

Life Experiences of Rice Farmers in the Paddy Monoculture Area of Thoai Son District, An Giang Province, Vietnam

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ABSTRACT

Purpose: This study explores the life experiences of rice farmers in the paddy monoculture area of Thoai Son District, An Giang Province, Vietnam. It aims to understand how monoculture rice farming affects their daily lives, livelihoods, and mental well-being.

Research Method: Data were collected through in-depth interviews with 24 households using semi-structured questions covering various aspects of their past and present experiences in rice monoculture areas.

Findings and Values: The findings reveal that crop diversification is difficult due to cultural practices, infrastructure limitations, and access to markets. Farmers employ various livelihood strategies and social networks to maintain resilience and well-being. Vocational training programs were found to be misaligned with farmers' actual livelihood needs. The study highlights the influence of socio-economic and policy factors on farmers' lives and provides insights for sustainable agricultural development and farmer support programs.

Keywords: Life Experience, Livelihood strategies, Monoculture, Social networks, Policy Support.

INTRODUCTION

Rice plays a central role in most Asian countries, providing up to 75% of daily caloric intake (Arunrat & Sereenonchai 2022). As the staple food for a large population, rice is not only vital for food security but also constitutes a major export commodity in countries such as Thailand, Vietnam, India, Pakistan, and Cambodia (Thanh & Singh 2006; Javed & Ghafoor 2012, Kea 2020). Beyond its economic role, rice cultivation is deeply embedded in history and culture, shaping wet - rice civilizations and being strongly reflected in local cuisines and cultural practices (Chang 1987, Ray *et al.* 2016).

Previous research has often focused on technical production, climate change effects, or land and adaptation issues. While qualitative studies have provided insights into farmers' perspectives,

they mostly examine contexts of agricultural diversity rather than monoculture. Consequently, there is still a gap in understanding the lived experiences of rice farmers in monoculture areas, particularly how they navigate livelihood strategies, socio-economic risks, and well-being.

Zuma Netshiukhwi *et al.* (2013) demonstrated how farmers combined traditional knowledge with scientific approaches to climate change adaptation, highlighting strengths but also noting the lack of quantitative data to assess its effectiveness. Similarly, Häyrynen *et al.* (2022) employed qualitative methods to analyze farmers' perceptions, emphasizing the role of

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traditional knowledge but overlooking policy and economic constraints. Veisi *et al.* (2022) also used qualitative methods, applying Bourdieu's framework to compare farmers' knowledge with scientific expertise, particularly in organic agriculture. While their large and representative sample strengthened the study, it remained focused mainly on conceptual identification. In the rice sector, Okta & Saefullah (2025) examined local knowledge and climate change adaptation, though limited to farmers' perceptions rather than broader socio-economic conditions. Ibrahim & Yuningsih (2025) also focused on traditional knowledge, showing its decline across generations, but their study remained narrow in scope.

Swaans *et al.* (2008) explored how health issues, particularly HIV, hindered farmers' participation in training and empowerment activities. While the study was strong in highlighting the health dimension, it was highly context-specific. Polthanee *et al.* (2014) focused on rice farmers' short- and long-term climate adaptation strategies, but the analysis was limited to climate issues. Myo (2024) investigated factors influencing rice farmers' livelihoods, including supporting systems and seasonal profit differences, yet did not capture farmers' lived mental well-being. Vertudes *et al.* (2020) provided insights into how taxation policies affected rice farmers' livelihoods and market prices, though their study remained descriptive rather than analytical.

In addition to health, climate, and policy influences, technical, economic, and human capital aspects also play a crucial role in farmers' livelihoods. Ramanathan *et al.* (2020) evaluated livelihood diversification through technical models, showing improvements in income and productivity but largely neglecting social and psychological aspects. Nayak *et al.* (2019) used quantitative methods to estimate the economic value of rice ecosystems, emphasizing economic benefits but not farmers' lived experiences. Nasak *et al.* (2025) combined quantitative and qualitative methods to assess the role of human capital in organic farming adoption, producing reliable findings but focusing narrowly on human capital without

examining broader economic or policy factors. Ainembabazi & Mugisha (2014) highlighted the role of technology and human capital in farming decisions, again reflecting a technical and economic orientation rather than farmers' subjective experiences. Taken together, while previous studies have provided valuable insights into various dimensions of rice farming, a comprehensive understanding of farmers' holistic lived experiences—integrating technical, economic, social, and psychological aspects—remains limited.

Overall, existing studies have provided valuable insights into technical, economic, environmental, and social aspects of farming. However, they often remain fragmented, focusing on single dimensions—technical efficiency, economic valuation, traditional knowledge, or climate adaptation. Very few have explored the holistic lived experiences of rice farmers in monoculture areas, particularly how they cope with socio-economic volatility, climate risks, and the psychological and social dimensions of their livelihoods. This study aims to fill that gap. Building on these insights, this study aims to systematically explore the lived experiences, livelihood strategies, and socio-economic factors affecting rice farmers in monoculture area of Thoai Son District, An Giang Province, Vietnam.

MATERIALS AND METHODS

The area of study

The study was conducted in Vong The commune, Thoai Son District, an area with extensive paddy monoculture. Farmers mainly cultivate paddy using uniform seed types, supported by an enterprise providing seeds, technical guidance, and purchasing services. The area is also targeted by local poverty alleviation programs (Smith *et al.* 2007).

In Vong The commune, 7,000 hectares of land are devoted to paddy cultivation out of a total of 114,684 hectares in Thoai Son District. A large-scale field model covers 209 hectares and supports three rice crops per year. Climate change has caused occasional flooding, affecting

productivity (An Giang Statistical Office 2019). The average farm size is 1–2 hectares, and the commune has a population of 4,624 (An Giang Statistical Office 2019).

Participants

Twenty-four participants from four villages were interviewed using semi-structured, private interviews. Participants' confidentiality and rights were fully protected, and interviews were conducted sensitively, allowing them to share their experiences without interruption. The interviewees answered demographic questions prior to the interviews. They were also informed of the study and provided consent forms. Transcripts of the interviews were stored on a private and protected computer.

Data collection and analysis

This study employed a qualitative research design to describe and explore rice farmers' experiences (Lopez & Whitehead 2013). The sampling framework included rice farmers in Vong The commune of Thoai Son District who had at least five years of continuous farming experience. An initial screening was conducted with 336 farmers; however, responses were largely repetitive. Therefore, 24 farmers were purposively selected from four villages to represent diversity in gender, age, and farm size.

The final sample size was based on data saturation, reached after approximately 20 interviews when no new themes emerged. The 24 participants were interviewed about various aspects of their experiences in rice monoculture rural areas, including past and present changes. Interviews lasted approximately 60 minutes. Responses were handwritten, as participants declined audio recording despite assurances of confidentiality.

Interviews were transcribed and translated from Vietnamese to English. Data were analyzed using inductive thematic analysis, with codes and themes generated from participants' responses. The material was manually coded and repeatedly reviewed to ensure accuracy. Findings are presented in four thematic areas, illustrated with representative quotations.

RESULTS AND DISCUSSION

Interviewees' characteristics

Almost all participants living in the rice monoculture area described their life experiences across various aspects. Most lived in their own houses along canal banks. A few had migrated to other provinces but later returned to their homeland. Rice cultivation is the principal economic activity in this area.

Reflection on rice farmers' experiences

Most of the participants said that there has been a job decline in rice agricultural areas. It's inappropriate for them to be asked about their jobs. For example, to find a job in this commune, it is, at the present, a difficult problem even if the job is a heavy one that can be paid the following day. However "jobs are getting reduced and reduced by replacing agricultural machinery" (Man rice farmer, 37).

When limited productivity of rice was supported by farm machinery, fertilizers, and pesticides that created optimized agricultural land use (Paman *et al.* 2019) and consequently diminished a number of agricultural laborers who can engage in off-farm jobs to enhance their income. However, hiring laborers without land is an exception to agricultural work. Besides that, people own less agricultural land and they depend on farm machinery services for the same cost of the increasing input. Some of the participants are hired by small-scale rice farmers who have a clear understanding of job decline in rice cultivation areas, which needed some material input for their production.

Previously, the rice farmers had items to replace manpower and animals in rice production "I have 10 hectares of rice land, inherited from my ancestor. In general, low incomes, harvester machines, chemical fertilizers, pesticide, last harvests. He has to work for other people for daily money and now he works around here, there are jobs, they call him spraying pesticide, making field bunds. A day can bring him about 150.000 vnd. There is no work break" (Man rice farmer, 29).

Table 1. Socio-demographic characteristics of participants.

Variables	Categories	Frequency
Age group	27 to 39	16
	40 to 60	8
Employment status	Employment	23
	Unemployment	1
Marital status	Married	22
	Single	2
Participant's education level	Illiterate	2
	Primary	15
	Intermediate and junior high school	4
	Senior high school	3
Family size	Small (1–4)	13
	Medium (5–7)	10
	Large (> 8)	1

Source: Field survey, 2017–2018

Income from rice plays an important role in the income of rice farmers who have a lot of land tenure and capital. In contrast, rice farmers have small-scale land tenure, and their income from rice has only supported a part of their family's living. Most of their rice income is extremely unstable. "How to control the price of chemical fertilizer, increasing pesticide price while rice price falls, that is not a profit" (woman rice farmer woman, 40).

Some rice farmers have large rice-growing land to their own harvester machines which not only serve their rice fields but also serve other households. However, they are competing with other rice farmers "...now people give up a lot of rice crops, buying a harvester machine should have little work..." (Man rice farmer, 30).

Most of the interviewees who are middle-aged have some severe problems with their health. They have to assure their health as well as fitness for work. Health insurance is just to support their medicine and medical examination when they become ill. Saving is typical to maintain rice farmers' livelihoods and sideline their adding

income resources as running grocery shops. "I'm getting older, my health has become worse, I am working day by day." (Woman Rice farmer, 46). "Who calls us to work? He works for one day; after that he takes a day off again. She has also been ill, both spouses can't do things. Here is nothing to work" (Man Rice farmer, 44)

Most rice farmers' progeny have habitually chosen to migrate to other cities and provinces, few rice farmers whose progeny are settled here. Nonetheless, few rice farmers whose progeny have come back to their fatherland because they have a low education level, unskilled vocation, and special responsibility with their parents; after that they become rice farmers or hired laborers in the rice field. "Before he was a worker in Binh Duong province, in his hometown he is now working the same job as his father, so he has to come back here" (Man rice farmer, 29).

The participants have a positive point of view for their future in various ways, with rice farmers who have hope for a better future and health. "This life would not rather be the same like the life before" (woman rice farmer, 32). However,

rice farmers with bad health put hope in their progeny. "...I want my progeny to have a stable vocation." (Man rice farmer, 37). These findings are consistent with Paman *et al.* (2019), who emphasized that farm mechanization improves productivity but simultaneously reduces rural employment opportunities.

From Marshall's (1890) supply-demand perspective, farmers' accounts of rising input costs (fertilizers, pesticides) while rice prices fall reflect the structural imbalance in the rice market, which generates unstable income. Moreover, Swaans *et al.* (2008) showed that health issues significantly limit farmers' capacity to sustain livelihoods, supporting our observations that poor health reduces work opportunities and reinforces intergenerational dependence.

Livelihood strategies

The participants in this study described the livelihood strategies of rice farmers' experiences in various ways. Rice farmers who are small-scale rice farmers have to combine the income resources of their family members. For example, a father grows rice and another member works off-farm in other cities and provinces. "Besides the major income from agriculture, we have to live on the income of three children in Binh Duong province. They have sent their monthly salary for the family, so my family has also been living in an economical way" (Woman rice farmer, 46).

Some rice farmers have a difficult situation because they have to take care of their children and older people. They work for other households around the village and in another village, they receive handicraft goods to work. "I have few hectares of rice growing land, besides I work on fish bubbles as an additional income..." (Woman rice farmer, 29). Some rice farmers can't leave their hometown because they themselves can only do farming jobs. "His arms and legs are born to work in rice fields, the ones are hired to do farming" (Man rice farmer, 29).

Some rice farmers have large-scale land tenure, brought for another hiring rice farmer. That

brings stable income and low risk for them. One rice farmer said, "My family has 120 hectares which have been hired and two more hectares of coconut. That has brought my annual income of VND 100 million" (Man rice farmer, 28).

Some studies show that profits from crop diversity enhanced farmers' income and utilized optimal soil resources (Ellis 1999, Anang & Yeboah 2019). However, it is clear to see that growing paddy rice has attached to them, it goes through generations in wet - rice culture.

Moreover, the informants in our study said that transferring rice to another crop is difficult for them as they only have knowledge about paddy, but not others. On the other hand, it depends on their capital, technology for new crop types, and consumption markets. Some rice farmers have capital and large-scale rice farms, they transferred apart from rice land to grow other plants; however, this is only an experiment.

"Besides rice crops,... I still have grown a dragon fruit crop when it is transferred to bring a better effect. However, it is the growing experiment of the first two crops that the effects of the planted process need to be considered" (Man Rice farmer, 60). Transferring from a rice crop to another crop can't be a simple issue as the infrastructure is only suitable for rice crops.

Some participants who are in their late middle age have health problems which bring them difficulty to manage their daily life. Therefore, they work for a day, and take a day off, or their children have to leave school soon to help their families. "Sometimes, nobody is hiring, ... eating in an austere way, ... cannot afford school fees for two children, one of them is going to leave school to help his/her sister" (Woman rice farmer, 30).

These strategies resonate with Ellis (1999), Anang & Yeboah (2019), who demonstrated that livelihood diversification enhances resilience by spreading risk. However, in monoculture rice regions, such diversification remains limited due to farmers' lack of technical knowledge and restricted markets, echoing the concerns raised

by Okta & Saefullah (2025) regarding climate adaptation. Myo (2024) also highlighted the role of seasonal differences and supporting systems, which explains the heavy reliance on migration and remittances observed in this study.

Ineffectiveness of short-term vocational training courses

Short-term vocational training courses in the locality for farmers have solved their job matter, which has not been a concern for rice farmers. “Previous training courses on cow raising were conducted, but not effective because the price fell, and they required large capital” (Woman rice farmer, 46). At present, rice farmers who are especially small-scale rice farmers are concerned about working for their income more than for their vocational learning. “So, which job requires a vocational training accomplishment? One course on eel-breeding was done, but it was costly and brought no benefit. Therefore, it was transferred from eel-breeding to fish bubble making” (Woman rice farmer, 29).

Some rice farmers fixed tractors, harvesters, sprayers, or motorbikes for themselves because they provided agricultural services or had good places where they could open motorbike repair shops. “Her husband fixed tractors before, he fixed tractors by himself while he got no vocational training” (Woman rice farmer, 32).

Some rice farmers who used to work in factories in other cities and provinces had experience of vocational training courses in factories. However, their vocational knowledge can’t be applied to work on rice farms. “The company provided training for about three months; after that she could work officially” (Woman rice farmer, 32). These results suggest that short-term vocational training is often misaligned with farmers’ real livelihood needs. Similar concerns were raised by Vertudes *et al.* (2020), who noted that policies affecting farmers are often descriptive rather than practical. This aligns with Britain & Beveridge’s (1942) social welfare framework, which underlines the importance of comprehensive social protection rather than fragmented training schemes.

Social networks

Social networks also play an important role to rice farmers’ daily lives as well as their livelihood resources. In general, rice farmers live in a rural community, attached by kinship and kindness. “Both of my sisters work for other people who have a sense of mercy calling jobs” (Woman rice farmer, 45).

To improve the income of rice households, it is necessary to have the contribution of other family members. “My spouse has a major income from rice farming and catching fish. My daughter is working in Sai gon city, she has sent a bit of her money to us. In my family, we still need to financially support our grandparents and children” (Man rice farmer, 45).

At present, some rice farmers have bought or had their agricultural land hired after they themselves became hired laborers on rice farms years ago. “His income relies on money from hiring land and day by day he sprays pesticides and follows the harvester which is unstable” (Man rice farmer, 28).

Most participants spent their leisure time with their family taking care of children, and grandparents. They also have to take care of their grandchildren because the grandchildren’s parents moved to other cities and provinces. “Only when they gave birth to their children, they returned to their hometown” (Woman rice farmer, 46). “In the city, they spent money on their children’s study at kindergarten as their accommodation is not spacious enough for the children” (Woman rice farmer, 44). Social networks emerged as a critical livelihood resource, consistent with Wasserman & Faust’s (1994) social network theory, which emphasizes the role of interpersonal ties in sustaining resilience. The findings also align with Ibrahim & Yuningsih (2025), who observed that as traditional knowledge erodes, farmers increasingly rely on family and community support to cope with uncertainties.

Overall, the study illustrates that farmers’ livelihoods in rice monoculture regions are

shaped by intersecting forces of market fluctuations, health constraints, migration, and social relations. This study extends previous literature that primarily focused on technical or economic aspects (Nayak *et al.* 2019, Ramanathan *et al.* 2020) by centering on farmers' lived experiences. Guided by Marshall's (1890) supply-demand theory, Britain & Beveridge's (1942) welfare framework, and Wasserman and Faust's (1994) social network theory, our interpretation emphasizes that sustainable agricultural development requires not only technical and market-oriented solutions but also stronger welfare policies and support for social capital within rural communities.

CONCLUSIONS

This study is a descriptive and exploratory study of rice farmers' experiences in their daily life. The samples of participants are rice farmers who have maintained their livelihoods through stories about farming. They have different strategies in their lives with a positive outlook. Most of the participants have experienced growing paddy for a long time since their adolescence. The rice agriculture sector experienced its many ups and downs and like the life of rice farmers. Their income has been unstable as they have little rice land and lived on rice farming. Most of the vocational training courses in their neighborhood did not bring efficiency for the participants. In the society of rice farmers, social networks play a very important role as they can affect rice farmers' mental well-being.

To enrich their lives, participants have various ways for adapt based on various contexts. Most of the informants' minds have thought of

converting paddy to another crop. However, it is difficult for rice farmers because they have to rely on capital, health, experience in marketing, food security policy, technology for new crops, and the infrastructure of their local area which has been attached to the paddy culture through generations. Some recommendations are given as follows:

Firstly, it is important to design specific policies to support rice farmers in crop conversion. These should include (1) financial and technical support policies such as preferential credit schemes and financial assistance adjusted according to market price fluctuations should be implemented. (2) Extension policies should not only rely on scientists but also promote the experience and farming techniques of leading farmers, whose successful models can be replicated. (3) Network and communication policies are needed to establish programs that connect farmers with each other for mutual learning and exchange. (4) Evaluation and scaling-up policies should be adopted to identify and expand the best practice models of successful farmers.

Secondly, policies should also focus on maintaining traditional cultural values in rural communities, as these contribute to farmers' mental health and social cohesion.

Finally, special financial support should be facilitated for rice farmers who returned from other provinces or cities due to health problems, as they need assistance to reintegrate into farming activities and can also contribute to stronger community integration.

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