# Livelihood and Poverty: The Case of Poor Women in the Rural Areas of Ca Mau Province, Vietnam

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Poverty in rural areas remains a major concern for developing countries. In order to improve the lives of poor rural people, it is important to identify the key factors behind their poverty. Over the past two decades, rural development policy and research have focused on livelihood perspectives that help to explain intertwining factors affecting the way rural residents make a living. Yet, critics point out that the livelihood perspective focuses heavily on the livelihoods of households at the micro level and does not recognize the impact of wider socioeconomic contexts in the lives of rural people. The livelihood literature also gives little attention to power relationships, particularly gender issues. This paper seeks to address these knowledge gaps by investigating the livelihoods of poor women in Ca Mau province, a coastal region of Vietnam. The study employed both quantitative and qualitative research methods with questionnaire surveys, in-depth interviews, observations, and focus group discussions. Research findings show that women in the area possess poor livelihood capitals, particularly in human capacity and financial capacity. Moreover, some rural development policies are still not accessible, and they do not provide sufficient inputs for farming. The findings presented here uncover the deep interlinkages between livelihood capitals and the impact of the wider socioeconomic contexts on household livelihood activities and outcomes.

**Keywords:** Livelihood; Poverty; Rural Development Policy; Vietnam; Women



## INTRODUCTION

Livelihood has become a key notion in rural development research and practice since the 1990s (Scoones, 2009). Although the concept is defined in a variety of ways, livelihood generally refers to "people's capacity to maintain a living" (Chambers & Conway, 1991). In 1992, the United Kingdom's Department for International Development (DFID) introduced the sustainable livelihood framework, which provides a multi-faceted definition of livelihood: "A livelihood comprises of the capabilities, assets (including both material and social resources) and activities required for a means of living" (Scoones, 1998). The five livelihood assets – human, physical, financial, natural, and social capital – together with a household's activities determine its standard of living (Ellis, 2000; Fanga et al., 2014). The livelihood perspective, which goes beyond material assets to recognize a set of interlinked factors that determine the standard of

living (Baumann, 2006), has shaped poverty reduction research and practice over the past two decades. Knowledge about livelihood capitals is considered crucial to understand the main causes of rural poverty (Lawal et al., 2011; Peter, 1999; Su & Shang, 2012), and international donors (Oxfam, Action Aid, and CARE) growingly support the livelihood perspective in poverty reduction programs (Batterbury, 2007; Khatiwada et al., 2017; Mdee, 2002; Okali, 2006).

Despite this enthusiasm, critics point out that the livelihood perspective focuses heavily on the micro level of households. Some authors try to quantify livelihood capitals and their relationships (Mdee, 2002), but ignore the broader socioeconomic contexts under which these livelihoods operate (Dorward et al., 2003). Furthermore, the livelihood literature does not provide enough insight into the linkages and trade-offs among livelihood capitals and the factors affecting these. The link between livelihood capitals and household strategies in livelihood activities is also under-researched (Fanga et al., 2014). In addition, little attention is given to power relations, especially gender issues (De Haan, 2012; Khatiwada et al., 2018). Though women's livelihoods vary from those of men in their control of income, resource use and production, and land rights (Flora, 2001; Radel, 2012), most frameworks used for poverty alleviation and community development are heavily based on capital assets, neglecting the "gendered nature of livelihoods" (Radel, 2012, p. 4).

A number of livelihood studies show women's lack of control over financial and natural resources (Fletschner & Kenney, 2014; Lovell et al., 2020). Women also have less access to knowledge required to develop their human and social capitals (Okali, 2006). Both previous and current research reveal that obstacles to women's livelihoods stem from the macro structural context and the bias of gender-based division of labor within the household. These obstacles have also been identified in studies on women's livelihood in Vietnam. Tuijnman et al. (2020) discover that the local authority's allocation of land to the head of the households (mainly men) for both commercial and agricultural purposes has given them the ability to choose how to use the land in production. Women thus earn little money from the house's land since it is recorded under the husband's name. Nguyen Nhat (1997) and Lovell et al. (2020) observe differential access to knowledge from extension trainings between men and women, as the majority of participants are male farmers and female-headed households do not have fair access to or show active participation in the trainings. Women in male-headed households, for example, are often refused enrollment in extension training courses because extension staff prefer to deal with household decision-makers, assuming that the information would be passed on to other household members (Ragasa, 2014). There are also different baseline conditions for women and girls, related to gender-based division of labor in the family, which bind women with family duties and childcare. For example, although migration is becoming an increasingly significant source of income for rural people (Nguyen & Locke, 2014), women's migration is often hampered by their reproductive roles, such as giving birth, raising children, and taking care of sick or frail family members (Thao, 2013). Educational disparities are perhaps the clearest and most significant cause of the unequal application of agricultural practices between men and women (Lovell et al., 2020). The gender disparity of labor impacts rural women in Vietnam in a variety of ways. As Ragasa (2014) shows, despite adequate preparation, women

often lack the time and energy needed to fully execute the activities derived from extension training.

This paper extends on these studies and investigates the livelihoods of poor women in the rural areas of Ca Mau province, Vietnam, with particular attention to the inter-linkages between livelihood capitals and the impact of the wider socioeconomic context on household livelihood activities and outcomes. Rural areas in Ca Mau province are poverty-stricken, and poor women have become the target of Vietnam's poverty reduction policies. Although poverty reduction research and practices in Vietnam have recently embraced the livelihood perspective, a number of livelihood studies in the Mekong Delta, the central highlands, and the northern uplands of Vietnam do not adequately address capital inter-linkages and the wider socioeconomic impact of the country's rural poverty (Bui & Schreinemachers, 2011; Ha et al., 2014; Hossain et al., 2006; Luttrell, 2001; Phuoc et al., 2001; Thulstrup, 2015). Using the method of the sociological survey via questionnaires and semi-structured interviews with key informants from local communities and relevant actors, this study seeks to clarify the linkages between the livelihood capitals of poor women in the rural areas of Ca Mau provinces and the impact of rural poverty as well as other factors on these livelihood capitals. Much in line with previous studies, we found the factor of gender playing a central role on women's livelihoods. By combining the micro level of households' livelihoods and the impacts of the broader socioeconomic context of rural poverty at a macro level, this study contributes to attempts to expand the livelihood perspective, which have been particularly useful for studying rural poverty at the local level (Thulstrup, 2015).

## ANALYTICAL FRAMEWORK AND RESEARCH METHOD

This paper focuses on the link between livelihood capitals, activities, and outcomes of poor women in rural areas, and the impact of the socioeconomic context including related, affecting factors. Its analytical framework builds on Ellis and Allison (2004) who describe livelihood as the combination of "what people do in order to make a living" (p. 10), the capitals they use to do so, the difficulties linked to these capitals, and the broader natural socioeconomic contexts in which they live. Ellis and Allison (2004) identify five livelihood capitals: human capital (skills, education, health), physical capital (houses, production equipment, household's appliances), financial capital (money, savings, loan access), natural capital (land, water, trees), and social capital (networks and associations). Socioeconomic contexts include policy and institutional settings but also less-clear circumstances, such as vulnerability. The livelihood framework is presented in Figure 1, while the analytical framework is summarized in Table 1.

### Study Locations

Ca Mau is a coastal province at the southern end of Vietnam with an area of 5,221.2 $km^2$. In 2018, its population was 1,229,600 people (Tong cuc Thong ke, 2018). The province has one city and eight districts (Cai Nuoc, Nam Can, Dam Doi, Ngoc Hien, Phu Tan, Thoi Binh, Tran Van Thoi, and U Minh). As of April 2019, Ca Mau had 19 ethnic

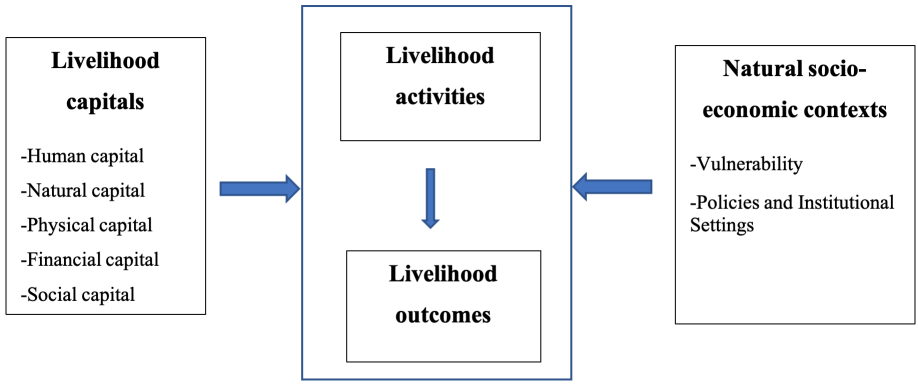


**Figure 1.** Basic livelihood framework. (adapted from Ellis & Allison, 2004).

| VARIABLES | SUB-VARIABLES | CRITERIA |
|---|---|---|
| Livelihood Capitals | Human capital | Skills, education level, health |
| | Physical Capital | Houses, production equipment, roads, electricity, internet |
| | Financial Capital | Money, savings, loan access |
| | Natural Capital | Land, water, trees, ... |
| | Social Capital | Networks and associations |
| Natural socioeconomic contexts | Policies Institutional Settings | • Provincial/district development master plan<br>• Rural development programs<br>• Poverty reduction programs |
| | Vulnerability | • Natural disasters (droughts, floods)<br>• Diseases |
| Livelihood activities | | Jobs to obtain income |
| Livelihood outcomes | | Incomes from livelihood activities |

**Table 1.** Analytical framework. (own compilation).

groups, including the Kinh, the dominant ethnic group in Vietnam (1,167,765 people), Khmer (29,845 people), Hoa (8,911 people), and other minority groups (Tay, Thai, Cham, and Muong) (Tong cuc Thong ke, 2018). Ca Mau is the largest shrimp production area in the Mekong Delta. The main economic activities of its rural areas are agriculture, forestry, and fisheries, all of which contribute 29.2% of the province's GDP (Le Anh, 2017). Poverty rates decreased from 12.14% in 2011 to 7.96% in 2017.

Located in the southeastern part of Ca Mau province, 19 kilometers from Ca Mau City, Dam Doi district has an area of 823,2 km$^2$ accounting for 15.5% of the province with a population of 187,000 people (Tong cuc Thong ke, 2018). The district administration includes one town and 15 communes. Dam Doi has favorable natural conditions and great potential for an offshore fishing economy with a coastline of about 25 km. With more than 70,000 ha of aquaculture, Dam Doi is also the key shrimp farming zone in Ca Mau. The whole district has 38,300 ha of improved, extensive shrimp farming, and

2,800 ha of intensive and super-intensive shrimp farming (Duy Anh, 2018). With the goal of striving to become a dynamic economic region, Dam Doi is actively inviting and attracting investment in the strong economic fields of the district (Duy Anh, 2018).

Located in the northwestern part of Ca Mau province, about 72 kilometers from Ca Mau City, U Minh district has an area of 774.14 $km^2$ accounting for 14.62% of the province's natural area and a population of 104,800 (Tong cuc Thong ke, 2018), including 3 ethnic groups: Kinh, Khmer, and Hoa. The district includes U Minh town and seven communes (Khanh An, Khanh Hoa, Khanh Hoi, Khanh Lam, Khanh Thuan, Khanh Tien, and Nguyen Phich). Agriculture and aquaculture play a key role in the district's economy. The district's farming area is over 37,500 ha, of which 21,000 ha are shrimp farming, which contributes significantly to increasing the district's general income. Extensive shrimp farming has been developed from more than 10,000 ha of land comprised of contaminated salty alum and low-yield rice lands. Traffic in U Minh consists mainly of a waterway system through canals, which makes the development of industrial production and other non-farm activities difficult and negatively impacts people's lives (Tan Tai, 2019).

## Data Collection and Analysis

Surveys, interviews, and group discussions are common methods for gathering data on livelihood capital. Surveys are used to obtain the demographic characteristics of the participants and their livelihood capital (Khatiwada et al., 2017). Some authors (Ghosh et al., 2012; Khatiwada et al., 2017; Mdee, 2002) have attempted to quantify these capitals using quantitative data collected from surveys and sophisticated statistical analysis. In addition, interviews are useful to gain more insights into participants' detailed experience in livelihood activities and into a number of other issues that surveys cannot go into in depth (Radel, 2012). Scholars also use group discussions to gain insight into the contexts under which livelihoods operate (Khatiwada et al., 2017).

This study combines both qualitative and quantitative methods, including document analysis, questionnaire surveys, semi-structured interviews, focus group discussions, and observations. For quantitative data collection, a survey of 362 women from poor households[1] was carried out in U Minh and Dam Doi in November 2019. In each district, two key villages were selected for the survey: Quach Pham and Tran Phan in Dam Doi, and Khanh Thuan and Khanh Tien in U Minh. The selection of 90 respondents from each village followed the method of stratified random sampling. The questionnaire contained 40 questions, including questions on the respondent's general data and attitude and perceptions on livelihoods. For qualitative data collection, 44 semi-structured interviews (11 interviews in each village) and 8 focus group discussions (4 discussions in each district) were conducted in the context of this study. Key informants included local authorities, villagers, the Association of Farmers, and the Association of Women. Other informants were selected by using the snowball sampling technique. The interviews focused on livelihood capitals and the issue of poverty.

1 In Vietnam, the government considers a rural household as poor when the monthly income per person is less than VND 700.000, equivalent to approximately USD 30 (Chinh phu Viet Nam, 2015).

For data analysis, the author used SPSS software to analyze the questionnaires and investigate the inter-linkages among the five livelihood capitals and the correlation between livelihood capitals and livelihood strategies. For qualitative analysis, the semi-structured interviews and focus group discussions were transcribed and thematically analyzed with topics relating to livelihoods. Since previous studies found obstacles stemming from both the macro context and women's baseline conditions, data analysis paid particular attention to whether and why women in these areas have faced the same or different obstacles in their access to and control of resources. Paying further attention to the factor of gender, both data collection and analysis centered not only on livelihood capitals, but also on policy and social background as well as gender division in the household, all of which affect women's access to various livelihood capitals.

## RESEARCH RESULTS

This section presents a detailed picture of the respondents and their livelihood activities and outcomes, as well as the factors affecting them, including livelihood capitals and the socioeconomic context. Interconnections among these three are discussed in the latter part of the article.

### Livelihood Activities

Questionnaire surveys showed that 34.5% of respondents made a living from off-farm activities earning low and unstable incomes, mainly as wage laborers. Other respondents earned incomes as workers/handicraftswomen and small traders at local markets or sold groceries/fish in villages. Of the respondents, 30.1% carried out on-farm activities: 21.8% worked on farming, such as cultivating rice, vegetables, and fruit trees, and raising domestic animals (pigs, cattle); 7.2% worked in shrimp farming; and 1.1% had contracts with the forest management board to plant and protect mangrove forests (Table 2).

| LIVELIHOOD ACTIVITIES | FREQUENCY | % |
|---|---|---|
| **1. On-farm activities** | **109** | **30.1** |
| • Crop farming + Domestic animal rearing | 79 | 21.8 |
| • Aquaculture | 26 | 7.2 |
| • Forestry contractors | 04 | 1.1 |
| **2. Off-farm activities** | **125** | **34.5** |
| • Workers, handcrafters | 05 | 1.4 |
| • Street vendors | 16 | 4.4 |
| • Wage labors | 104 | 28.7 |
| **3. Unemployment** | **128** | **35.4** |
| **TOTAL** | **362** | **100** |

**Table 2.** Livelihood activities. (author's compilation).

Of the respondents that were engaged in agriculture and fisheries, 54.1% of their products were purchased through intermediaries and 11.3% were used in households. Only 32% of respondents had stable jobs and more than a third of the sample (primarily young women) reported being unemployed. They explained that they did not have a regular job, spending much of their time at home as housewives caring for their children (Figure 2). They sometimes worked as wage labor for other farmers or went to the local market to sell some fruit from their garden or shrimps from their ponds, but the revenues from these jobs were sporadic and low. Respondents' households that did not hold regular jobs accounted for 63.5%.

Interviews with key informants revealed that there were not enough off-farm jobs in the area. One of the causes of that problem was the inconvenient transportation to the areas, which consisted mainly of small boats and low-quality roads. There were some industrial companies in other districts, but the women lacked the skills required for the work. They also hesitated because they had to care for small children.

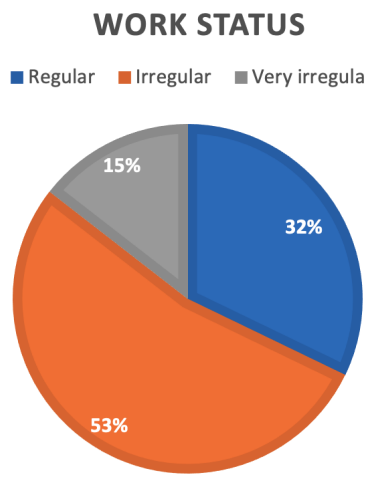


**Figure 2.** Respondents' work status. (author's compilation).

### Livelihood Outcomes

Of the livelihood activities listed in Table 2, the average income of the respondents was VND 2,379,500 (USD 104.8) per month. However, 61% of respondents had no regular income and the remaining 39% had monthly incomes ranging from less than VND 1 million (USD 44) to more than VND 30 million (USD 1,321). Only 2% of respondents earned more than VND 10 million (USD 440.4) per month. The respondents' average household income was VND 3,496,084 (USD 154) and 66.6% earned less than VND 3 million (USD 132) per month. On average, women contributed 38% of the household's income. Most of the respondents identified themselves as housewives, and the family income was dependent on their husbands' jobs. These men worked as wage labors for other farmers, but these jobs were not regular. Many respondents (75%) blamed their poverty on the lack of money to invest in aquaculture and means of production. Some (22.5%) recognized that their low education and low

skill levels were causes of their unemployment and thus their poverty. A large number (42%) reported that they lost money in agricultural and aquaculture production, and 47% mentioned the unfavorable climate and weather. When asked what they need to improve their livelihood and get out of poverty, most respondents expressed a need for capital in order to develop agriculture production: 46.4% needed money to invest in agriculture and 30% required more land. Only 17% needed plant seeds and animals to breed, and 18.8% answered that they were in need of off-farm jobs. Some would have liked to have been forestry contractors but did not get the chance. When asked about migration to other cities for work in factories, 46% acknowledged they had used this strategy and 54% responded that they needed jobs in the district, or in Ca Mau province, so that they were able to take care of their young children and senior members in the family.

## Factors Affecting Livelihood Activities and Outcomes

Factors affecting the respondents' livelihood activities and incomes pertained to natural socioeconomic contexts and livelihood capitals.

### *Natural Socioeconomic Contexts*

The long coastal zone and suitable climatic conditions give Ca Mau natural advantages for aquaculture (Le Anh, 2017). The province ranks first in the country in terms of land area of brackish water shrimp farming (Vietnam Association of Sea Food Exporter and Producers, 2019), the main economic activity of Ca Mau's rural regions. Over the past years, the province's shrimp farming area has always been stable at about 280,000 ha, accounting for more than one third of the country's shrimp farming area (VSEP, 2019).

Implementing the government's Resolution No. 09/2000 / NQ-CP of 15 June 2000 on economic restructuring and agricultural product consumption, Decision No. 1116 / QĐ-CTUB of 19 November 2001 by The Provincial People's Committee approved a plan to develop fisheries-agriculture-forestry production in Ca Mau province for the years 2001-2010 (Dang Kim Oanh, 2010). Following the decision, rice-growing land of the province (169,875 ha) was reduced to 145,000 ha (in 2010) for shrimp farming. The decision also allowed farmers to combine shrimp farming with rice farming and forest cultivation (Dang Kim Oanh, 2010). In implementing the decision, the provincial government created favorable conditions (such as extension services, irrigation) to deploy and replicate the shrimp-rice production model, especially in the north region of Ca Mau.

With the province's Decision No. 1116, the two districts, Dam Doi and U Minh, have considered the development of shrimp farming as their economic development strategy and a key solution to poverty alleviation in the districts. In the period 2014-2016, farmers mainly utilized traditional extensive shrimp farming, which completely relied on natural food sources. This model suffered low productivity and resulted in shrimp diseases, causing losses for farmers. This method of shrimp farming also heavily polluted the farming environment. In 2006, an improved extensive model was developed with the addition of seeds and feed. Since 2016, farmers have

been introduced to the improved extensive shrimp farming (Male farmer, 36 years old, personal communication, Nguyen Buu San, 2020), and U Minh used this method across more than 20,000 ha.

High profitability is the reason behind the development of shrimp farming in Dam Doi and Ca Mau districts. Interviews demonstrated that shrimp farming yields high profits, depending on the model. The traditional extensive farming model yields about 200-300 kg per ha in a year, providing an annual income of VND 20-25 million per ha. The improved extensive model showed a stark improvement with yields of 500-700 kg per ha each year and an annual income of VND 120-150 million per ha. The intensive model made a further improvement with a yield of 60-70 tons per ha in one year, giving farmers annual earnings of VND 500-800 million. However, most villagers invested in extensive or improved extensive farming due to the high investment for the intensive model.

Though profitable, shrimp farming requires high inputs. Farmers had to invest nearly VND 50 million for a 1000 $m^2$ pond for extensive farming and VND 70 million for a 1000 $m^2$ pond utilizing improved extensive farming (Tran Thanh Hai, 2019). Further investments included VND 150-200 million for breeding, food, and veterinary expenses (Loan Phuong, 2020). The intensive model requires extremely high input (around VND 700 million per ha) and few villagers can afford it. Although agricultural development policies provide loans for shrimp farming, banks hesitate to lend for proposals with intensive and super-intensive shrimp farming. In addition, bank loans do not provide enough capital for intensive and super-intensive shrimp farming, so farmers are unable to invest in this method (VSEP, 2019). Respondents said that shrimp farming was risky, with high failure rates due to disease and unstable selling prices. If everything went smoothly, they could escape poverty and even become well-off after two or three successful harvests. Otherwise, they would become bankrupt.

Shrimp cultivation has affected the environment negatively, which in turn caused a backlash on the shrimp farming industry. In the early years, most shrimp farming produced relatively high yields because the land was rich in nutrients, the water source was not polluted, and the breeds generated high prices and were of good quality. However, over the years, the productivity and output of farmed shrimp have decreased due to land degradation and shrimp diseases (Male farmer, 36 years old, personal communication, Nguyen Buu San, 2020). Furthermore, since farmers have to bring seawater into the fields to set up shrimp ponds, large-scale saline intrusion has increased in the two districts (Huynh Anh, 2019). The transfer of rice-growing land to shrimp farming worsened the situation. Because of this environmental issue, other farmers have experienced poor productivity in both crop cultivation and livestock raising (Van Mach & Tran Trương, 2019).

### *Human Capital*

The sample included 362 poor women between the ages of 16 and 60. The sample's average age was 41 years, and 80% were under 40 (Figure 3). Most of them live with a household (their own family or an extended family), whose size varied between 4-6 persons. The respondents' education level was low: 42.3% finished primary education,

32.3% attended lower secondary school, 4.1% went to high school, and 11.2% were illiterate (Figure 4). These numbers and interviews showed that, while the government has implemented national compulsory universal education programs for both girls and boys in the areas, the traditional perspectives of rural people in Vietnam that girls did not need to study and ought to get married as soon as possible (when they turn 18) still prevailed. Therefore, compared to their husbands, women's education was low. A young woman in Tran Phan village (Dam Doi district) confirmed this observation:

> My parents said, I only need to learn how to read and write. This is because girls will get married and their husbands will take care of them. The boys need to study because they will become the head of their own families later. (female respondent, 25 years old, personal communication)

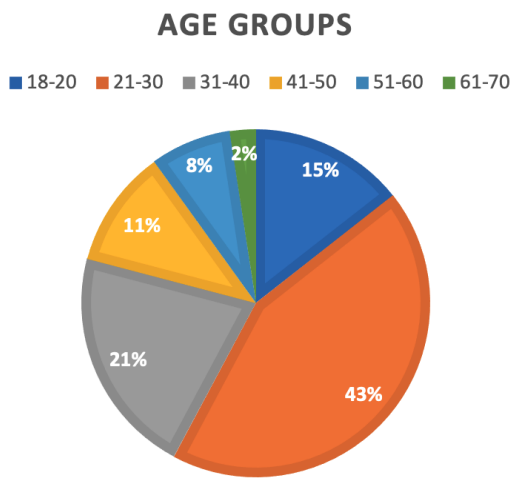


**Figure 3.** Respondents' ages. (author's compilation).

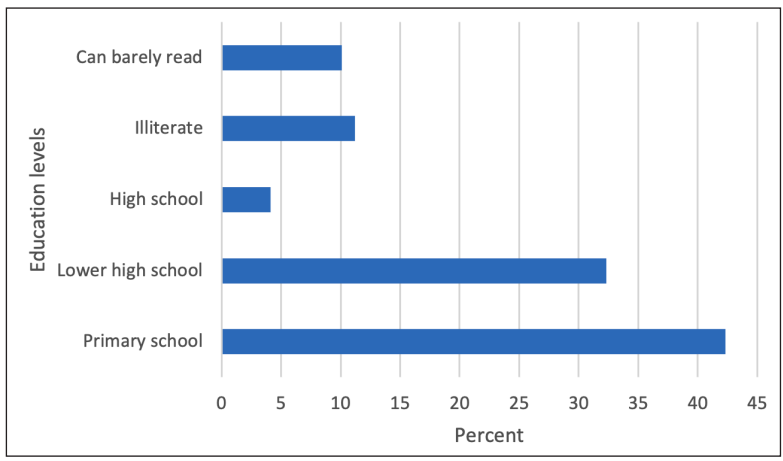


**Figure 4.** Respondents' education levels. (author's compilation).

Although shrimp farming is a household's activity for many farmers in the two districts, most of the poor farmers in these areas lacked the necessary skills in shrimp farming. Training on techniques for shrimp farming is mainly provided by local extension services. Farmers also get some guidance from experts on national television shows and local newspapers pages (41.7%). They also got information from relatives, friends (27.1%), and traders (12.7%).[2] Moreover, women also lacked skills in shrimp farming. As participant in the group discussion in Khanh Tien village (U Minh district) recalled:

> We worked as farmers because our parents were farming in the past. We only know how to sow the seed and how to take care of rice and vegetables in general. As for shrimp farming, we watched how our neighbors did and followed. We did not know how to treat the shrimp disease, we called the veterinarians, but they also could not solve the problem, so most shrimps in our ponds died and we lost money. (female respondent, 28 years old, personal communication)

The survey results showed that only 30.9% of the respondents said that they had access to knowledge about production, especially farming and shrimp farming (compared to 40.9% who said their husbands did have access to this knowledge). The other 69.1% had difficulties in acquiring knowledge because their husbands were considered heads of the households and would represent the households at training programs.

Regarding ethnicity, 93.7% of respondents were Kinh, the largest ethnic group in Vietnam, and 6.3% were Khmers. Of the respondents, 86% were married, 4% were single, and 10% were either widowed or divorced. The respondents were mostly healthy, although 34% reported mild symptoms of joint pain, fatigue, and ear, nose, and throat issues. In general, the respondents' ages and health status were favorable for joining the workforce. Despite this advantage, 86.7% of respondents were housewives without any specific skills for off-farm jobs. In particular, only 36.4% were applicable for being workers of industrial companies, which required candidates to have lower high school[3] certificates. There are no employment or human resource services to help respondents find well-paid, off-farm jobs at factories in Ca Mau or other provinces. They could only work as wage laborers, street vendors, or sellers in local markets – all of which delivered unstable incomes.

The surveys and interviews revealed three reasons why these women quit or did not go to work in factories. First, they lacked the requisite skills to work in these factories. Second, the factories were not located in the districts but in Ca Mau or in other provinces, and they were hesitant to relocate due to their precarious financial situations. Third, they had young children but the neighborhoods lacked kindergartens and the tuition fees of the ones near the factories were too high. Some even had to care for their aging parents/parents-in-law. As a result, they agreed with the family to remain at home.

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2 Only 1.1% of respondents said they got information from the internet and social media.

3 Lower high schools in Vietnam include classes from Grade 6 to Grade 9.

*Financial Capital*

The low capacities of the respondents, which led to unstable and low-income jobs, jeopardized the respondents' financial capital needed for their livelihoods. Nearly 80% of respondents reported having no savings because they could only make ends meet with unstable, off-farm jobs or because of the low productivity of agricultural crops and shrimp farming. One woman in Dam Doi confided in saying:

> Every day, my husband and I only tried to earn enough to buy rice and food for the 4 children. You know, there are not many jobs offers here, especially after the crop harvest. We work for the owners of shrimp farms in our village and also in other villages. (female respondent, 39 years old, personal communication).

Another woman living in U Minh complained:

> My husband works for the fishery boat and I am only at home taking care of the children. We do not earn enough to have a saving though we want to. (female respondent, 26 years old, personal communication).

Eleven percent of the surveyed women saved between VND 450,000 and 10,000,000, and only 1% had savings over VND 10,000,000.

A total of 54.4% of the women were able to obtain loans from local organizations such as the Veteran Association, the Women Association, the Poverty Reduction Fund, the Employment Fund, and the Policy Bank. More than one third of respondents (45.6%) received money from the Women Association and the Policy Bank (Table 3). The average loan amount was VND 10-30 million (USD 431.48-1.294.44; Figure 5), which was not enough to invest in shrimp farming, the lucrative livelihood of the districts. Besides, only 42.3% respondents said they could control and make decisions concerning the use of the loan. Others said their husbands, as the heads of the family, were the ones to take decisions. Married men can borrow money from the bank if they have a plan in production approved by the bank. They can also get a loan from a number of national/provincial rural development programs. In general, banks hesitate to lend to poor farmers who do not have some assets to deposit. Thus, poor farmers tend to get loans from rural development programs.

| SOURCES | FREQUENCY | % | AMOUNT (VND) |
|---|---|---|---|
| Poverty Reduction Fund | 20 | 5.5 | 1M-15M |
| Veteran Association | 2 | 0.6 | 10M-12M |
| Women Association | 71 | 19.6 | 1M-40M |
| The Policy Bank | 94 | 26.0 | 1M-50M |
| Employment Fund | 3 | 0.8 | 10M-30M |
| Other funds | 7 | 1.9 | 1M-80M |
| **Total** | **197** | **54.4** | |

**Table 3.** Respondents' access to loan. (author's compilation).

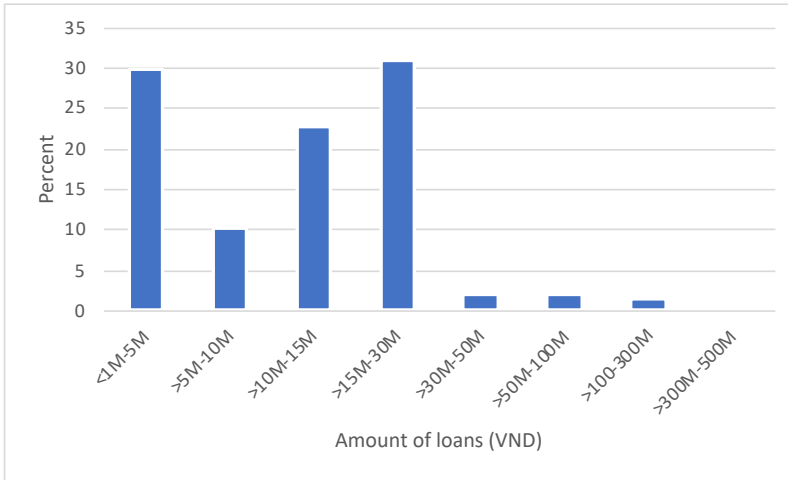


**Figure 5.** Amount of loans. (author's compilation).

### *Physical Capital*

Among the respondents, 4.4% had no home but leased a place to stay. Among the other households, 46.1% had temporary houses made of wood with corrugated iron or thatched roofs. This type of housing is common in both districts. According to construction regulations in Vietnam, 22.1% had housing that was ranked fourth.[4] For home appliances, 81% of the respondents had a TV in the home, providing them with information and entertainment, but only 4.4% had access to the internet. Like other Vietnamese households, 58.8% owned one motorbike for travel, and 16.6% households had small boats utilized for transportation, not for fisheries. It should be noted that these assets were considered the household's property. Although both husband and wife contributed to these properties, 50% of respondents said their husbands were the ones to control them. Some respondents said that, in the past, they had had some personal assets, such as gold jewelry given to them by their parents when they got married, but they had to sell them eventually in order to make ends meet.

Rural infrastructure was still unfavorable, with poor-quality rural roads. The main transportation mode was by boat. More importantly, 100% of respondents' households did not own any production equipment for farming, such as water pumps or plows. The lack of physical capital was responsible for the low productivity and high costs of agricultural crops and shrimp farming.

### *Natural Capital*

Nearly one-fifth of the sample (19%) owned no land. Some respondents (15.2%) owned a plot for growing rice (on average 4,506 $m^2$), and 44% of respondents had much larger plots for shrimp farming (an average of 74,883 $m^2$). Others had small

4 This is housing made of bricks and wood, with enclosed walls and partitions made of bricks, tile roofing, or fibrocement considered low-quality finishing materials and, thus, low living facilities.

plots of 300-600 $m^2$ for raising cattle (cows and oxen), poultry, vegetables, and fruit trees (Tables 4 & 5). A small percentage (4.4%) used land contracted with local forestry agencies for planting forest trees (on average 1-5 ha). Respondents with small rice plots said their products were primarily used within the household. The same held true for respondents with small plots of land for vegetables and fruit trees, though some of their produce was sold at the local market. Respondents with shrimp farms mostly sold their products to intermediate buyers.

Gender inequalities highly impacted the women's natural capital. Around 80% of cases involved respondents whose husbands were considered heads of the household. Only 5% of respondents were family heads because they were widowed or divorced. As a result, just 13.3% of respondents were able to access land and houses, and only 8.4% were involved in managing these resources. As a woman living in Dam Doi said:

> My husband keeps the documents of the land and house; he just gives me money for expenses. I do not know much about these properties because he is the head of the family. Every time we need to make a decision such as selling or buying something, he is the one who decides. (female respondent, 26 years old, personal communication).

| TYPES OF LAND | FREQUENCY | % |
|---|---|---|
| Shrimp farming | 159 | 43.9 |
| Rice | 55 | 15.2 |
| Poultry | 43 | 11.9 |
| Fruit trees | 18 | 5 |
| Vegetables | 16 | 4.4 |
| Cattles (cow and oxen) | 1 | 0.3 |
| **Total** | **292** | **80.7** |

**Table 4.** Types of land. (author's compilation).

| TYPES OF LAND | AVERAGE AREA ($m^2$) |
|---|---|
| Shrimp farming | 74,882.85 |
| Rice | 4,505.87 |
| Poultry | 398.04 |
| Fruit trees | 597.35 |
| Vegetables | 249.17 |
| Cattles | 0.0 |

**Table 5.** Area of land. (author's compilation).

### *Social Capital*

Although 67% of respondents joined local groups and associations (mainly the Commune Women's Union), 60% said they often seek help from their families and relatives in case of need. Only 27% acknowledged that they received some support from local governments and other organizations (women's organizations, communist farmers' organizations). These networks mainly act as intermediaries between

villagers and poverty reduction programs to provide low-interest loans for farming. In both districts, the government had implemented some rural development and poverty reduction programs, such as Program 135, providing socioeconomic development for ethnic minorities and mountainous communities; and Program 134, supporting productive land, residential land, housing, and domestic water for poor ethnic minority households. Interestingly, a high proportion of the respondents were generally unfamiliar with rural development programs (Table 6).

| | RESPONDENTS' AWARENESS | | |
|---|---|---|---|
| | Have not heard | Know | No interest |
| Program 135 | 63.8 | 28.9 | 2.8 |
| Program 134 | 84 | 14.4 | 1.6 |
| Program to invest and upgrade commune' clinics | 77.3 | 21 | 1.6 |
| Program to develop rural roads | 47.9 | 50.2 | 1.9 |
| Program on clean water and environmental sanitation | 63.5 | 35.9 | 0.6 |
| Program giving loans for jobs | 42.4 | 55.9 | 1.6 |
| Training programs for exporting labor | 21.6 | 75.4 | 3.0 |
| Credit programs | 28.7 | 68 | 3.3 |

**Table 6.** Respondents' awareness on rural programs in the two districts. (author's compilation).

Since most husbands of the families had to work in the areas of farming and wage labor, the majority of wives (more than 60%) attended village meetings and other community activities. Though representing their households in local meetings, the women still lacked knowledge of specific programs related to them. This is because these meetings addressed not only rural development programs, but also revolved on various other topics such as news concerning the socioeconomic situations of the districts, legislation, and other social issues. The women reported that they only paid attention to programs for which they were the beneficiaries. Furthermore, only programs' beneficiaries (mainly men as household heads) received special briefings on the programs' specifications and procedures. Women obtained information on agriculture and aquaculture products mainly from mass media. A majority of 40% acquired information from television and newspapers and 20% from friends and neighbors. Only 8% received information from local authorities. Poor social capital explains why female respondents lacked the ability to respond to and cope with vulnerabilities that occur in agriculture, such as shrimp disease and droughts.

## DISCUSSION

Research on livelihoods emphasizes the important role of all five livelihood capitals to livelihood activities and outcomes (Erenstein, 2011; Kibria et al., 2018; Oumer & de Neergaard, 2011; Scoones, 2009; Shah, 2005; Sharifi & Nooripoor, 2017). However, the importance and contribution of each capital varies and remains a matter of debate.

Sharifi and Nooripoor (2017), for example, ranked physical capital above human, natural, and social capitals in their contribution to rural livelihoods. Other authors (Sadik & Rahman, 2009; Shah, 2005) have also highlighted the important role physical capital plays in supporting livelihoods. Kibria et al. (2018), however, underlined the significant role that financial capital played in resource extraction, and stressed that human capital and social capital helped rural residents gain access to resources. Sadik and Rahman (2009) further point at the importance of social capital for livelihood activities and outcomes.

In line with Kibria et al. (2018), findings from the case studies in Dam Doi and U Minh districts highlight the significant role of human capital in shaping respondents' choices in livelihood activities. Due to low education levels and the lack of skills to perform non-farm jobs, the respondents, although young and healthy, still worked in agriculture and shrimp farming, despite the limited land they had for such activities. In this choice of livelihood activities, human and financial capitals are crucial for livelihood outcomes. Although shrimp farming is highly lucrative, shrimp yields are susceptible to diseases, which can lead to low productivity. Respondents' poor knowledge and skills in shrimp farming and their lack of savings and poor access to loans rendered them unable to fully invest in shrimp breeding, feed, and needed veterinary services. As a result, women cannot get out of poverty. Their lack of natural and physical capitals worsens the situation. Having only small plots of land for growing rice, vegetables, and fruit trees, they mainly use the products for their families and sell some on local markets. Production costs increase because they lack production equipment (plows, water pumps, etc.) and had to rent these tools for production. Small land plots and temporary housing also served as disadvantages for securing loans from local banks that require borrowers to offer guarantees in the form of properties. For the ones who obtained loans from poverty reduction programs, the amount of the loan was not sufficient for shrimp farming. Findings also indicated that the weak social capital did not help respondents gain access to agricultural extension and loan services geared toward shrimp farming.

While most studies focus on livelihood capitals as the main factors shaping farmers' livelihood strategies (Kristjanson et al., 2005), this case study shows mixed impacts, including that of the wider, natural socioeconomic context, on livelihood activities and outcomes in the two districts. On the one hand, the province's policy to develop shrimp framing has made it a popular livelihood activity in Dam Doi and U Minh as well as in other rural areas in Ca Mau. This policy has directed governmental support in infrastructure (irrigation) and extension services. It has also allowed private actors to invest in intensive shrimp farming. Overall, the policy has created opportunities for farmers to get involved in this lucrative activity. On the other hand, there were trade-offs between rural development policies and livelihood capitals in performing shrimp farming – the main livelihood activity of the two districts. As the analysis shows, the five livelihood capitals of the respondents are minimal, rendering them incapable of participating in the popular and profitable livelihood activity of shrimp farming. The fact that 20-40% of respondents did not hear about or have access to rural development and poverty reduction policies shows the small degree to which impoverished rural women take advantage of these programs. For respondents who did access the loan programs, the money received was insufficient to carry out

profitable livelihood activities like shrimp farming. Some respondents did use the loan for shrimp farming but suffered losses due to shrimp disease. Also, training programs on shrimp cultivation and saline intrusion were generally lacking.

The research findings confirm the vital role of the factor of gender based on two central gender issues concerning poor women in the rural areas of Ca Mau when pursuing their livelihoods, namely, one related to the broader institutional contexts and one related to the gender division of labor within the households. The traditional view on men's role as heads of the family was not only confirmed by villagers but also promoted by government policies in rural development. Villagers give priority to the education of boys over girls. Male heads of households are the primary beneficiaries of rural development policies, reducing women's opportunities to improve their human, financial, natural, and social capital. More importantly, the gender-division in the household places the burden of childcare and elderly care on the shoulders of women, which poses an additional obstacle to them in improving their assets and thus their livelihood. Although employment is perceived as the key to lifting these women out of poverty, rural development policies and poverty reduction programs in the province focus on availing loans for shrimp farming and thus fail to create employment, especially off-farm jobs for women. Rural policies in the two districts are created for two different goals (roads and clinics), and there is a strong lack in synthesis of different policies in the area. Their effects are, therefore, scattered and do not combine to create an effective force for rural poverty reduction. Poverty reduction programs also fail to improve human capital (or skills) and social capital (or a minimal access to poverty reduction support).

## CONCLUSIONS

Poverty reduction remains a core priority in Vietnam's rural development strategy. Studies on this subject pay great attention to livelihood approaches for identifying the causes of poverty, which are important so that policy makers can form poverty reduction solutions. This study explored the livelihoods of poor women in the coastal province of Ca Mau. Using questionnaire surveys and semi-structured interviews, the research findings revealed the essential and intertwined roles of human capital in influencing respondents' choice of livelihood activities: financial capital (money, savings, loans) in determining their livelihood outcomes in terms of limited human capital (educational levels, skills); physical capital (houses, means of production); and social capital (access to agricultural extension services and poverty alleviation loans).

The results highlighted the mixed impacts of livelihood capitals and the socio-economic context on rural livelihoods. In both districts, rural development policies followed different objectives and no integration was attempted to build up development capacity. Rural development policies have not yet been accessible to some villagers and have not provided enough input into shrimp farming as the main solution for poverty reduction. Therefore, there is a need to open up access to loans and training that are not gender-biased in order to increase human and financial capitals for shrimp farming. Poverty reduction programs also need to create employment, especially off-farm jobs for women. Two gender issues facing poor women in rural areas of Ca Mau include prevailing traditional views on men's role as heads of

the family and the responsibility to look after children and the elderly placed overwhelmingly upon women. Addressing these impacts and further including a gender perspective in policy and development programs is critical to improve women's livelihood in the rural areas of Ca Mau.

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