal, up to 45% of women engage in tedious day-to-day chores, such as forage collection, cleaning gutters and sheds, and feeding animals that do not derive much income. Meanwhile, men tend to control responsibilities that generate revenue, such as the sale of milk at the markets. Men were found to occupy 74% of key positions in livestock management associations and important cattle enterprises, with the small proportion of women serving primarily as symbolic representatives (Paudel et al., 2009). Waithanji et al. (2013) argued that responsibilities for household activities restrict women from more lucrative activities, such as raising animals and participating in commercial markets. Women tend to have greater involvement in less profitable domestic livestock production activities. Thus, gender norms tend to limit women from accumulating livestock assets as a means of strategically improving their livelihoods through market-oriented production (Quisumbing et al., 2015).

Women’s livestock ownership is also restricted by gender norms. There is a large body of research that suggests that women contribute more to daily livestock production activities than men (FAO, 2013, 2019; Oparaocha, 1998; Khan et al., 1993; Njuki & Sanginga, 2013; Waithanji et al., 2013; Kinati & Mulema, 2018; Quisumbing et al., 2015). In Vietnam, although women may not naturally choose to raise small animals such as chickens, cultural barriers tend to strongly influence the type of livestock they raise. Women tend to play key roles in raising small livestock such as pigs, chickens, ducks, and geese, whereas men are involved more with larger animals such as buffaloes, cows, sheep, horses, and goats, employing industrial-scale animal husbandry (FAO, 2019). Men tend to possess superior technical knowledge about animal breeding, feeding practices, and the treatment and prevention of disease at this scale, whereas women have more experience with the daily care of small animals. In response to these

challenges, women have employed strategies to pool resources, such as labor, household assets, knowledge, and skills to improve the benefits they obtain from livestock markets. However, as Quisumbing et al. (2015) pointed out, it is the ownership of livestock assets that would provide more significant assistance to women’s empowerment. This would lead to poverty reduction and access to income opportunities in a range of Asian countries.

Quisumbing et al. (2015) suggested that if gender equity issues related to livestock production activities are to be understood, then the control women hold over livestock resources in Asia needs to be examined. For instance, Jumrani and Birthal (2015) conducted research on gender and livestock in rural India focused on issues of income control, children’s health, nutrition, and education. In another case in Laos, Oparaocha (1998) found that ethnic Hmong women inherit pigs, which are purchased as part of important rituals such as weddings. In this case, local culture contributes towards the ownership of livestock by women.

However, this is not replicated for commercial livestock. For instance, women in rural China tend to use land resources to engage in labor-intensive farming and small livestock raising for household consumption, whereas men seek land and animals for trade. As a result, men access higher incomes, but women are placed at the lower end of the livestock and agricultural commodity value chains. This tends to threaten household food security, which may be reflected via assessing the Pro-Poor Livestock Policy Initiative (PPLPI) reports (Shen, 2014). In these documents, there is no mention of gender; rather, they are limited to gathering quantitative information about livestock production methods and identifying opportunities by which they may be improved in both South Asia and the Mekong region. Only occasionally is the role of women in traditional livestock management mentioned. Reporting is mainly focused on the significant contribution of livestock production to the value of the agricultural sector and its contribution to improving gross domestic production (GDP; Teufel et al., 2010). Similarly, in Thailand, a review of livestock production and management focused on the transition from traditional to more commercial cattle production made no mention of gender issues.

Gender Norms and Changing Rural Economics and Resource Ownership in Thailand

Thailand is ranked 60th out of 145 countries in the Gender Gap Index, and currently, 71% of women and 86% of men are engaged in the workforce. The proportion of women who are elected officials or employed by the government is much lower, and the earning capacity of women is significantly less than for men (World Economic Forum, n.d.), despite efforts within the country to promote gender equality (Office of Women's Affairs and Family Development, 2008; UN Women, 2018). Thailand's impressive economic development over the past three decades has not led to a proportionate reduction in social and gender inequalities in the country. Slow economic growth in Thailand over the past few years has left Thailand with one of the highest gaps between the rich and the poor in the world. The people of the Isan region are the poorest in the nation (The ASEAN Post Team, 2019).

Gender inequality in Thailand is complex, contested, and dynamic. The proportion of women employed in agriculture (27.64% in Thailand) is lower than men (32.76%; World Bank, 2020). Historically, in the Isan region, men were supported by parents and their sisters to access higher education, whereas daughters were culturally expected to focus on caring for their parents and conducting household activities (Gordon et al., 1996; Yoddumnern-Attig, 1992; Pramualratana, 1992). However, more recently, the social and economic roles of women have adapted (Gordon et al., 1996), with a shift in the structure of the rural economy from a subsistence culture to a market-based economy, specific to the Isan region and an increase agricultural productivity more generally in Thailand (Yoddumnern-Attig, 1992). Current trends see both young men and women moving away from the village to work in larger cities, leaving behind their children to be cared for by their grandparents (Rigg et al., 2012).

Nowadays, both sisters and daughters are supported by their families to obtain an education as parents identify that education enhances the ability of the household to generate income. Previous ethnographic studies have revealed that relationships between wives and husbands in rural communities have become rather egalitarian, with women actively participating in the household economy (Akter et al., 2017; Curran & Meijer-Irons, 2014; Mill, 1997). Women have tended to engage more in activities such as pretty trading

and the marketing of homemade and foraged produce (Yoddumnern-Attig, 1992). Akter et al. (2017) argued that women now have more access to productive resources and greater control over household income than men. This empowerment and active participation of women in agriculture is said to be a prerequisite to achieving food security.

In Isan, small-scale farmers have kept traditional beef cattle for sale to substitute their rice farming income which often fluctuates (Bunmee et al., 2018). Traditional matrilineality is still obviously practiced and influences the roles and status of women. Husbands usually move in with the wife's parents, and married women retain ownership of their parents' properties, including land, house, and cattle (Mill, 1999; Bowie, 2008; Lapanun 2013, 2018; Lapanun & Thomson 2018). For example, during the opening up of the economic system of Isan to other regions, it was found that women inherited cattle from their parents. Men were just the transporters who took cows to trade in the central region (Pupiupa, 2016). However, the practice of matrilineal kinship in Isan is dynamic and complex (Lapanun & Thomson, 2018). Thus, in rural Isan, matriarchal residence and traditional ownership systems obviously limit men's role in having the most power to be the breadwinner (Bowie, 2008; Lapanun & Thomson, 2018; Lapanun, 2013).

Women have enthusiastically engaged in both off- and on-farm activities and have played an increasing role in household finances. Land ownership has been a key factor that has changed gendered participation in agricultural production and markets as it is possible to make secure investments in both sustainable land use and sustainable livelihoods (Curran & Meijer-Irons, 2014).

Despite this, gender norms about ownership are still preventing women from fully enjoying the benefits of the market economy. Traditionally, rural women in the region owned land, cattle, and household assets. They have historically been passed down the matrilineal lines as women are expected to look after their parents, with the youngest daughter generally taking on the caregiving role. Men have tended to stay with the family of their wives after marriage and contribute to family labor. Although men would previously be given other forms of inheritance such as cattle, education, or money before leaving their parents, this practice has become fragmented as a result of rural socioeconomic change. Now, both sons and daughters

move away from the village to work in the city, while aging parents are left behind with their grandchildren. Parents tend to not farm anymore, with male and female children sending remittances. Children now tend to inherit land more equally. As plots of land get smaller due to subdivisions over several generations, some children sell their inherited land to either sisters or brothers who remain in the community.

Sex-Disaggregated Data

The concept of ownership is usually constructed within cultural, legal, and socio-historical contexts that shape and influence policies or strategies that create gender equality in resource allocation (Ostrom, 2005). Hence, resource ownership can create power for specific groups to decide how livestock as assets are raised or sold (Doss et al., 2007). Thus, to enhance women's empowerment with respect to making decisions about livestock production and trade, ownership should be combined with interventions that provide women with the opportunity to access other resources. This includes access to land and water resources, as well as access to the information, capital, and services necessary to participate in the marketplace effectively (Njuki, Mburu, et al., 2013; Njuki & Sanginga, 2013). Further, Njuki and Sanginga (2013) presented a critical argument about gender in livestock production and markets. They suggested that that homogeneity cannot be assumed at the household scale. Members within households must negotiate fair resource allocation as domestic gender norms restrict women from accessing resources at this scale. This reinforces the inequalities that disadvantage them. Thus, multiple research methods are required to obtain gender-disaggregated data that better understands intra-household dynamics.

Sex-disaggregated data about livestock production and markets are very important for sub-Saharan Africa and Asia, yet scarcely available (Kinati & Mulema, 2018; Njuki & Sanginga, 2013; Quisumbing et al., 2015). The lack of gender-specific data about livestock ownership tends to limit the capacity to improve outcomes for women's participation in livestock markets. As a result, men continue to enjoy better access to services and inputs, as well as greater opportunities to generate profit (Galiè et al., 2015; Njuki & Sanginga, 2013; Shicai & Jie, 2009). It also perpetuates misunderstandings about gender inequality related to livestock ownership and reinforces

inappropriate gender norms (Galiè et al., 2015; Quisumbing et al., 2015; Njuki & Sanginga, 2013).

In summary, insights from the literature on gender dynamics and complexities of gendered ownership of livestock (Galiè et al., 2015; Kariuki et al., 2013) have helped to frame my analysis in this paper. I argue that context-specific gender norms, as well as prevailing socioeconomic conditions, influence whether women are able to own livestock, the capacity of women to make effective decisions about livestock production, and how women access markets. I demonstrate how gender norms limit women's access to capital, knowledge related to livestock production, and hence participation in livestock markets. A case study focused on cattle production and the livestock market in Si Sa Ket Province in the Isan region of Thailand is used to analyze the gender norms and gender dynamics related to the complexities of livestock ownership. In the next section of this paper, I describe the methodology used for this case study. Then, I present my findings and a discussion of these results.

Methods

The data presented in this paper are part of a research project undertaken in 2019, entitled "Urbanism and agricultural diversification: A case study of Si Sa Ket City, Thailand." In-depth interviews were conducted in four districts located in Si Sa Ket Province, including Yangchumnoi, Kanthararom, Rasi Salai, and Benchalak districts. Qualitative methods were employed to obtain field data. In-depth interviews were conducted with 15 female and 10 male small-scale farmers, two large-scale beef cattle farmers, one cattle market owner, five cattle traders, one government officer, three beef restaurant owners, and five beef customers from the restaurant. These key informants were purposively selected. Farmers were required to have experience in both cattle production and sales. The large-scale farmers raised cross-bred cattle specifically chosen for fattening and selling. The owner of the cattle market was also the operator of each marketplace, with two cattle markets within the province examined. The government officer was from the Si Sa Ket Provincial Livestock Department. The beef restaurants all sold beef steak and other beef items, whereas the customers ate at these restaurants. I also conducted a non-participation observation at the

cattle markets within two villages. I went to observe and interview cattle traders in the cattle markets of Rasi Salai and Benchalak districts and went to visit and interview large-scale cattle owners at their farms in these two districts.

The cattle markets had been established more than 30 years ago. They are located along the main road, which is easily accessible by trucks loaded with cattle. The two villages were randomly selected among those recommended by the government officers as being known to raise beef cattle. Each village had sufficient land and water resources for this purpose.

The Study Areas

The selected study area, Si Sa Ket Province, has a population of 1.47 million inhabitants, covering an area of 8,840 km². It is located within the Mun river basin, bordering Cambodia. Agricultural production accounts for 70% of the total labor force in the province, and more than 80% of the land is used for these activities. Most land is allocated for rice production, followed by rubber, cassava, vegetables such as red onions and garlic, and fruits like durian and rambutan. Native cattle are raised on rice fields after crops have been harvested, whereas cross-bred cattle raised for fattening and the production of beef are kept in stalls. During the rainy season, when rice crops are planted, farmers keep native cattle in a confined area. In 2016, most of the cattle raised in the province were native breeds (177,050 head; raised by 43,137 farmers), followed by cross-bred cattle (30,385 heads; raised by 8,621 farmers), and fattening cattle (830 heads; raised by 221 farmers; Lower Northeast Province Group Strategy Office 2, 2016).

The villages under study are medium-sized communities of about 150 households. The main livelihood activities in Nongyai are rice, dairy production, and fishing. Red onions are a key cash crop and are traditionally grown directly after the rice harvest in Yangnoi. Villagers in Yangnoi generate more income from the cultivation of red onions than rice, and this is a traditional practice in the village. Beef cattle are raised for additional income.

More recently, beef cattle production has become a very good source of income. Generally, households that keep cows in each village have about four to five beef cattle on average, mainly raising native breeds, followed by cross-bred beef cattle. Land and water resources are quite abundant in both villages. There are

only a few cattle traders in the village who transport cows to the cattle markets in each village. About 30% of the villagers in the Yangnoi keep beef cattle. They sell them to traders both inside and outside the village. In Nongyai village, about 50% of families keep beef cattle as they have large wetland areas for cattle to graze. Most raise beef cattle for the market. Some take their beef cattle to market, but many sell to the cattle traders who buy from the village. Households who raise cattle in each village are small-scale producers owning approximately four to five beef cattle on average, raising mainly native breeds. Only a few households raise cross-bred cattle, and there are a few cattle traders in each village that have the capacity to transport cattle to markets. In Yangnoi village, approximately 30% of households raise beef cattle for sale to traders both inside and outside the village.

Results

Shared Ownership, Decisions, and an Overlapping Gendered Division of Labor

Both husbands and wives usually decide to raise beef cattle together, as they are considered a very important family asset. In the past, they also used cattle manure for farming, whereas buffaloes were used to plough land. However, buffalo meat is now less popular, and mechanical tractors have replaced buffalo labor. Currently, raising beef cattle is generally not used for cropping purposes, as chemical fertilizers have replaced the need for manure over the past 20 years. Beef cattle have become a significant method of saving income for family needs, such as paying for the education of their children, paying debts, weddings, house warmings, funerals, food purchases, dairy expenses, building a house, buying assets such as motorbikes, and handing down wealth to future generations. One woman stated:

“My husband and I decided to buy one female beef cow four years ago. Now we have four. We sold one cow as we needed money for our son to attend school. We received 22,500 baht for the sale. The rest of the money was used to buy food or kept for other expenses for our family.”

Everyone in the family has a role in raising cattle based on their knowledge and responsibilities. Mostly,

husbands have more knowledge about which cattle to breed, and men tend to always make decisions about which breeds to raise. Historically men have learned about cattle husbandry from the livestock department and other men who hold knowledge about which breeds are in demand at the market. The most popular cross-breeds in the study was Brahman.

Feeding cattle is a task usually associated with women. They give the cattle rice straw or allow cattle to graze in the rice fields on their property. Children are given the responsibility of owning a calf usually give them a name and then care for them. As each family in the village only raises a few cows each, looking for grass for the cow to forage and feeding them is not too time-consuming. Mostly, husbands travel by motorbike in the morning to look for wild grasses along the roadside, high ground, and along river banks, forests, or wetlands. Sometimes wives will do the same when their husbands are unavailable. However, mostly they busy themselves cooking and preparing for their children to attend school in the morning. Many women never collect wild grass for cows.

During the day, wives feed cows with rice straw that has been stored on the property or collected by their husbands. Wives give water to cows during the day while their husbands are completing other work or watching TV. Husbands normally take care of sick cows. They consult a person called a “livestock villager,” who is always a man that is knowledgeable about cattle as a result of being trained by the district livestock officer. Husbands either know which medicine is appropriate to treat cows or purchase it based on the advice of an agricultural input seller in town. Wives also help their husbands take care of cows when they are sick, as advised by their husbands.

In many cases, knowledge about raising cattle was passed on from father to son rather than from mother to daughter. A male cattle trader is called *Nai Hoi*. Traditionally, *Nai Hoi* heritage was passed down the male line, and the role was distinctly masculine and inappropriate for women (Pupiupa, 2016). *Nai Hois* are often perceived as people endowed with masculine characteristics necessary for managing a role considered to be difficult, challenging, risky, requiring the capacity to be knowledgeable, bossy, controlling, and able to deal with troubling moral challenges. One cattle trader stated:

“*Nai Hoi* must be a male. This job is difficult. You have to deal with other men who are aggressive and tough. You have to lead the men accompanying you. A woman cannot do this. A woman should be home managing activities such as cooking and taking care of children.”

One woman, who was 78 years of age, recalled memories from 50 years ago of her father, a *Nai Hoi*, who transported cows for sale in Saraburi Province. She stated:

“My father was a *Nai Hoi*. I remember when I was 12 years old, my father and my grandfather took 20 beef cattle from home with eight other males. They were all my relatives. I think there were about 50 cows they took to the market outside Isan. They used oxcarts. He never let my mother join him. All the people going to sell cattle with my dad were aged in their mid-40s. My older brother went with my father. They were very strong. My father was away from home for more than a month. My mother and my grandmother took care of the house and raised me and my siblings. I really wanted to go with my father. But he told me that it was very dangerous for a girl like me or my mother. Only men were able to go. He came home with lots of money each time and other gifts like candy and clothes. He gave all the money to my mother after he arrived home. I remembered that our house was the biggest in the hamlet. My dad used the money from selling cows to build a larger house.”

This traditional era of the *Nai Hoi* ended more than 50 years ago when roads were improved and cattle markets were developed in the Isan region. At this time, the traditional *Nai Hoi* were transformed into modern *Nai Hoi*. This shift changed the associated gender relationships within cattle markets. Over the past 40 years, cattle markets have become established in almost every province in *Isan*. Unlike traditional *Nai Hoi*, any man with money, a truck, and knowledge about the cattle market can obtain this status. They can easily accumulate this knowledge from their friends or fathers.

Men usually become cattle traders as a result of knowledge passed down from their fathers. Women

on occasion are allowed to accompany their modern *Nai Hoi* husbands to cattle markets. As trading cattle has become a primary family livelihood activity in the region, villagers now invest larger amounts of money in the practice. Thus, over time, decisions about cattle trading have increasingly been made by both husbands and wives, particularly concerning how to finance these costs. As cattle trading has become a more lucrative and capital intensive activity, husbands have required the support of their wives' skill in petty trade to help them to negotiate with other cattle traders. Now wives have established a role of holding money while at the marketplace.

Money, Holding Money, and Negotiation

Creating income is another important factor in the decision to become a modern *Nai Hoi*. One man stated:

“I decided to be a trader as I thought I could make income every time I went to the market. I learned about this from my father and uncle, who often took me along when they traveled to sell cattle. I have my own truck that can transport a few cows to the market on each trip. My brother comes with me when we go to the market. We help each other to load and unload the cows and protect them from thieves. In some cases, some cattle traders try to cheat. Disputes over the price of cows is a potential risk.”

In Nongyai village, another cattle trader made a decision to become a cattle trader. He stated:

“I became a cattle trader as it allows me to access income almost every day. I don't want to waste time keeping cows. Cattle traders are just like food or clothing traders. They can get money every day they go to trade. I use money to buy cows and keep them for a few weeks. My wife and I give the cows special feed, as well as grass. I also buy special grass for the cows to help them gain weight. I am the one who travels to the market and to other villages to purchase cows before keeping them for one week or more at home. After that, I take cows to the market. I think trading cows enables us to earn good money.”

It was observed that women were present in only about 10% of the trucks that arrived at the cattle markets. However, when they did, their role was quite active. Women were observed offering prices to buyers, negotiating prices, and leading cows around to attract other buyers. Some women held purses. Women have equal skills and knowledge about how to negotiate prices. In some cases, women did a better job of negotiating the sale of cattle. One male cattle trader at the Si Yaek Kan Chang market, one of the largest cattle markets in Si Sa Ket Province, stated:

“I think my wife is better at negotiating the price of the cows than me. You know, buyers need a cheap cow, but we needed a good price. She knows how to approach customers. Her softness and sweetness while talking with customers help me to sell cow more easily.”

In the case of disputes arising while selling and buying cattle, women tend to let their husbands negotiate with male sellers or buyers as women believed that their husbands would be able to deter aggressive behavior from other traders more effectively. Other wives felt that selling cows was the job of their husbands as the task was too difficult for women to manage. One woman in Yangnoi stated:

“I have never gone to purchase a cow with my husband. Our son accompanies my husband. I am the one who feeds the cow, giving it grass, rice, straw, and water. We feed the cows my husband purchases for three weeks before my husband takes the cows to sell at the cattle markets.”

Owning Knowledge About Cattle and Trading

Historically, knowledge of cattle production has mostly been passed on from fathers to sons. Fathers tended to always take cattle to graze far from home and stayed there for the entire day. Sons often accompanied their fathers. While letting cows graze, both of them would collect wild foods such as fish, wild animals, and vegetables. Sons learned how to collect wild products from their fathers. One man from Nongyai stated:

“I learned how to raise cows and buffalos and take care of them from my father. He took me with him when he took our cattle to graze. My

mom and sisters were at home cooking and taking care of housework and weaving”.

However, other situations were described where women learned how to raise cows from their mother, as both of them would take them to graze in the forest together. One woman stated:

“My mother and I would go to communal grazing areas together. I watched my mother fetching cows and moving them to areas with better access to wild grass. My father would go to catch fish in the river nearby. My mom would go foraging. I played with my brother. My father took care of our cattle when my mother was cooking lunch.”

In modern times, women’s participation in cattle trading is more acceptable than in the past. Women have the opportunity to visit cattle markets with their husbands, as the market system has changed. Markets are closer and are easily accessible by vehicles. Cattle trading requires negotiating skills that women have been able to hone through pretty trading in the village. They have tended to engage more in selling other products such as rice and other cash crops. Some women are very skillful at bargaining. Hence, contemporary cattle trading is a more individualist economic activity and quite different from the way cattle were traded during the traditional *Nai Hoi* period. Nowadays, rural women have gained knowledge about selling beef cattle from their husbands. As one woman stated:

“I observed what my husband was doing when selling our cattle. Um, I think it is not too hard. I just helped him to sell it. I know the price of each cow, as my husband told me, and I knew the cost of cows too. I agreed on what price we could sell at. I know what price I can accept. Actually, it is not hard, as long as people need our cows. I think negotiation always needs to take place when we sell or buy things.”

Keeping Money Earned From Selling Cattle

The profit made from trading beef cattle is quite good and provides ample daily income. Traders are able to sell and buy cows each day as there are cattle markets in almost every province. Traders move from market to

market. On average, a trader can earn between 2,000 and 5,000 baht for each head of cattle they sell at the market. Traders usually bring three to four cows to the market each day. However, they also have costs such as gasoline or payment to the truck owner. In some cases, traders are also asked to accompany the truck owner to the market. Money earned from selling cattle is mostly kept by women, even when women do not visit the market with their husbands, as it occurs in most cases.

In other cases, the husband retains an amount equal to the cost of the cow to continue buying new cattle. He only gives his wife the profit made from sales to his wife. Wives usually know the market price from their husbands or other traders in the village and what price cows may be sold or bought for. One woman mentioned that she had never gone with her husband to buy and sell cows at the market. However, her husband always consulted with her about the price of cattle and how much profit would be made. One male trader in Nongyai village said that he gave all the money from sales to his wife as she was skilled at keeping, saving, and managing money.

Inequality Within: Access to Capital and Government Support

Access to capital for raising cows or becoming a cattle trader is complex. The costs of buying beef cattle can vary across different villages. Poor villagers, both women, and men, from both villages, find it hard to access money to invest in beef cattle. Hence, the economic status of different farmers tends to dictate whether they are able to participate in livestock production activities. Women find the process of accessing capital to invest in cattle trading even more complex. Generally, money to purchase cattle for sale or set up a cattle farm comes from one of three sources: family savings, borrowing, or government incentives.

One small-scale female farmer living in Nongyai village has expressed her difficulty raising cattle. Her family has not stopped for a few years as she did not have money to buy cows. A few years ago, she had two cows and sold them all. Money was used for daily life, children’s school, and health expenses. Most of the family income is made from rice and cassava growing and hiring labor. This income is not enough to buy a cow and its feed. She and her husband agreed not to keep cows. She stated:

“I cannot afford cows anymore. I have limited money to spend on the cow as it is very expensive. One cow is at least 10,000 THB. We decided not to raise it. Cow raising is costly. I do not participate in the state program to support farmers to keep cows too. I was not invited, and there are only some people who know about the project join the program.”

A small-scale male farmer living in Nongyai village has never had a chance to raise because he sold them all to a trader from the nearby village. He stated:

“My wife and I used to have five cows, but we sold them out because we needed money for our son’s wedding. After that, we did not have money to buy cows. Our income is low. How could we have more money to buy it. It is expensive. Not only me who has financial problems. There are many poor families who used to have cows, but they no longer raised cows due to a lack of money. The government’s financial support is very limited. It is not for us.”

Apart from finance for cow raising, limited land, water, and labor are other important factors affecting poor farmers from raising and owning cattle. One woman in Yangnoi village stated:

“My farmland is pretty small, only 3three rai. It is not good to keep a cow. You need more space than this. Hence, I have to have water for the cow. I do not have a pond or pump to get water on my land. So I have not kept a cow.”

Another small-scale female farmer stated:

“I don’t have children to help raise cows. All my children have left the village to work in Bangkok after they finished elementary school. I get money from them and use it for food and some necessary stuff like medicine, merit-making, electricity, and tap water. My husband is a hired labor in town. No one has time to raise a cow. Also, we do not have money to buy it too.”

However, about 30-50% of small-scale farmers in each research site still raise cattle. This indicates the intersectionality of gender and classes in regards to

cow raising. Small farmers who can raise cows often have capital available from their children working in Bangkok to invest in it, and they have labor such as children to take care of cows and transport them to the market.

The owner of the medium-scale beef cattle farm, interviewed in the Rasi Salai district also uses both modern and traditional systems to manage his farm. He raises native, cross-bred, and a few fattening cows. Napier grass, rice straw, and mineral additives are used to feed the cattle. He has allocated 50 rai on (1rai = 1600 m²) to grow Napier Pak Chong grass. He has about 500 cows, 20% of which are Brahman breeders. He keeps them in stalls. He mainly used family savings to invest in the farm. He has also collaborated with some other farmers to set up the “Dok Lam Duan Cattle Fattening Group,” comprising 25 members. This group was set up to access money from the government, which will only provide capital to projects via villager groups. It receives support from a livestock development project. The farmer was provided with more than 250,000 baht from this group to invest in his cattle farm.

His wife, daughter, and son-in-law help him to manage the farm business. His daughter and son-in-law are knowledgeable and have received a Bachelor’s Degree in Agriculture. He does not have to sell his cows at the cattle markets, as customers come to his farm to buy cattle. He also has a slaughterhouse, which is used to prepare fresh beef for sale to retail traders at the district and provincial markets. His wife and daughter are responsible for selling the beef, whereas he and his son-in-law manage the farm and trade cattle. He stated:

“I have raised cows since I was very young. My father taught me how to manage a cattle farm so the cows are healthy and reach a good weight. We have raised cattle for sale for as long as I can remember. It was our occupation. I also learned how to buy and sell cattle from my father. We used our family savings to invest in cattle trading and it has made us a lot of money. My wife takes care of all the money earned from the business.”

Women from wealthy families have no problem accessing capital to buy cattle to raise for sale. However, poor and middle-income women find this very difficult and represent the majority of villagers

in this study. It is challenging for these women to borrow money from village funding schemes or money lenders in the village. One poor woman from Chumnoi village, who does not raise beef cattle, said that her family did not have savings to invest. Without access to capital, it was impossible for her to raise cattle, with a minimum investment in purchasing one good native female beef breeder costing more than 15,000 baht. This money needs to be used for the food and education of her children. She stated:

“I cannot raise cows even though I know that I can sell them for a large profit. Even having money to buy food is hard for us.” Don’t talk to me about cows.”

A woman with a medium income stated that she did not have enough money to buy a native female beef breeder to raise calves. The cost of investment was high and needed to be spent on other priorities. However, 10 middle-income women in Chumnoi village had decided to raise native beef cattle, as they have perceived it to be an alternative livelihood strategy. The village head encouraged them to form a group so they could apply for support from the government.

The government launched a Breeding Cattle Bank project in 2018 to provide livelihood options instead of rice farming activities. This was intended to respond to the uncertainty associated with rice price fluctuations. To access this funding, villagers had to form an entrepreneur group to meet the requirements for funding. There were more than 20 group members. The government did not have a gender-specific project livestock livelihood project, and the project was designed without considering sex-disaggregated data. The women had to mobilize themselves to form an entrepreneur group and join the meeting with men. Only 12 women joined the group, accounting for less than 3% of women in the village. These were the only women who had the opportunity to benefit from the project. All 12 women were from middle-income families, with no poor women or men represented. The group purchased eight native female beef breeders, and by late 2019, more than eight group members had already received a calf. Members would be allocated a calf on a rotational basis until all members of the group received one.

The few large-scale farms in the Isan region mostly raised cross-bred cattle or breeds used for fattening. Largely, the money for investing in this type of farm is linked to government projects that borrow from the Bank of Agriculture and Agricultural Cooperatives (BAAC). A male, who is the owner of one large farm, stated that he had spent more than 10 million baht to set up his farm. This farm is located in the Benchalak district. He has more than 600 head of beef cattle, including 280 breeders, mainly Brahman. To access more finance for investing in his farm, he had to form a cattle entrepreneur group, as required by the government.

His group comprises 49 farmers, all men, who are able to access a subsidy from the Provincial Livestock Department. His farm is the biggest in the entrepreneur group and meets the requirements of the Provincial Livestock Department to be classified as a premium farm. He uses a range of local and modern technologies to manage his farm. This includes a water management system, animal waste treatment, farm stalls, and advanced feeds, including the use of rice straw, mixed with mineral additives, yeasts, and grain-based concentrates. He also has access to modern medicines and animal hygiene systems, as well as detailed financial management systems. He regularly hosts university students to complete a practicum at his farm. He manages the farm with his son, who studied Bachelor’s Degree in Livestock Management. He stated:

“I encouraged my son to study livestock and fishery management at university. This was so helpful in assisting me to manage my farm more effectively. My wife sells fresh beef meat. We have a slaughterhouse and sell both fresh and dried beef. My wife manages off-farm activities. My sons and I sell live cattle from our farm. Traders from the Central and Northern regions of Thailand come here to purchase our cows.

He sells cows to middlemen from the central and northern regions of Thailand. These traders sell cows to Vietnamese customers, and some beef cattle are sold to a slaughterhouse, which he also owns. His fresh and dried beef products are packed and sold at provincial and local markets.

Discussion

This paper has demonstrated that beef cattle ownership in the Isan region is complex and shared between women and men. Gender relations are dynamic and have adapted over time in response to a restructuring of the rural economy. Women have played significant roles both in livestock production and marketing. However, they have lacked the power to influence decisions about resource control and livestock ownership. This has created gender inequalities, especially for women from poorer families.

In contrast to *Waithanji et al. (2013)*, this study finds that decision-making power related to cattle markets is dynamic and flexible, depending on specific socioeconomic contexts, cultural aspects, and time. Women in rural Isan tend to have a rather egalitarian relationship with men (Akter et al., 2017; Curran & Meijer-Irons; 2014; Yoddumnern-Attig, 1992). They are independent agents (Mills, 1997). Thus, it is important for cattle-raising activities to occur on land owned by women. However, gender inequalities related to land and cattle ownership became entrenched during the traditional *Nai Hoi* period. At that time, membership in the traditional *Nai Hoi* culture was exclusive to men. Women were considered to be weak and fragile and lacking the capacity to control people and beef cattle when making the long journey to the Central region of Thailand. Knowledge of cattle production and trading was passed down exclusively from fathers to sons.

Changing gender relations related to livestock trading in the context of the rural economic restructure in the Isan region is significant. Rural livelihoods have become highly diversified through the commercialization of farming activities. Access to capital has become central to improving agricultural outcomes and livelihoods (Rambo, 2017a; Rigg et al., 2012). In the modern *Nai Hoi* era, shared ownership of beef cattle enables women to access the power to make decisions in consultation with their husbands regarding investments in cattle production and trading. Specifically, this includes decisions about the number of cattle raised, as well as how to produce and sell cattle, both at home and in the marketplace. Women tend to control the money earned from beef cattle production and trading. To be a modern *Nai Hoi* in this context involves both wives and husbands making

decisions together about beef-cattle assets as a means to generate income for the family. Despite this, currently, only 10% of women participate directly in selling cattle in the marketplace due to their domestic roles as housewives and care providers in their families. This reflects the findings of many other scholars (Paudel et al., 2009; Kinati & Mulema 2018; Njuki & Sanginga, 2013; Galiè et al., 2015), who argue that women's participation in lucrative cattle trading activities is not phenomenal and few women can engage in these opportunities.

Hence, the shared ownership of beef cattle has provided a mechanism for women to gain and exercise power to negotiate cattle production and trading activities, as well as access to capital, knowledge, and markets. Galiè et al. (2015) argued that women's livestock ownership improves gender equity and food security. However, ownership connotes diverse meanings that vary greatly depending on different socioeconomic, legal, and physical contexts. This argument is shown to be true in the context of rural Isan, which has a matrilineal tradition of land inheritance, as well as for other assets; a persistence of women-led roles in petty trading; and a culture of wives keeping and managing money. To access sufficient capital, both wives and husbands need to discuss sources of finance before they may begin to make purchases to participate in the cattle market, rather than making these decisions alone. It becomes a family decision. Women benefit from beef cattle trading as they keep and spend the money earned. This is consistent with the concept of Ribot and Peluso (2003, pp. 153--154), who defined access as "the ability to benefit from things—including material objects, persons, institutions, and symbols."

Gender norms have created gender inequality among women and men as a result of beef cattle production and trading, especially when considering poverty reduction programs designed by government officials. All poor and some middle-income women and men in the study found it challenging to access funding and services compared to wealthier families. Rich men, and to a lesser extent, women, have obtained access to capital more easily through government livestock development schemes. Nightingale (2011) argued that to improve gender inequality, understanding the specific contexts, intersectionality, and heterogeneities among women, with respect to class, age, gender, race, socioeconomic strata, and education is required by policymakers. This research demonstrates that

inadequate access to resources results from a lack of gender-disaggregated data in livestock policies. This persistent problem has created social and economic tensions over resource ownership facilitated by the government. Cattle ownership for poor men and women should be promoted differently than for wealthier men and women. In line with arguments by other scholars (Galiè et al., 2015; Njuki & Sanginga, 2013), this research shows that sex-disaggregated data helps understand gender inequality and supports women's empowerment. In short, it is essential for overcoming gender inequality in livestock production and trading.

Women are socially and culturally expected to do housework and take care of children due to gender norms. Only 10% of women observed in this study were able to travel to participate in cattle markets with their husbands. Women generally remain at home conducting domestic activities and raising smaller livestock such as poultry. However, because shared ownership of beef cattle has become more prevalent, wives are now consulted more about their husband's activities at the marketplace when trading animals. Njuki and Sanginga (2013) argued that even though livestock ownership improves gendered participation in decision-making, women's economic roles are still restricted by gender norms.

Conclusion

Gender relations in the Isan region have been found to be dynamic and complex. Women have enthusiastically engaged in livestock production and marketing. Despite this, gender norms about ownership are still preventing women from fully enjoying the benefits of the market economy, even though women have more access to productive resources and greater control over household income than men. The empowerment and active participation of women in the raising and sale of beef cattle is a prerequisite to achieving food security in the region. Women obtain the independence to choose alternative livelihoods when ownership of beef cattle is shared. This paper concludes that the government should use sex-disaggregated data to enable a detailed analysis of the hierarchical positions of men and women in the beef cattle sector.

Acknowledgments

Thanks to all the villagers, beef cattle traders, officers in Si Sa Ket Province who volunteered to participate in this study. This project was supported by Thailand Science Research and Innovation, grant no. RDG6210007. Thanks also to Alessandra Galie and Michael Victor from International Livestock Research Institute for useful comments.

Declaration of ownership:

This report is my original work.

Conflict of interest:

None.

Ethical clearance:

This study was approved by my institution.

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