

SINO-THAI EXPLORATIONS

# AGRARIAN TRANSITIONS

IN ETHNIC COMMUNITIES OF NORTHERN THAILAND







## **Sino-Thai Explorations: Agrarian Transitions in Ethnic Communities of Northern Thailand**

Yunnan University and Chiang Mai University  
Sino-Thai Summer School 2025

**Executive Editors:** Chayan Vaddhanaphuti, He Ming  
**Project Coordinators:** Long Xiaoyan, Wang Yueping, Zhu Min,  
Kanchana Kulpisithicharoen  
**Managing Editors:** Charlotte Trenk-Hinterberger, Garrett Kostin

This publication collects research from social science students at Yunnan University and Chiang Mai University on different aspects of agrarian transition in highland ethnic communities of northern Thailand. The research articles compiled in this volume are the product of a collaborative summer school hosted by Chiang Mai University in August 2025 in which 15 graduate and undergraduate students from Yunnan University were given the opportunity to conduct short-term fieldwork together with students from Chiang Mai University under the guidance of local academic mentors. The work produced is a series of enlightening case studies focused on the potentials and challenges facing ethnic communities throughout northern Thailand as they both negotiate and activate transformations to their traditional agricultural livelihoods. Most importantly, the book shows the potential for critical engagement in Southeast Asia from multinational anthropologists-in-training, and should be read within that context.



**SINO-THAI EXPLORATIONS**

**AGRARIAN  
TRANSITIONS**  
**IN ETHNIC COMMUNITIES OF NORTHERN THAILAND**

National Centre for Borderlands Ethnic Studies  
in Southwest China & School of Ethnology and Sociology,  
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Regional Center for Social Science and Sustainable Development,  
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Chiang Mai University, Thailand



# Sino-Thai Explorations: Agrarian Transitions in Ethnic Communities of Northern Thailand

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# FOREWORD

*Professor He Ming*

The fourth Sino-Thai Summer School hosted by the Regional Center for Social Science and Sustainable Development (RCSD) at Chiang Mai University has successfully concluded, and Yunnan University once again recognizes and is impressed by the positive impact it has had on our students. We are pleased to share the fruits of our students' collective academic labor in this fourth volume of the Sino-Thai Explorations series.

The Sino-Thai Summer School program is a primary component of the long-term collaboration between RCSD, Faculty of Social Sciences, Chiang Mai University, Thailand, and the National Centre for Borderlands Ethnic Studies in Southwest China (NaCBES) and the School of Ethnology and Sociology at Yunnan University, China. This program is a platform for our young learners to refine their skills and try their hand at practical fieldwork, this year exploring the theme “Agrarian Transitions in Ethnic Communities of Northern Thailand.” With shared similarities of ethnoscape and historical connections with Yunnan—but also wide differences in social, cultural, and economic context—the ethnic communities of northern Thailand offer our ethnology students an occasionally familiar but also thought-provoking field for research and interpersonal engagement.

For more than a decade, our universities—Chiang Mai and Yunnan—have worked closely to foster research networks on cross-border issues and have co-organized numerous seminars and scholarly exchanges. Our professors and students appreciate the opportunity to explore northern Thailand together with the scholars of RCSD's network. Faculty and mentors provide students invaluable guidance and support in developing their research papers, for many

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their first opportunities to gain experience conducting field research and writing in academic English.

We are grateful to Dr. Chayan Vaddhanaphuti and RCSD for hosting us and facilitating the publication of our students' research papers—an invaluable experience for young scholars to engage with international partners and see their work made tangible. We hope to continue and deepen our future collaboration, fostering exchange, understanding, and academic excellence.

*Professor He Ming*, Executive Editor

Dean, School of Ethnology and Sociology, Yunnan University

Director, National Centre for Borderlands Ethnic Studies

in Southwest China, Yunnan University

# PREFACE

*Dr. Chayan Vaddhanaphuti*

This volume presents eight insightful research papers co-authored by students from the School of Ethnology and Sociology at Yunnan University and the Faculty of Social Sciences at Chiang Mai University who participated in the 2025 Sino-Thai Summer School at Chiang Mai University, Thailand.

This summer school was the fourth cohort of a growing and deepening collaboration between the National Centre for Borderlands Ethnic Studies in Southwest China (NaCBES) and the School of Ethnology and Sociology at Yunnan University with Chiang Mai University's Regional Center for Social Science and Sustainable Development (RCSD). Importantly, this year's summer school was the second time that multinational undergraduate and graduate students of Chiang Mai University have had the opportunity to not only accompany their colleagues from Yunnan University for lectures and fieldwork, but also travel to Kunming to join in the final writing workshop at the School of Ethnology at Yunnan University.

Under the theme of "Agrarian Transitions in Ethnic Communities of Northern Thailand," this year's summer school focused on exploring how changes in northern Thailand in land and market access, methods of agricultural production, migration, education, technology, state policy, and tourism have affected the lives and livelihoods of ethnic people in the region. During the three-week program, students from Yunnan and Chiang Mai universities attended lectures on the program's major themes and embarked on field trips to four highland communities accompanied by faculty members, interpreters, and academic mentors. These trips offered rich opportunities to directly engage local ethnic communities and gain insight into how their daily

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lives have been affected as multiple transformations of migration, a changing agricultural economy, legal status, citizenship, infrastructure, and land access have wrought changes in culture and community, brought about by connection to broader Thai society and our increasingly globalized world.

In Mae Ngud Village, Zhou Mao and Ainthira Mongkam investigated the local Karen peoples' livelihood struggles resulting from market changes and environmental challenges. Importantly, they also learned about the villagers' strategies of adaptation, specifically their efforts at crop and livelihood diversification. Zhou Yibing and Ma Shuyi examined the village's land use changes resulting from the environmental impact of the construction of the Bhumibol Dam, as well as shifting livelihood strategies informed by aspects of the community's traditional Karen culture.

The second team conducted research in the village of Mae Tha, where He Jinhua and E Jilong explored the role and effectiveness of self-organization during the community's agrarian transition centered around cultivation of organic produce. The authors conclude that the community's trajectory may provide a helpful roadmap for similar communities seeking to make their agricultural practices more sustainable for future generations. Zhou Wenxuan, He Lingxin, and Kanokon Kongkaew focused on youth mobility and organic farming in Mae Tha, paying particular attention to the potential of the village's nascent tourism industry to make returning home an attractive option for savvy young villagers who have relocated to urban centers in pursuit of further education and non-agricultural livelihood opportunities.

Researchers in the third team visited Doi Chang, a burgeoning multi-ethnic community in mountainous Chiang Rai Province deeply involved in the coffee and tourism industries. Liu Ching, Lin Long, and Li Chunmei conducted novel research into the livelihood strategies of the village's small Yunnanese Chinese community, a minority with strong historical ties to the presence of the Kuomintang forces in the region. Among other findings, they conclude that the younger generation's gradual disengagement from local agriculture has resulted from their bilingual advantage and expanding Chinese influence in Thai society which has led to the creation of attractive new opportunities in Thailand's cities and tourist centers. Cai Junqing, Ye Yint

Kyaw, and Mou JiaMing dove into the topic of new livelihoods related to organic vegetable farming in Doi Chang among the village's ethnic Akha majority and concluded that while the increasing role of non-coffee agriculture carries several advantages and the promise of prosperity for more households under the context of a growing village population, increased scale of vegetable cultivation may also result in land availability pressures in the future.

Finally, the fourth research team embedded themselves in Pang Hin Fon, a predominantly Hmong village that has transitioned successfully from illicit opium cultivation to licit fruit, vegetable, and coffee farming. Lu Xinlei, Zhang Yuelin, and Tan Yumei took a close look at the effects of the crop and market changes in the village over time, including the impacts of adopting greenhouse and organic cultivation techniques on the villagers' incomes, daily routines, and relationship with the state. For the final chapter in this volume, Ye Jiaying employs aspects of gender studies and gender role theory into her inquiry and analysis of the role of Hmong women in Pang Hin Fon's agrarian transition. Notably, she finds that although local women have gained significant agency and decision-making authority in the village's thriving agricultural sector, they are still expected to adhere to traditional Hmong cultural expectations and roles, resulting in intergenerational tensions.

This was, for the majority of students, their first time conducting field research, and the articles herein are the insights and explorations of Yunnan and Chiang Mai students entering new terrain as they navigate the early steps of scholarly inquiry.

We would like to thank our colleagues from Yunnan, Dr. Zhang Haichao, Dr. He Haishi, Dr. Wang Xueying, and Dr. Shi Ji, for their support throughout the summer school, along with Professor He Ming for his assistance and guidance. We also extend our gratitude to our lecturers and field coordinators, Dr. Malee Sitthikriengkrai, Dr. Siya Uthai, Dr. Putthida Kijdumnern, and Dr. Nwet Kay Khine.

*Dr. Chayan Vaddhanaphuti*, Executive Editor

Director, Regional Center for Social Science and Sustainable  
Development, Faculty of Social Sciences, Chiang Mai University

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## BACKGROUND OF THE SUMMER SCHOOL

The Regional Center for Social Science and Sustainable Development (RCSD) at the Faculty of Social Sciences, Chiang Mai University, in collaboration with the National Centre for Borderland Ethnic Studies in Southwest China (NaCBES) and the School of Ethnology and Sociology of Yunnan University, hosted the fourth Sino-Thai Summer School with the theme “Agricultural Transition in Ethnic Communities of Northern Thailand” from August 7 to 19, 2025 in Chiang Mai, Thailand. The summer school program aims to create meaningful opportunities for students of sociology, ethnology, anthropology, and related disciplines from Yunnan University and Chiang Mai University to explore the critical transformations occurring in agricultural systems in the Upper Mekong Region against the backdrop of Sino-Thai relations, along with their impacts on local/ethnic communities, with a particular focus on Thailand.

Agriculture remains a crucial component of livelihoods for many ethnic groups in both China and Thailand. However, these communities are facing significant challenges due to globalization, environmental changes, policy shifts, and the expansion of industrial agricultural practices. One major transformation has been the shift from subsistence farming to commercial agriculture driven by globalized market demands. This transition often includes the adoption of cash crops and intensive farming techniques, which can affect traditional agricultural practices, socio-economic conditions, and cultural landscapes.

A significant development in this context is China’s increasing role in the agricultural sector of northern Thailand through investment in large-scale agricultural projects and infrastructure development aimed at securing resources and enhancing trade. This includes the establishment of contract farming agreements that offer new market opportunities for local farmers, access to larger and more profitable markets, and potential improvements in agricultural technology. However, these agreements also come with risks, including the creation of economic dependencies, significant debt burdens,

and vulnerabilities to market fluctuations. While commercial agriculture can increase incomes and promote economic growth, it can also lead to a reduction in crop diversity, threatening biodiversity and the sustainability of traditional agricultural practices.

Students participating in the 2025 Sino-Thai Summer School examined the socioeconomic and cultural impacts of agricultural transformations on local/ethnic rural communities in Thailand's Chiang Mai and Chiang Rai provinces via an innovative learning experience that combined theoretical knowledge with intensive practical fieldwork. By engaging directly with affected communities, students gained significant insights into the complexities of agricultural transitions and their broader socioeconomic and cultural impacts on local/ethnic communities, including livelihood changes, coping strategies, traditional knowledge systems, and sustainable development practices. In total, the 2025 summer school brought together eight undergraduate and seven graduate students from Yunnan University and five undergraduate and one graduate students of the Faculty of Social Sciences, Chiang Mai University, to jointly conduct field research in four rural villages and develop the written presentation of their research under the supervision of faculty members from both universities.

### *Objectives of the Sino-Thai Summer School*

1. To create a deeper understanding of agricultural transition processes in the Upper Mekong Region, focusing on the impact of these changes on traditional farming practices and the livelihoods of local ethnic communities in the context of Sino-Thai relations.
2. To offer students practical fieldwork experience, including hands-on data collection and data analysis methods.
3. To enhance students' research and academic writing skills through fieldwork opportunities and mentorship.
4. To promote cross-cultural collaboration and shared learning experiences between Chinese and Thai students.

# ACKNOWLEDGEMENTS

We would like to thank everyone whose dedication and cooperation made the 2025 Sino-Thai Summer School and the publication of this volume possible.

This fourth joint summer school program would not have been achievable without the long-standing partnership between Professor He Ming of Yunnan University and Dr. Chayan Vaddhanaphuti of the Regional Center for Social Science and Sustainable Development (RCSD), Chiang Mai University. Their shared aspirations and continuous commitment created the foundation for the program and for this valuable exchange between students across borders.

We sincerely thank our Yunnan University lecturers for sharing their expertise during the teaching sessions and field trips: Professor He Haishi of the School of Ethnology and Sociology; Professor Zhang Haichao, Associate Professor and Director of the Anthropology Museum; Associate Professor Dr. Wang Xueying; and Dr. Shi Ji from the School of Ethnology and Sociology.

We would also like to thank our colleagues at Chiang Mai University who contributed as field trip coordinators, many of whom also served as lecturers: Chayan Vaddhanaphuti (RCSD), Malee Sithikriengkrai (Center for Ethnic Studies and Development-CESD), Puttida Kijdamnern and Siya Uthai (Department of Social Sciences and Development), and Nwet Kay Khine (RCSD), who kindly shared their knowledge and guided participants through field-based learning and theoretical reflection.

The fieldwork component of the summer school depended on the careful planning and coordination of field trip coordinators Ampha Wusue, Saiporn Atsanechantra (CESD), Worrapi-mook Intrasan (RCSD), Wanjiao Yu (Faculty of Social Sciences, Chiang Mai University), and Suwat Samachitob-orm (CESD). We thank them for their coordination, logistical support, and guidance during the field visits.

We are also grateful to the field trip translators Yan Wenbao and Mepimon Or-tah from the Faculty of Humanities at Chiang Mai University, as well as Thitiwan Saechang and Thanatchaphon Saechang from Peking University.

The papers in this volume were further strengthened by the dedication and patience of writing mentors Charlotte Trenk-Hinterberger, Jeffrey Moynihan, Garrett Kostin, and Noah Holzapfel, who supported participants in developing their research ideas and shaping their contributions to this publication. Charlotte Trenk-Hinterberger and Garrett Kostin served as managing editors of this volume and ably guided this publication to completion.

This project also relied heavily on the support of the coordination team at RCSD. We would like to extend our sincere thanks to Min Zhu of Yunnan University, as well as Kanchana Kulpisithicharoen and Chanida Puranapun, for their organizational work and continued support.

Above all, we would like to express our sincere gratitude to the villagers of Mae Ngud, Mae Tha, Doi Chang, and Pang Hin Fon for their warm welcome, openness, and willingness to share their knowledge and experiences.



# MAP OF FIELD SITES



N



MYANMAR

LAOS

CHIANG RAI

CHIANG RAI CITY

DOICHANG

CHIANG MAI

CHIANG MAI CITY

PHAYAO

MAE THA

LAMPANG

PANG HIN FON

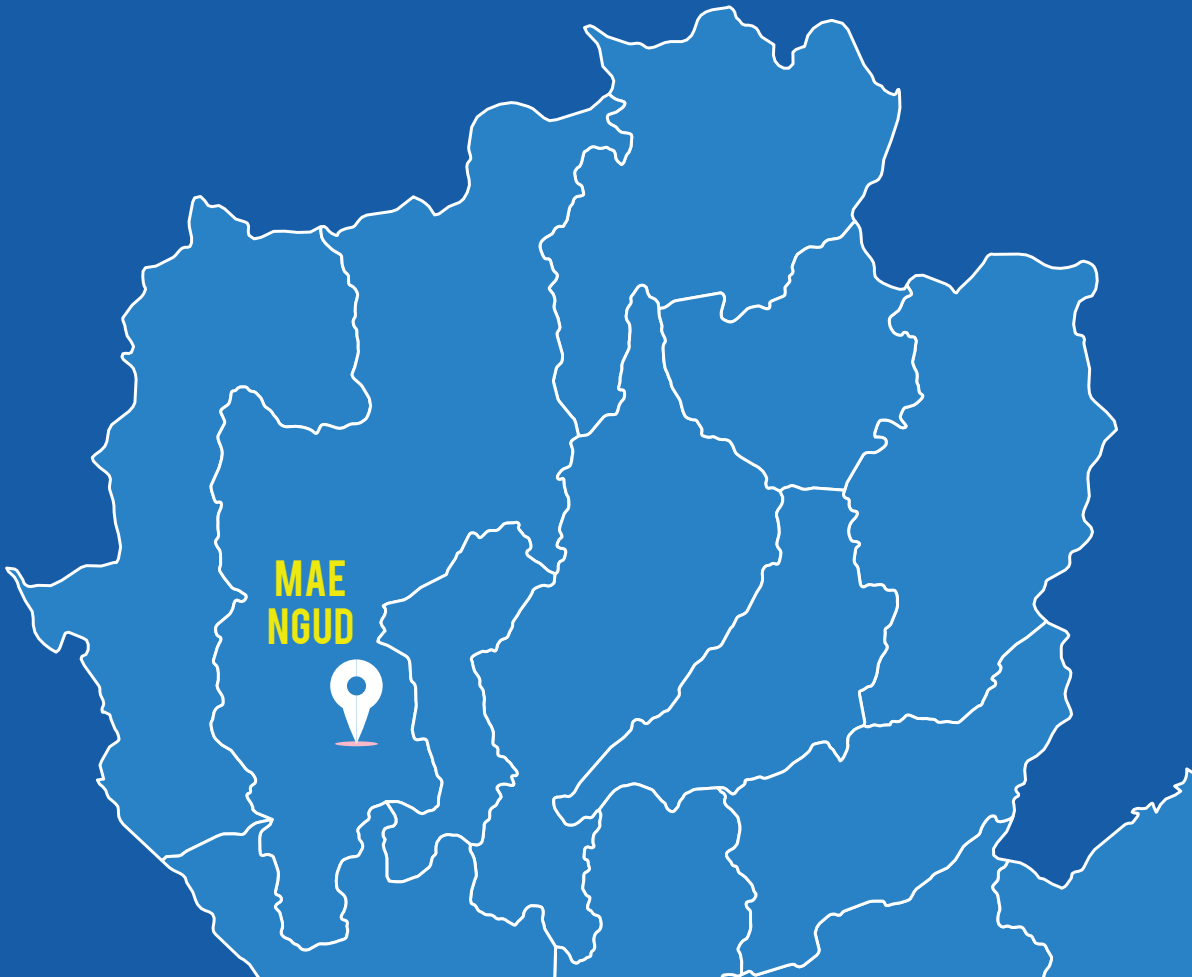
THAILAND

MAE NGUD



# MAE NGUD

The village of Mae Ngud is located in Na Kor Ruea Subdistrict, Hod District, Chiang Mai Province, about 25 kilometers from the Hod District Office. The vast majority of the population (99 percent) are Karen Pwo ethnicity with a total of 157 households and 590 people currently residing in this village. Mae Ngud relies heavily on the Mae Ngud River for agricultural irrigation. However, the river is now heavily silted and resembles a sandy road throughout much of the year. Despite this, water still flows beneath the sand, and villagers use pumps to extract it for use in their longan plantations. Every household has a water pump; overall, there are 118 pumps spanning the distance of the Mae Ngud River. The villagers rarely cultivate rice for their own household consumption. There



are some households that own rice farms, but these are located outside the community. In addition, Mae Ngud villagers earn a fairly good income from selling longans and raising cattle. There are about 570 cows in the village, and they drink from the river during the dry season. The community also collects plenty of food resources from the forest.

In 1964, after construction of the Bhumibol Dam was completed, the original Mae Ngud residential area was negatively affected by severe flooding. Although authorities allocated new areas for the residents in An Subdistrict, villagers refused to move there because the dense forest environment was not considered suitable for community settlement. Therefore, the villagers decided to relocate about 200 meters from the site of the original village area. According to villagers' narratives, they experienced significant hardship in building houses and establishing the new community. Later, the community was relocated to a third area which previously belonged to the Royal Forestry Department and was leased to Mae Chaem Cooperative Estate for 30 years, expiring in 2017. As a result, the villagers of Mae Ngud have been placed in an unstable position due to the lack of clarity regarding who has legitimate rights to determine usage and administration of the land.

Mae Ngud Village is the planned water tunnel exit point for the proposed Yuam River Diversion Project. If the project proceeds, the Mae Ngud River would divert water from the Yuam River to supply Bhumibol Dam. Mae Ngud would have 2,415,194 cubic meters of tunnel-excavation earth. The villagers received information about the Yuam Diversion Project after the environmental impact assessment report was completed in 2021. Villagers originally agreed to this project because officials claimed that villagers would have more water available for agricultural endeavors. Later, however, they received additional details about the likely impacts of the project. Therefore, the community now largely opposes this project due to the flood risks and potential need to relocate their community once again.



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# **Beneath the Longan Trees: Livelihood Struggles and Adaptive Strategies Among the Karen Community of Mae Ngud Village, Northern Thailand**

*Zhou Mao and Ainthira Mongkam*

## **Abstract**

This study examines the livelihood strategies of ethnic Karen longan farmers in Mae Ngud Village, Chiang Mai, Thailand, who face uncertain crop prices due to market changes and environmental challenges. Longan is their main income source, but price drops greatly impact their lives. Through interviews and observations, this research finds that farmers use several methods to cope. For example, they adjust harvest times to avoid low prices, grow other crops like corn and chili, raise animals, and make handicrafts. Women weave clothes and bags to sell. Young people work in cities to enhance their incomes. The community shares knowledge and labor, and individuals help each other during difficult times. They also borrow money from relatives or cooperatives. Although they lack government support, their strong social networks and diverse income sources enable them to survive and adapt. This reveals how small-scale farmers utilize local cooperation and livelihood diversification to persevere in the context of economic and environmental problems.

**Keywords:** Karen, longan production chain, livelihood strategy, agricultural transition, agricultural transformation, northern Thailand

## SINO-THAI EXPLORATIONS

### Introduction

“Agrarian transition” refers to shifts in rural agricultural communities from small-scale, low-productivity, subsistence-oriented farming to more modern, economically-oriented agricultural activities (Diao, 2024). Rigg (2014) describes that for the context of Southeast Asia, agrarian transition is not a linear or uniform process, but often involves peasants becoming less dependent on farming and increasingly subsisting on diverse sources of non-farm income. This transition is not necessarily even and can contribute to the development of new inequalities.

This study examines aspects of agrarian transition in northern Thailand’s Mae Ngud Village, with a particular focus on the rise of longan cultivation as a key element of this process. This transformation has brought about significant changes to local livelihoods, shifting from subsistence farming for household consumption to commercial agriculture aimed at generating income.

Longan fruit is a popular crop in Thailand, particularly in the northern region, where the climate and topography are ideal for cultivation. Therefore, most of the national longan production occurs in the provinces of Chiang Mai, Lamphun, Lampang, and Chiang Rai, making the northern region the country’s largest longan production base in terms of both quantity and quality (Department of Agricultural Extension, 2023). Longan is produced for both domestic consumption and for export in the form of fresh, dried, and processed fruit. Therefore, longans not only generate income for farmers but also play a vital role in the local economy, employment, and international agricultural trade, particularly with China, a major export market. China has a large consumer base and strong purchasing power for fresh longan and processed longan products due to the particular cultural significance of the fruit and its health-promoting properties (Shao, 2022).

Thailand’s longan production and trade have been significantly influenced by the Thailand-China Free Trade Agreement (TCFTA) that came into effect in 2003, particularly the Early Harvest Program (EHP), which eliminated import tariffs on 116 fruit and vegetable items (Department of Foreign Trade, 2021). Trade changes under the TCFTA have directly impacted Thai longan

farmers in the north, both in terms of opportunities and challenges. The longan trade in northern Thailand is complex, linking small-scale farmers with Chinese middlemen, packers, exporters, and importers. In recent decades, longan exporters with links to China have played a significant role in setting prices at the village level. They often purchase directly from farmers or through cooperatives before exporting to China. As a result, farmers are locked into a cross-border trade system but have little bargaining power (Boonruang, 2024). While longans generate significant income for rural households, their reliance on a single crop and export market exposes them to high risks when demand changes or trade policies fluctuate. The TCFTA is therefore a key factor in shaping the future of longan farmers (Boonruang, 2024).

Mae Ngud is a small village located in Na Khuea Subdistrict, Hod District, Chiang Mai Province. The population consists almost entirely of ethnic Karen Pwo people, accounting for 99 percent. According to data collected in 2022, the village has a population of 580 people and 167 households, with approximately 180 *rai* (71 acres) of residential land and 900 *rai* (356 acres) of agricultural land (Sithikriengkrai et al., 2025). Prior to 1979, subsistence rice cultivation was the primary livelihood, with villagers relying on the riverbanks of the Mae Ngud River to produce rice for household consumption, along with raising cattle for plowing and transporting rice.

After the Bhumibol Dam—the first major dam in Thailand—was completed in 1964 as the country’s largest reservoir for hydropower generation, agricultural water supply, and flood mitigation, it soon contributed to flooding that submerged houses and rice fields in the community (Sithikriengkrai et al., 2025). As a result, villagers were forced to relocate. Between 1979 and 1995, the community moved to its current location, which falls within a national forest reserve. Later, the Thai Royal Forest Department granted authority to a project known as the Mae Chaem-Longpong Cooperative Settlement to allocate land to landless farmers under a 30-year lease beginning in 1974. This lease has since expired, and there remains no clarity regarding villagers’ legal rights to the land. Today, villagers continue to cultivate some rice fields along the Mae Ngud River, but recurrent flooding has led them to plant rain trees for lac (resin) cultivation. They also previously expanded rice

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fields along the Mae Poi Stream. However, rice production remained insufficient. As a result, villagers turned to wage labor and selling foraged forest products to earn money to purchase rice for their household consumption (Sitthikriengkrai et al., 2025).

Between 1995 and 2011, the community faced regular flooding during the annual rainy season and the river was filled with sand during the dry season. Villagers therefore permanently stopped rice farming in 2000 and shifted to growing vegetables such as peanuts, garlic, and shallots. During their free time from farming, they would work for wages in various places, such as longan orchards, factories, and construction sites. In 2006, the Electricity Generating Authority of Thailand (EGAT) encouraged farmers to plant trees or fruit trees, indicating that it would provide compensation if floods returned. Villagers then switched to growing bamboo, mangoes, longans, and bananas, and began installing water pumps for agriculture. However, in 2011, severe flooding occurred from late September to February, killing all crops and trees (Sitthikriengkrai et al., 2025). Villagers then turned to longan cultivation, both in-season and off-season. However, most opted for off-season longan cultivation due to the high competition in the seasonal crop. Off-season longan cultivation requires a large amount of water and chemicals, and also carries the risk of longan blossoms falling during the rainy season and concerns about a lack of water for longan cultivation (Sitthikriengkrai et al., 2025).

The longan production chain begins at the household level, where farmers primarily rely on family labor and occasionally hire community members during harvest time. After harvesting, longans are sorted and sold to local traders, middlemen, or “longan collection houses” (known as *longs*), which handle grading and packaging according to China’s plant quarantine standards in nearby districts such as Doi Tao and Chom Thong before exporting the products to China. Our fieldwork conducted in Mae Ngud Village revealed that farmers have virtually no opportunity to sell directly to exporters; instead, they must go through local collectors and packing houses. As a result, farmers shoulder the production risks while having little to no bargaining power over prices.

Longan prices have been continuously declining for more than 30 years. The situation became severe in 2012, when 300 longan farmers used 50 vehicles to block the road to the Chiang Rai City Hall, demanding that the government address the falling longan prices (The Nation, 2012). Before 2017, the price of longan was only one Thai baht (THB) (US\$0.03) per kilogram (Charoenkiatpakul, 2017). As households rely on longans for their primary source of income, the price drop has a significant impact on their livelihoods, leaving them unable to repay debts or production costs, and forcing them to find alternatives to sustain their households.

For Mae Ngud households, the benefits of longan cultivation are often tempered by the risk of price fluctuations and insecure incomes. Comprehension of these dynamics requires understanding the production chain within global trade as well as the livelihood strategies households use to navigate constraints and to adapt. This offers insights into both the vulnerabilities and livelihood dynamics of smallholder farmers amid global economic uncertainty.

### **Research questions**

1. What are the longan production practices, including resource management and gendered divisions of labor, among the Karen community members of Mae Ngud Village?
2. How do the Karen villagers in Mae Ngud sustain their livelihoods in the context of unstable longan prices?

First, this research explores elements of longan farming as the primary occupation of villagers in Mae Ngud, including land and water use, longan orchard care, family labor management, and the integration of local and traditional Karen wisdom with modern agricultural practices. Secondly, the study aims to understand how the villagers sustain their livelihoods amid price volatility, their adaptation processes, and economic strategies including social and cultural dimensions.

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### Methodology

The data for this research were obtained through in-depth interviews, observations, and surveys of secondary sources during fieldwork in the Karen community of Mae Ngud, Hod District, Chiang Mai Province. Observation played a crucial role in learning about the longan planting and care processes. By closely observing the farmers' daily activities in the orchards, we gained a deeper understanding of their lifestyles and agricultural practices.

Formal interviews were conducted with five longan farmers: Jamrat, Insorn, Songkram, Chatchai, and Nan. These farmers were selected for their diverse roles, each owning their own orchards, while others were also orchard contractors. They shared their experiences of longan cultivation and selling their longans (some to middlemen, some through sponsors, and some directly to the longan warehouses). They also discussed the challenges that they encountered in their longan farming and strategies for maintaining financial stability. Some interviewees had limited Thai language proficiency, requiring our interpreters Noon and Noey to translate from Karen to Thai to ensure accurate understanding and to provide additional information. Furthermore, as this study was a collaborative effort between Thai and Chinese students, a Chinese interpreter was required to assist with the translation from Thai to Chinese. These language barriers may have contributed to some loss or distortion of information.

Due to limited time for fieldwork (seven days), the research team relied on additional documentary data to fill gaps in field data. The literature and additional research materials were crucial to linking the research findings to the broader social context, to understanding the situation of low longan prices in the market, and for verifying the field data. We obtained informed consent from informants prior to all interviews. As researchers from Thai and Chinese backgrounds, our interpretation and understanding of the field data reflected both different and overlapping perspectives shaped by our respective backgrounds and experiences. Efforts were made to reflect these perspectives through exchange and discussion. As one of the authors recorded in her field notes:

Conducting fieldwork in Mae Ngud has allowed me to encounter the lived realities of longan cultivation in ways that differ greatly from what written reports describe. From building trust, conversing with villagers in their homes and orchards, walking through the groves under the hot sun, to observing the Mae Ngud River that sustains hundreds of longan trees—these experiences made me realize that agriculture is not merely an occupation but an entire world for the villagers. At the same time, I witnessed their vulnerability to fluctuating longan prices and unstable water availability, risks that farmers must shoulder alone. Observing the efforts of the Karen community in managing water collectively, maintaining their livelihoods on land without legal security, and working together amid uncertainty taught me about their resilience, self-reliance, and solidarity. This research also made me reflect on my own role as an outsider and taught me to listen more attentively, to be humble, and to value the knowledge rooted in the lived experiences of the community.

### **Findings and discussion**

This following sections outline the Mae Ngud villagers' longan cultivation practices and management systems, including labor organization, intermediary roles, and gender aspects in longan production. Following that, adaptive strategies in response to fluctuating longan prices are described, including internal support systems of reciprocity, livelihood diversification, and engagement with external actors.

### **Longan cultivation practices and production strategies**

The Karen villagers of Mae Ngud have developed a range of practical longan production techniques, demonstrating their local knowledge, including approaches to irrigation, fertilization, labor organization, and land use.

Access to water is the primary challenge for longan cultivation in Mae Ngud. As groundwater lies beneath sandy layers of soil and riverbed, households commonly use water pumps. Water pumps, as critical resources,

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are mostly owned by individual households, though some are shared. The installation cost for each pump is about 100,000 THB (US\$3,046), and the maintenance of related equipment can also be a major household expense. Water use order is managed via electrical switches, requiring no additional coordination. Villagers must rely on water pumps to draw irrigation water from sandy soil layers about five meters underground. The pumping systems are generator-powered and easy to operate, but electricity costs are high, especially during the dry season. In terms of land use, among the villagers we spoke with, each farmer's plot is typically two-to-three *rai* (0.8 to 1.2 acres) in size, rarely exceeding 10 *rai* (four acres) (Kubo, 2019).

During harvesting, workers prioritize the largest longan fruit, and small, deformed, or thin-fleshed longans are sorted out. These lower-grade products are usually sun-dried and sold at lower prices, or used to pay part of the workers' wages, or even given to workers for free when prices are very low, resulting in a win-win situation. To reduce maintenance costs, farmers trim off the large, excess branches after harvesting the fruit, anticipating the next round of sprouting, flowering, and fruiting.

Regarding fertilizer choice, potassium fertilizer is widely used in the village due to its low cost, despite its negative impact on soil health. Pesticides are applied according to instructions, mainly to control pests and diseases like leaf yellowing, with no reported misuse. To increase income, most farmers use chemical agents to induce off-season longan flowering. They coordinate among themselves to stagger fruiting times, achieving staggered market release to ease labor shortages and price competition (Yano et al., 2002). Some growers reported that their operations are close to losing money due to extremely unstable returns (Song Kan, pers. comm., August 2025).

Villagers' knowledge about longan cultivation and trading comes from diverse sources and relies on community sharing of information. We were told that some learned about off-season cultivation techniques while working as laborers in other longan-producing areas and then introduced them to the village (Noey, pers. comm., August 2025). In addition, they learned more professional planting techniques when they attended some training sessions: "The agricultural association once organized trainings, and a few villagers

attended and then returned to share and teach the techniques inside our village” (village chief, pers. comm., August 2025).

Meanwhile, savvy villagers also learn farming techniques from YouTube videos. Nan (pers. comm., August 2025), one of the villagers studying in the association, explained, “I also do self-taught online sessions to obtain tips on the cultivation, and I have obtained GAP organic certification, which helps me to get bigger offers from the big factories.” Furthermore, villagers frequently exchange knowledge gleaned from personal farming experiences among themselves: how to fertilize, when to spray, how to stagger harvests, etc. This open knowledge dissemination system helps farmers adjust their strategies and improve their ability to cope with risks.

### *Labor organization and intermediary roles in longan production*

Longan farming in Mae Ngud Village is part of a complex production and marketing system shaped by global market forces and local social relations. Labor organization and intermediaries play an important role in how farmers manage production risks, organize labor, and connect to export markets.

The quality of longan determines its selling price. Market longans are graded in descending order of quality as AA, A, B, and C. AA represents the best quality with plump fruits, but quantities are limited. Most longans supplied by Mae Ngud farmers are A and B grade (Song Kan, pers. comm., August 2025). The purchase prices fluctuate sharply, sometimes being as low as nine to 10 THB (US\$0.30) per kilogram for AA grade, while at other times reaching 40 to 50 THB (US\$1.20 to \$1.52).

Due to market demand, most local longans are exported to China through a global supply chain. In this chain, large intermediaries dominate pricing and negotiation by controlling market information between China and Thailand (Wang et al., 2023). The typical model involves Chinese importers setting a base price, after which Thai intermediaries determine the purchase price for growers and their profit from the margin. As a result, price risks are primarily transferred to those filling downstream roles, such as growers with limited access to market information, keeping them in a vulnerable position within the chain (Hasachoo & Kalaya, 2013). This external power structure

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forms the broader context for the local longan economy in Mae Ngud. Within the community, the production network is composed of growers, workers, and local middlemen (often referred to as “patrons”). These local actors exercise agency in longan planting, continually interacting and negotiating with the overarching power dynamics of the global supply chain.

The villagers’ labor organization models are flexible and diverse. Payment models for hiring workers to do longan harvesting include daily wage, piece rate, and labor exchange. In the daily wage system, women are hired at the rate of 300 THB (US\$9.15) per day. Men are compensated with 400 THB (US\$12.20) per day, as males often undertake more high-intensity tasks like tree climbing and pruning (Noon, pers. comm., August 2025). Fifty THB (US\$1.50) are paid per box picked, but an additional 10 THB (US\$0.30) per box is paid to the driver who transports workers to the orchard. To ensure fairness, farmers often number the trees and have workers randomly draw lots to assign them, preventing competition over trees with higher-quality fruit.

In the longan production chain, patrons act as middlemen, serving as a bridge in two ways. First, they connect workers and growers, arrange vehicles, and coordinate with supervisors. Second, they mediate between the fresh longan growers and export-oriented fresh longan factories (Song Kan, pers. comm., August 2025; Wang et al., 2023).

Patrons in Mae Ngud are usually farmers with broader resources. They are responsible for recruiting workers, organizing harvesting, and bargaining with intermediaries. Based on these characteristics, their relationships with laborers are usually close and reciprocal. Workers may voluntarily accept reduced wages or forgo payment for small fruit when the price of longan is low. In return, patrons often host meals for workers when prices are high as a gesture of gratitude for their cooperation (Noon, pers. comm., August 2025). Additionally, patrons also supervise the harvesting of longans as foremen, determine the quality of contracted longan orchards based on their knowledge or experience, and finally sell the harvested longans to larger intermediaries with a good offer.

In terms of trading modalities, farmers may trade directly with patrons or intermediaries. A few capable farmers who possess related certificates or marketing resources choose to directly connect with large buyers, such as supermarkets, which enables them to secure better prices. Besides, patrons with significant financial resources will sometimes purchase entire orchards for resale, obtaining profits from the price difference. In this process, patrons bear the main market linkage risks on behalf of farmers who have limited knowledge of market conditions. Song Kan (pers. comm., August 2025), a longan farmer and a patron, reflected on the contrasting responsibilities of being both a plantation owner and a patron:

These two roles need to bear different risks. As a plantation owner, I need to take more responsibility for my longans, striving to produce high-quality ones and deciding when to harvest them. However, when prices are low, I worry and feel distressed. As a patron, however, I'm more concerned with market prices, specifically how to make a profit.

Although large intermediaries are the key to determining prices, some of them also bring certain benefits. Together with patrons, they connect farmers to the market and act as a buffer. This reciprocity mechanism helps soften the impact of market fluctuations. Meanwhile, intermediaries handle the job of longan packaging, preservation, or storage, and export via cold chain logistics (Kubo, 2019).

### **Gendered aspects of the labor organization in longan cultivation**

In Mae Ngud's longan cultivation industry, women and men typically work side-by-side. During the picking stage, men typically climb the trees to trim the branches and pass them down to the women waiting on the ground, who are responsible for picking and packing the fruit (Noon and Noey, pers. comm., August 2025).

Initially, patrons were often men, but nowadays, some women have become patrons as well, taking on the same responsibilities as their husbands, who

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are typically patrons themselves. At the beginning, the resources of the female patrons typically derived from their husbands who had become patrons before them. However, as they develop professionally over time, they often explore different resources, and the couple develops different connections and networks among intermediaries, farmers, and workers, building their enterprise together (Song Kan, pers. comm., August 2025.) Noon and Noey (pers. comm., August 2025) acknowledged the capabilities of female patrons, noting that women tend to be more meticulous and caring toward the workers they supervise. Furthermore, some female operators first worked in other jobs outside of the village in order to save money for their future agricultural business and to learn livelihood skills. Then, they gradually expanded their planting scale and further diversified household income sources.

The plantation of Nan, for example, is very large and still expanding. When asked about her motivation for growing, she replied, “It’s my daughter. I want to earn money so she can get educated, so I’m trying hard” (Nan, pers. comm., August 2025). Ambitious female growers such as Nan do not face discrimination or opposition in the village. They are able to use their own resources to organize their businesses more efficiently, while they also receive strong support from their families.

In sum, women in Mae Ngud Village are reshaping their roles in local longan cultivation, becoming patrons and entrepreneurs, contributing to a changing labor organization and household economy while they leverage both traditional support systems and new opportunities. In Karen culture, lineage and marriage practices are matrilineal, meaning that women and their husbands join the wife’s family after marriage. As such, gender roles and responsibilities have traditionally differed. While women were traditionally bound to housework and childcare, and Karen men were regarded as the family leader and breadwinner, nowadays shifting gender roles and responsibilities have been observed, blurring the lines between women’s and men’s roles, and highlighting the agency of Karen women (Amornwat & Miyake, 2025).

**Coping strategies: From internal mutual aid to external adaptation**

Facing sharp fluctuations in longan prices and environmental constraints, the Karen villagers in Mae Ngud have developed multi-layered, mutual-aid coping strategies. These strategies encompass internal support networks and broader livelihood diversification. The following sections detail these adaptive practices.

***Internal community mutual aid networks***

Maintaining a resilient, socially cohesive mutual aid network is a core mechanism for villagers to cope with risks. To avoid price drops caused by concentrated market supply, farmers coordinate to stagger their cultivation times, using chemical agents to adjust the production cycles, thereby stabilizing prices and balancing labor demand. The labor exchange system arises from the strategy of staggered harvests, leading to different labor needs. This occurs mostly among relatives or neighbors, and is particularly common among women because men often stay to work in their own orchards, also supervising and guarding. Because villagers have different harvest times, their labor needs also vary. They work for each other for free, with the host household providing meals for the helping relatives and friends, who also often bring food items to share (Noon, pers. comm., August 2025).

For sales, farmers often choose intermediaries or patrons with whom they have histories of long-term cooperation. They care not just about getting the highest prices, but value stable long-term cooperation and risk-sharing relationships. Although villagers all need to earn money from their longans, they do not compete with each other for buyers. Instead, they share recommendations of reliable buyers who offer the highest prices. They frequently share market price information with each other, enabling them to unite and respond together to face changing market conditions and reduce losses. This mutual trust, enabled through Karen identity networks within and beyond the community, alleviates the psychological pressure from market fluctuations and helps farmers maintain resilience in difficult times (Kanchanaroek & Engstrom, 2025).

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When the price of longan is low, it leads to slim profits and eventually to a lack of money for household expenses and daily living. Borrowing becomes a primary way for villagers to get through difficult times. Farmers typically borrow from relatives and friends first. Some are even willing to lend their own accounts to close relatives so that they can get a loan from the local agricultural cooperative.

This culture of internal mutual aid based on reciprocity is closely linked to the relationality emphasized in the traditional worldview of the Karen people. In Karen understanding, there exists a network of interdependent and reciprocal relationships between humans, spirits, plants, and animals (Phatthanaphraiwan, 2025). Reciprocal behaviors within the community, such as understanding and offering concessions between workers and headmen, are manifestations of this broader cosmology at a socioeconomic level, helping the community maintain internal cohesion and resilience under external pressures (Buergin, 2002).

Internal kinship and community ties also make the villagers in Mae Ngud very cautious about the outflow of resources. The village chief (pers. comm., August 2025) explained that some of the land he holds was purchased from relatives, and the land price is generally around 10,000 THB (US\$305) per *rai* (0.4 acres) significantly below market prices. Besides, these deals are usually based on verbal agreements, rarely on formal contracts. In this community, villagers prefer not to sell the land rights (from a non-legal perspective) to outsiders. This is their way of protecting the land of the Karen village; it is their home, where relatives live close together, and they do not want to change this situation (village chief, pers. comm., August 2025).

As in other ethnic Karen communities in Thailand and beyond, land is not only a means of production but is also central to cultural identity, historical memory, and the spiritual world. External pressures and restrictions, including national protected area policies, force communities to place greater emphasis on collective control over land and resources in order to resist assimilation and threats to their survival (Buergin, 2002; Fink, 1994). This caution regarding the outflow of land resources reflects the efforts of the Karen living in Mae

Ngud to preserve their sociocultural roots and collective identity in the face of national assimilation efforts and market encroachment.

Therefore, from practical labor exchange and financial assistance to collective sales alliances and the communal safeguarding of land and other core resources, these reciprocity-based practices together weave a tight-knit social safety net. This network constitutes the intrinsic resilience that enables the community to sustain both livelihoods and identities amidst market volatility and policy pressures.

### *Livelihood diversification*

Livelihood diversification is a key strategy for coping with longan price fluctuations, effectively dispersing the risk of dependence on a single crop. This strategy unfolds both within and beyond the longan economy. Within the longan production chain, many individuals maximize resource utilization by playing multiple roles, acting simultaneously as growers, patrons, and workers. This flexible role-switching helps mitigate the production risks inherent in any single position.

Beyond longan, households engage in a variety of complementary activities to spread risk and stabilize incomes. Many families cultivate other crops such as corn, chili, tomatoes, and bamboo alongside their longan orchards. These are grown partly for household consumption, which reduces living expenses, and partly for sale, providing an alternative source of cash when longan prices are unfavorable. Furthermore, villagers enhance systemic resilience through additional livelihood activities closely tied to local resources and seasonal cycles. For example, women weave cloth during the agricultural off-season to produce clothes and bags for sale, with backpacks being particularly marketable. Cattle raising also serves as an important asset strategy; cattle are released into forested hills during the dry season and return to the village in the rainy season, with a healthy cow capable of fetching between two to four thousand THB (US\$61 to \$122). Young people also seek employment outside the village, such as in auto repair or decoration work in cities like Chiang Mai, to supplement household income and save for future investments in land or agricultural inputs (village chief, pers. comm., August 2025).

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Collectively, these practices enable households to build a livelihood base that does not rely solely on a single crop, helping them diversify income sources, build savings, and mitigate the financial risks associated with longan cultivation. This diversification enhances household economic resilience. Ultimately, livelihood diversification is not only an economic tactic but also a mechanism for the Karen community to maintain their cultural ways of life amid significant external changes, such as tightened national forest policies and market integration. For instance, facing restrictions on land use, a Karen community in western Thailand's Thung Yai has been compelled to strike a balance between preserving traditional livelihoods and seeking external wage income, a diversification strategy in direct response to pressures of state integration and modernization (Buergin, 2002). Meanwhile, sustaining multiple livelihoods helps preserve their spiritual and material connections with the land and forests, which are central to their cultural identity (Phatthanaphraivan, 2025).

### *Engaging external actors: Cooperatives and strategic alliances*

In addition to borrowing money from family and friends, agricultural cooperatives also provide lending services. A key requirement of joining a cooperative is that farmers need to form groups of three to guarantee membership. Besides applying for loans to purchase farm machinery, building materials, motorbikes, etc., they can also buy farming materials like fertilizer and water pipes on credit. The village chief (pers. comm., August 2025) stated that, "If the previous year's longan harvest was poor, I would buy fertilizer on credit, repaying with the following year's fruit income, thus reserving cash for more urgent needs." Repayment terms for credit and loans are flexible, but overdue payments incur higher interest. When asked about the future plan for this community, the village chief (pers. comm., August 2025) stated, "I would later try to integrate everyone's resources to gain higher bargaining power. Actually, we are already taking actions toward this goal. Recently, I collaborated with university professors to submit proposals advocating for our rights."

The village chief has sought cooperation from university professors to advocate for villagers' rights, reflecting a strategic adaptation by the Karen community in response to state policies. Historically, Karen communities in Thailand have been viewed pejoratively by the state as "hill tribes," uncivilized outsiders in need of being integrated, assimilated, or even resettled (Fink, 1994). To counter this "imposed community" narrative and defend their interests, community elites sometimes forge "intercultural alliances" with external actors such as scholars and non-profit organizations, leveraging mainstream discourse, e.g., rights and environmental protection, to claim space. Although such alliances may be fraught with contradictions and often fail to fully convey the community's voice and worldview, these types of collaboration serve both as pragmatic efforts to seek support and attempts to reposition themselves within the state system.

### **Structural constraints and community vulnerability**

While the preceding sections detail the diverse adaptive strategies employed by the Mae Ngud community, a critical analysis must acknowledge the structural constraints that limit the effectiveness of these strategies and expose the community's underlying vulnerabilities. These constraints are not random obstacles but systemic forces that interact across environmental, institutional, and economic domains.

Firstly, long-term environmental and infrastructural challenges form a persistent backdrop. The village's location in the flood-prone Mae Ngud River basin, compounded by siltation and hydrological changes linked to the Bhumibol Dam, creates a cycle of drought and flood that directly threatens the water-intensive off-season cultivation of longan (village chief, pers. comm., August 2025). At the household level, this translates into heavy reliance on and financial burden from private water pumps, underscoring a precarious dependence on fragile natural conditions.

Secondly, the lack of supportive policies and institutional security in the village significantly heightens livelihood risks. The absence of government production subsidies or price guarantee mechanisms for longan is compounded by a more fundamental insecurity: ambiguous land tenure. Land transactions

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among villagers mostly rely on verbal agreements between relatives, and these so-called “farmer certificates” are of limited use in disaster relief (village chief, pers. comm., August 2025). This institutional void exists within a broader historical context where Thai forestry and land policies, such as the Forest Reclamation Policy and the National Park Act, have often stigmatized indigenous groups and threatened their land rights through penalties for “encroachment,” translating into prolonged land tenure conflicts and a pervasive sense of political vulnerability (Phatthanaphraiwan & Greene, 2025; Kanchanaroek & Engstrom, 2025).

Ultimately, these vulnerabilities are locked in by an unequal market power structure. As detailed in the discussion of the supply chain, villagers operate at the disadvantaged end of a system dominated by external intermediaries and Chinese importers who control information and pricing (Wang et al., 2023). Their position is exacerbated by the industry’s heavy dependence on the Chinese market, which subjects them to cross-border price fluctuations, capital interventions leading to shrinking profit margins, and stringent non-tariff trade barriers like sanitary and phytosanitary standards that increase costs without guaranteeing returns (Tankam & Tan, 2017; Buergin, 2002). This structural dependence means that the stability of their livelihoods is largely contingent on decisions and forces far beyond their control or influence.

In essence, the community’s repertoire of coping strategies, from knowledge sharing and labor reciprocity to livelihood diversification and strategic alliances, is embedded in a structural environment characterized by ecological precarity, limited support from state authorities, and market asymmetry. These systemic constraints define the boundaries of local agency and resilience, highlighting that while internal social capital is significant, it operates against a backdrop of external pressures that cannot be overcome by community-level action alone.

### Conclusion

The case of Mae Ngud Village highlights the interconnectedness between global trade policies, domestic agricultural systems, and rural livelihoods.

While the TCFTA offers opportunities for longan farmers, it also creates a strong dependence on Chinese market demand.

This investigation of the Karen longan farming community in Mae Ngud reveals how a smallholder group at the periphery of the global agricultural supply chain strives to maintain livelihood stability and increase community resilience. It finds that at the production level, the villagers manage environmental conditions through practices like knowledge sharing, staggered harvesting, and investment in water pumps. At the level of social organization, local patrons play an important role as risk buffers. The reciprocal relationships between patrons and workers and strong networks within the community allow people to share resources and to provide mutual support.

At the level of livelihood strategies, people combine role diversification, agricultural diversification, and non-farm income-generating activities. Together, these activities provide several sources of additional income and reduce reliance on a single crop. The villagers demonstrate agency, with the Karen women increasingly taking roles and responsibilities based on local knowledge, social networks, and shared traditional values of mutual help.

This study provides insights into certain aspects of agricultural transition processes in northern Thailand. Rigg (2014) describes that rural change in Thailand and beyond is not a linear movement away from farming but a process marked by livelihood diversification, partial deagrarianization, and the persistence of smallholder agriculture even amidst changing economic and social circumstances. In line with Rigg's (2014) understanding, this study shows that smallholder farmers remain engaged in farming while simultaneously diversifying their livelihoods. They combine agricultural production with off-farm employment, seasonal or long-term migration, and other income-generating activities. In addition, they rely strongly on social networks, shared labor, and reciprocal support within the community to cope with economic volatility and environmental uncertainty, illustrating a pattern of partial deagrarianization rather than a complete withdrawal from farming.

This study also illuminates the limits of local agency due to the structural constraints villagers face, such as environmental damage, ambiguous land tenure, and power imbalances within the global supply chain. It suggests that

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external interventions in smallholder contexts should take into account existing local practices and social networks and understand, respect, and strengthen existing livelihood strategies.

While these particular findings may not be generalizable to other contexts, they indicate that development interventions that overlook existing arrangements risk missing important aspects of everyday livelihood strategies. Future research should explore how macro-level changes like climate change and trade policies dynamically interact with these community strategies. Rather than introducing entirely new mechanisms, development projects may aim to build on strategies that communities already use to cope with uncertainty and structural risks. Further research with a broader empirical base would be needed to examine how these local practices relate to larger structural changes such as climate variability or market conditions.

## References

- Amornwat, C., & Miyake, Y. (2026). Changing gender regime in Karen community: A case study of Karen women in Mae Ramat District, Tak Province, Thailand. In A. Nawawi, A. N. Alami, J. Bautista, M. Aung-Thwin, D. Simandjuntak, & Y. E. Prasetyo (Eds.), *Managing disruption and developing resilience for a better Southeast Asia* (SEASIA 2022). Springer Proceedings in Humanities and Social Sciences. Springer. [https://doi.org/10.1007/978-981-96-2116-3\\_42](https://doi.org/10.1007/978-981-96-2116-3_42)
- Boonruang, W. (2024, September 12). With Chinese merchants controlling export prices, Thailand's longan industry faces uncertain future. *Benar News*. <https://www.benarnews.org/english/news/thai/with-chinese-merchants-controlling-export-prices-thailand-longan-faces-uncertain-future-09122024141747.html>
- Buergin, R., & Working Group Socio-Economics of Forest Use in the Tropics and Subtropics. (2002). *Change and identity in Pwo Karen communities in Thung Yai Naresuan Wildlife Sanctuary, a "Global Heritage" in western Thailand*. Albert-Ludwigs-Universität Freiburg.
- Charoenkiatpakul, W. (2017, August 13). Price slump of longan is not so sweet. *Bangkok Post*. <https://www.bangkokpost.com/thailand/general/1305271/price-slump-of-longan-not-so-sweet>
- Department of Agricultural Extension. (2023). *Agricultural statistics report: Cultivated area, harvested area, and longan production*. Thai Ministry of Agriculture and Cooperatives.
- Department of Foreign Trade. (2021). *Report on Thailand's fresh and dried longan exports*. Thai Ministry of Commerce.
- Diao, X., Jones, E., Pauw, K., Thurlow, J. & Xu, W. (2024). *The agricultural transformation index*. IFPRI discussion papers. 2275, International Food Policy Research Institute (IFPRI).
- Electricity Generating Authority of Thailand. (n.d.). *Bhumibol Dam*. (Archived November 5, 2021).
- Fink, C. L. (1994). *Imposing communities: Pwo Karen experiences in northwestern Thailand*. University of California Press.

## SINO-THAI EXPLORATIONS

- Hasachoo, N., & Kalaya, P. (2013). *Competitiveness of local agriculture: The case of longan fruit trade between China and the north of Thailand*. Research Institute on Contemporary Southeast Asia (IRASEC).
- Kanchanaroek, Y., & Engstrom, D. W. (2025). Development policy affects the indigenous group: The case of the Karen community, Klang Village, northern Thailand. *World Development Perspectives*, 40, 100733. <https://doi.org/10.1016/j.wdp.2025.100733>
- Kubo, K. (2019). The geography of the labor-intensive fruit export industry in Southeast Asia: A case study of Thai longan. In *New trends and challenges for agriculture in the Mekong region: From food security to development of agri-businesses*. Bangkok Research Center, JETRO Bangkok/IDE-JETRO.
- The Nation. (2012, July 25). Farmers protest. <https://www.nationthailand.com/in-focus/30186981>
- Phatthanaphraiwan, S. (2025). Reciprocal relations in the Karen highlands of northern Thailand. *People and Nature*, 7(5), 1099-1110. <https://doi.org/10.1002/pan3.10634>
- Rerkasem, K., & Rerkasem, B. (2009). *Indigenous knowledge, customary use of natural resources and sustainable biodiversity management: Case study of Hmong and Karen communities in Thailand*. Center for Agricultural Biotechnology, Chiang Mai University.
- Rigg, J. (2014). *More than the soil: Rural change in Southeast Asia*. Routledge.
- Shao, N. R. (2022). Riding on waves and filling the cracks: Toward an inclusive and sustainable Sino-Thai longan supply chain management in Upper Thailand. *Chiang Mai University Journal of Social Science and Humanities*. <https://doi.org/10.12982/CMUJASR.2022.008>
- Sitthikriengkrai, M., Gyoryary, S., International Rivers, & Center for Ethnic Studies and Development. (2025). *Karen livelihoods in the area of the Bhumibol Reservoir inflow augmentation project from the Yuam River to the Bhumibol Reservoir: People's environmental impact assessment report*. Faculty of Social Sciences, Chiang Mai University. [https://docs.nhrc.or.th/view\\_book/ID/14284/](https://docs.nhrc.or.th/view_book/ID/14284/)

- Tankam, S., & Tan, C. C. (2017). Practice-based view (PBV) of the longan industry in Chiang Rai. *Management*. [https://www.researchgate.net/publication/371665626\\_PRACTICE-BASED\\_VIEW\\_PBV\\_OF\\_THE\\_LONGAN\\_INDUSTRY\\_IN\\_CHIANG\\_RAI](https://www.researchgate.net/publication/371665626_PRACTICE-BASED_VIEW_PBV_OF_THE_LONGAN_INDUSTRY_IN_CHIANG_RAI)
- Wang, X., Liu, X., Huang, R., & Sengmar, W. (2023). The Thai-Chinese longan trade: Positionalities, perceptions, and power of longan middlemen. In Z. Liang & W. T. Wattanapong (Eds.), *Sino-Thai explorations: Transnational flows, reconnection and collaborative development in the post-pandemic era* (pp. 67-84). Chiang Mai University Press.
- Yano, M., Sugiyama, N., Thunyarpar, T., & Yamaki, Y. T. (2002). Problems confronting longan growers in northern Thailand. *Japanese Journal of Tropical Agriculture*, 46(2), 72-76.

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## Land Use Change and Shifting Livelihood Strategies in Mae Ngud Village, Northern Thailand

*Zhou Yibing and Ma Shuyi*

### **Abstract**

This study explores the dynamic processes of land use change and shifting livelihood strategies among the ethnic Karen villagers of Mae Ngud Village in northern Thailand, a community with a unique context shaped by environmental and governance-related changes. Against the backdrop of the construction of the Bhumibol Dam and its environmental and sociopolitical consequences, this paper examines how villagers have flexibly adapted their livelihood strategies. Drawing upon ethnographic data including field interviews and observations, the research analyzes the interplay between natural disasters, state interventions, and market forces, together constituting the primary drivers of village transformation. This chapter details the transformation of the villagers' livelihoods from traditional subsistence rice cultivation toward market-oriented cash crops, alongside the evolution of supplementary livelihood practices. It highlights villagers' active agency in adapting land use and subsistence strategies, while also noting persistent challenges, including land insecurity, environmental degradation, and market risks.

**Keywords:** mountains and basins, land use, livelihood strategies, Karen, northern Thailand

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### Introduction

Globally, the socio-environmental impacts of large-scale infrastructure projects—particularly dams—on rural indigenous and ethnic communities has emerged as a critical area of concern. While such projects aim to advance macro-level development goals such as energy security and water management, they often disrupt local ecosystems, restructure economic systems, and erode traditional livelihoods (Sitthikriengkrai et al., 2025). Analyzing how local communities respond and adapt to such environmental and policy-driven changes is essential for understanding human-environment interactions, rural development trajectories, and the resilience of marginalized groups. Mae Ngud, an ethnic Karen Pwo village in Chiang Mai, Thailand, serves as a paradigmatic case. The community's land use and livelihoods underwent dramatic shifts following the 1965 construction of the Bhumibol Dam, a concrete arch dam built on the Chao Phraya River in Thailand's Tak Province.

A livelihood is defined as “the capabilities, assets (including both material and social resources), and activities required for a means of living” (Borras, 2010). This study centers on exploring livelihood strategies, the diverse practices households use to secure subsistence, including agriculture, animal husbandry, handicrafts, natural resource gathering, social network maintenance, and cultural tradition transmission. When facing environmental pressures or external shocks, adapting and diversifying these strategies becomes essential for a community's survival and resilience. This research explores how Mae Ngud's villagers sustain their livelihoods through diversified economic activities, social networks, and cultural practices amid altered land use practices. It emphasizes their flexibility in navigating local environmental and institutional changes, framing livelihood strategies as dynamic adaptive responses rather than static patterns of practices. This perspective enables us to move beyond approaching villagers as passive recipients of impact by highlighting community agency and the ability to adjust flexibly.

### Overview of Mae Ngud Village

Mae Ngud is primarily inhabited by ethnic Pwo Karen villagers. The Karen are one of Southeast Asia's largest indigenous groups, with a significant

population living in the Thai highlands. The Pwo Karen sub-group is estimated to comprise around 80,000 individuals in northern Thailand (Dawkins & Philipps, 2009).

The majority of village residents belong to this sub-group, with a small number of northern Thais (known as *Khon Mueang*)—said to be earlier settlers—living alongside them (Village Headman Phra, pers. comm., August 2025). The Karen Pwo community originally migrated from Burma/Myanmar during the reign of Thailand’s King Rama V (1868–1910). Today, the village has 191 registered households, though only 147 are occupied, with a total population of 560 (270 women, 290 men) (Village Administrative Office, 2024). It is situated 20 kilometers from the nearest town and is named for the Mae Ngud River, a tributary of Chiang Mai’s Ping River that flows into the Bhumibol Dam. Historical records and testimonies of elders confirm the village has existed in the area for approximately 100 years (Elder Saw, pers. comm., August 2025).



Fig. 1: The Ping River, Chiang Mai’s largest river (*photo by the authors*)

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The village has endured two major relocations. The first occurred around 1974, triggered by severe flooding following the construction of the Bhumibol Dam. Rising waters inundated the original settlement, forcing residents to move 200 meters uphill. The second relocation, driven by the cultural beliefs of the villagers, took place just five years later in 1979: the 1974 site was located opposite to (and at a higher elevation than) a cemetery for infants, to which villagers attributed several unexplained illnesses and deaths in the community. To avoid misfortune, they moved again, settling at the current location, two kilometers from the original site (Phra, pers. comm., August 2025).



Fig. 2: Wooden residential homes in Mae Ngud (*photo by the authors*)

Importantly, the site where the community resettled in 1979 and currently reside is within the boundaries of a designated national forest reserve (i.e., a forest area managed and protected by the state). Therefore, the villagers lack formal land titles. The current residential area covers 180 *rai* (71 acres), with an additional 900 *rai* (356 acres) used for agriculture. Under Thailand’s “land for use only” policy, villagers face persistent legal uncertainty over their land

rights, even after investing in infrastructure (e.g. roads, housing, etc.) and perennial crops (e.g. longan trees). Without formal ownership rights, their homes and livelihoods remain vulnerable to policy shifts or state enforcement, trapping them in a condition of long-term insecurity (see Rigg, 2019, p.140).

Traditionally, the livelihoods of the Karen relied on shifting cultivation, rice farming, and forest resources, both for subsistence and cultural practices (Cramb, 2009). Their relationship with the Thai state has long been fraught, marked by marginalization of the ethnic group, land tenure disputes, and coercive implementation of development and conservation policies (Bunditdertsakul, 2019). This context shapes Mae Ngud's specific challenges: the state's historical suspicion of ethnic Karen communities exacerbates their land insecurity and forces them to rely on informal networks for their survival.

### **The impact of the Bhumibol Dam**

Completed by the Thai government in 1964, the Bhumibol Dam began reshaping Mae Ngud's environment and livelihoods the following year. The Mae Ngud River, once critical for local rice farming, suffered severe siltation due to dam-induced flooding. Annual floods occur regularly from September to November, lasting three-to-four months (Kaew, pers. comm., August 2025). Repeated major floods since 1965 caused rice fields to be buried under sediment, rendering them uncultivable. Additionally, sediment accumulation raised the riverbed, causing acute water shortages in the dry season, further undermining agricultural productivity.

Beyond environmental changes, the dam became a tool for state intervention in land ownership and use. For example, after the 2011 floods, Thailand's Water Conservancy Bureau provided partial compensation to affected villagers but subsequently reclaimed ownership of submerged land. While villagers retained usage rights, they were prohibited from growing cash crops (e.g. perennial fruit trees) and restricted to short-term subsistence crops (e.g. vegetables) (Somchai, pers. comm., August 2025). This "compensation-then-confiscation" pattern, paired with strict land use limitations, illustrates how the state has increased its involvement in resource governance alongside

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disaster relief measures. The dam's construction has thus become associated with the gradual expansion of state power in the village.



Fig. 3: The Mae Ngud riverbed, filled with sediment (*photo by the authors*)

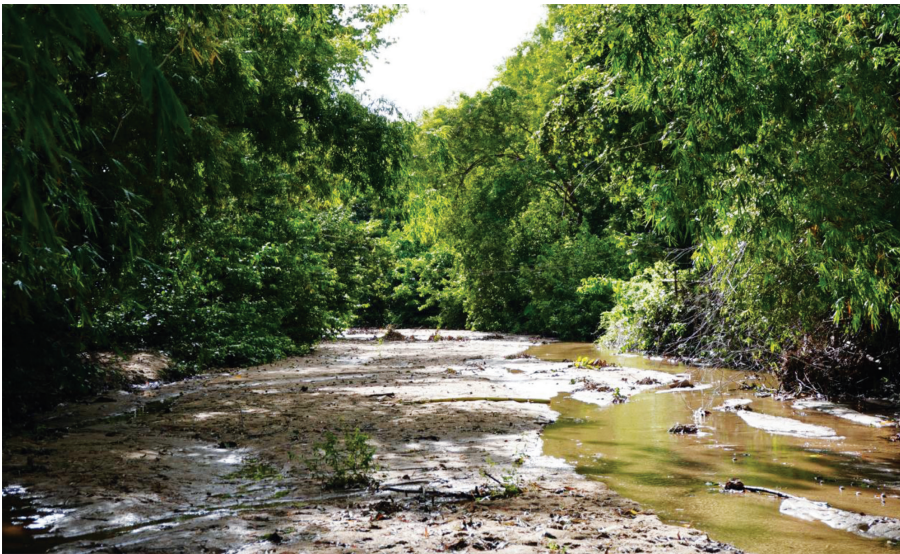


Fig. 4: A section of the Mae Ngud River (*photo by the authors*)

Mae Ngud's location and history make it a valuable case for studying socio-environmental transformation. The village's history and contemporary situation illustrate how the Karen, traditionally dependent on upland farming and forests, have adapted to the dam-altered local environment. The case also reveals multidimensional interactions between natural disasters, state policies, and market forces, which collectively shape local adaptations. Importantly, it challenges stereotypes of indigenous "mountain peoples" or "hill tribes" as isolated, static, or passive victims. Instead, it highlights their dynamic agency, innovative responses, and flexible engagement with external systems amid socio-environmental change.

### **Research questions**

1. Against the backdrop of the construction of the Bhumibol Dam and resulting environmental impacts, how have local Karen villagers in Mae Ngud Village flexibly adjusted their land use and livelihood strategies?
  - 1.1. What factors have been significant in driving changes in land use and livelihood strategies in Mae Ngud Village?
  - 1.2. What new challenges are local Karen villagers currently facing in adjusting their land use and livelihood strategies?

### **Methods**

To examine the processes, influencing factors, and challenges associated with land use transitions and shifts in livelihood strategies in Mae Ngud, this study employs a combination of qualitative research methodologies.

### ***Interviews***

The interview method served as the core approach for obtaining data for this research. Through face-to-face interviews with villagers, we gained in-depth insights into the historical development of their land use and livelihood strategies, decision-making processes, and challenges. Key interviewees included the village head (Phra), a village elder (Saw), and senior villagers with extensive agricultural experience (e.g. Kaew and Somchai). These individuals possess comprehensive knowledge of village history, land policies,

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and current agricultural practices. In-depth discussions with them clarified the context of land use changes, the implementation of national policies at the village level, and community-level livelihood decision-making. Additional interviews were conducted with villagers of diverse ages, genders, and livelihood types. We sought to understand the distinct experiences and perceptions of different villagers regarding land use and livelihood transitions. The interviews primarily employed a semi-structured approach. A pre-designed interview outline covered themes including historical land use patterns, reasons for adjusting livelihood strategies, challenges encountered, and impacts of policies and market forces. Questions were flexibly adjusted during the interviews based on actual circumstances, encouraging villagers to share personal experiences and perspectives. Pseudonyms have been used throughout this chapter to protect the privacy of all interviewed villagers.



Fig. 5: Team members conducting interviews (*photo by the authors*)

### *Participatory observation*

Observation conducted at the village field site yielded vivid, tangible research data by immersing researchers in the village's daily life and agricultural production activities. During the seven-day fieldwork period, we visited areas

along the Mae Ngud River (witnessing silt-covered land) and longan orchards (observing management practices firsthand). This allowed us to understand labor distribution and the spatial organization of land use.

Throughout seven days of close interaction, we gradually established some trust with villagers, facilitating the identification of information difficult to obtain through formal interviews, such as regarding oral agreements on land transfers between family members and villagers' private attitudes toward national land policies. Detailed field notes were maintained throughout, covering descriptions of the landscape, villagers' behaviors, dialogue content, and researcher reflections, providing empirical evidence for our analysis.



Fig. 6: Observations in the village (*photo by the authors*)

### *Feedback*

To ensure the integrity and plausibility of preliminary research conclusions, this study employed a feedback methodology. Specifically, we held in-depth discussions with selected villagers (the village chief, two elders, and three interviewed residents) regarding our preliminary findings, soliciting their input for clarification and refinement. During the latter stages of fieldwork, we organized a small briefing session to outline preliminary conclusions on

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land use transitions and livelihood adjustments. Villagers confirmed whether these conclusions aligned with their actual experiences, enabling revisions to discrepancies (e.g. correcting the timeline of mango cultivation, which was initially misdated). Additionally, for critical issues such as land tenure and market risks, we actively sought villagers' perspectives and proposed solutions, ensuring findings better reflected the village's actual circumstances.



Fig. 7: Villagers providing feedback to researchers (*photo by the authors*)

### Findings and discussion

This section presents the core findings of the study, focusing on how the Karen villagers of Mae Ngud Village have developed flexible land use strategies to adapt to the environmental and institutional changes following the construction of the Bhumibol Dam. Findings are organized around two key themes: shifts in crop cultivation (from subsistence to cash crops) and spatial adjustment of land use (from temporary local plot utilization to external land leasing).

## Flexible land use strategies

### *Shift in crop cultivation: From rice dominance to cash crops*

Prior to the dam's construction, rice was the village's primary crop. Villagers relied on the Mae Ngud River for irrigation, growing rice mainly for subsistence while cultivating dry land rice and peanuts on plots further from the river to supplement food needs. However, after the dam's completion in the mid-1960s, frequent flooding and sedimentation damaged rice fields, forcing villagers to adjust their crop structure.

In the early stages of flooding, the villagers attempted to repair their rice fields, but frequent inundation rendered these efforts ineffective. Some villagers shifted to growing short-term crops such as peanuts and vegetables. Peanuts require no irrigation (relying solely on rainwater) and thrive in the sandy soil formed by flood-deposited silt, making them a primary crop at the time. For example, Kaew's father cleared over 10 *rai* (four acres) of land to cultivate peanuts, selling the harvest to Thai merchants in nearby Nan Province to partially marketize the family's livelihood (Kaew, pers. comm., August 2025). Concurrently, villagers grew vegetables like edamame (immature soybeans), pumpkins, and eggplants primarily for household consumption, with small surpluses exchanged or sold.

After 2000, villagers completely abandoned rice cultivation along the Mae Ngud River (Sitthikriengkrai et al., 2025, p.140). Simultaneously, they gradually shifted from short-term crops to cash crops such as mangoes and longan. Between 2007 and 2008, attracted by high market prices for mangoes, some villagers began experimenting with mango cultivation on higher ground near the river. However, a major flood in 2011 submerged all mango trees, causing them to die. Since then, villagers have ceased mango cultivation, shifting their focus to longan as the primary cash crop, and planting trees in higher, less flood-prone areas (Somchai, pers. comm., August 2025).

The promotion of longan cultivation stems partly from technical expertise and market insights villagers gained while working for Thai farmers, and partly from cooperative support. The local agricultural cooperative previously organized training sessions for four or five villagers in longan cultivation techniques, subsequently rolling out the practice villagewide (Anan, pers.

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comm, August 2025). Today, longan is the village's primary cash crop, with most villagers owning dedicated plots.



Fig. 8: Longan plantation in Mae Ngud (*photo by the authors*)

Additionally, some villagers have experimented with other cash crops like corn. For instance, one household leased 80 *rai* (31.6 acres) of land near the Ping River from Thai farmers specifically for corn cultivation, with the corn primarily exported as animal feed. In the previous two years, favorable corn prices enabled this household to earn up to 300,000 Thai baht (THB) (US\$9,135) after deducting 100,000 THB (US\$3,045) in labor costs (Preecha, pers. comm., August 2025).

Mae Ngud's transition from rice to short-term crops and then to cash crops demonstrates the villagers' flexibility in adjusting their land use practices in response to environmental changes and market conditions. This adjustment is both a forced adaptation to flood-induced land changes and a proactive response to market-oriented agriculture.

*A spatial expansion strategy for land use: Historical temporary local plot utilization and current external land leasing*

Faced with arable land scarcity due to flooding and national policy restrictions (e.g. designation as a forest conservation area), Mae Ngud villagers historically adopted a dual strategy of utilizing local, temporarily open plots and leasing external agricultural land to optimize land utilization. During the initial stages of flooding (following relocations in the 1970s), some villagers utilized scattered open plots to cultivate vegetables, short-term grains, and other subsistence crops after their original farmland was submerged. For example, one household used unoccupied open spaces near the village to grow supplementary crops, while also gathering mushrooms, bamboo shoots, and other edible forage in nearby forests to supplement their livelihood (Saw, pers. comm., August 2025). This use of available local plots of land followed a temporary, low-intensity model: villagers rotated between small scattered plots each year, leaving field fallow and completing a cycle every five years that maintained soil fertility without permanent reclamation.

With the strengthening of national forest conservation policies (e.g. stricter enforcement of the National Reserve Forest Law) and challenges like transportation difficulties (relying on cattle to transport crops) and high labor input, temporary local plot utilization has gradually become unfeasible. Most previously used plots have either been repurposed for cattle grazing or have reverted to natural vegetation. Presently, leasing external land owned by others has become the preferred choice for most villagers. Leased lands offer stable water sources and suitable growing conditions, making them ideal for cultivation of rice, which is the villagers' primary staple food. The land is leased primarily from local Thai farmers in neighboring areas or Karen communities elsewhere, with arrangements relying on verbal agreements and trust among relatives and friends rather than formal contracts (Phra, pers. comm., August 2025).

This evolving spatial strategy, shifting from temporary use of local plots to external land leasing, enables villagers to leverage the resource advantages of different locations. External land leasing ensures food security through rice cultivation, while nearby open areas now support supplementary activities

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such as cattle grazing and foraging, demonstrating villagers' adaptive capacity in the context of limited local land resources.

### *Informal land transfer and flexible property rights management*

Due to Thailand's legal system and the village's land tenure status with lack of formal ownership, land transfers in Mae Ngud Village primarily occur through informal channels. Villagers safeguard their land use rights and livelihood stability via flexible strategies. Within the village, land transfers occur mainly among relatives and friends, based on verbal agreements without official registration. Transfer types include sales and leases. Land prices range from approximately 30,000 to 40,000 THB per *rai* (0.4 acre) (around USD\$850 to \$1,150 per *rai*, or about USD\$2,150 to \$2,900 per acre), while longan orchard land costs around 100,000 to 200,000 THB per *rai* (around USD\$2,850 to \$5,700 per *rai*, or roughly USD\$7,200 to 14,400 per acre). Land leasing is predominantly short-term for seasonal crops and flexible; some cases require no payment. For example, one villager cultivates his aunt's one-*rai* (0.4 acre) plot rent-free since she works outside of the village (Anan, pers. comm., August 2025). This informal system relies on community trust. Despite lacking legal safeguards, it has maintained high stability within the cultural context, resulting in few land disputes.

Although villagers do not hold formal land ownership certificates, they possess lease certificates known as *Sor Por Kor* 4-01<sup>1</sup> and land farmer certificates ("green books"), which grant conditional land use rights. Villagers in the cooperative can use lease certificates to apply for loans for agricultural production (e.g. purchasing longan saplings or fertilizer). The land area registered on farmer certificates determines loan amounts—larger holdings correspond to higher limits (Phra, pers. comm., August 2025). While these documents do not confer ownership and carry policy change risks, they provide some stability for land use rights. The cooperative's intermediary role also mitigates livelihood risks from uncertain land tenure.

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1 *Sor Por Kor* titles provide rights to use land for agricultural purposes but do not grant full ownership. Use of the land is restricted to farming, and sale or transfer is allowed only under specific conditions.

These informal transfer and ownership management strategies represent a practical compromise between the national legal system and village realities. They address the lack of formal ownership by establishing local arrangements for land allocation and use, helping to support livelihood stability under conditions of insecure tenure.

### **Diversified supplementary livelihood strategies**

To cope with land scarcity and market risks, Mae Ngud villagers have developed diversified supplementary livelihoods which complement their primary agricultural activities of cash crop cultivation and basin rice leasing.

#### *Livestock farming*

In the past, villagers kept water buffaloes for ploughing rice paddies. However, as paddies disappeared due to flooding and siltation, the local buffalo population dwindled. Only one oxcart remains in use in the village today (Saw, pers. comm., August 2025). Farming has shifted to mechanization, as hardened soil makes livestock ploughing difficult. Presently, villagers primarily rear yellow cattle for sale as they rarely consume beef themselves. During the rainy season, cattle are driven into surrounding forests to graze freely; owners check on them every four to five days. The cattle recognize their owners' voices and gather when called, allowing owners to count them and search for strays. Yellow cattle are reared for four to five years before sale, although prices have declined, with a single animal now fetching 2,000 to 3,000 THB (USD\$64 to 96) (Taksin, pers. comm., August 2025). During the dry season (when forest forage is scarce), cattle are confined in the village (e.g. small paddocks by the river) and fed hay. Some households pen cattle year-round to avoid forest grazing troubles.

#### *Forest gathering*

In the past, villagers frequently hunted in forests beyond the sacred village forest and burial grove area. However, dwindling wildlife populations, time limitations, and protected area designations have reduced hunting activities. Nevertheless, the forest remains a vital livelihood source, providing

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mushrooms, medicinal herbs, ant eggs, honey, taro, and bitter eggplant (Saw, pers. comm., August 2025).

Mae Ngud has two principal forest zones: 1) The sacred village forest, revered as a home to forest guardian spirits protecting the community, where felling trees or removing items is strictly forbidden; and 2) The communal forest, a “public” area where all villagers are able to gather daily consumables (vegetables, medicinal herbs, small wild animals) and graze cattle during the rainy season (Phra, pers. comm., August 2025). Villagers from other settlements may collect resources here but cannot fell trees. Local residents requiring tree felling must submit applications to the Thai Forestry Department. This sustained forest utilization amid restricted access and protected area policies highlights the forest’s important role in village livelihoods.



Fig. 9: Weaving traditional Karen textiles (*photo by the authors*)

### *Handicrafts*

Originally, villagers cultivated cotton, spun yarn, and wove cloth using plant-based dyes. Today, most purchase ready-made yarn or use chemical dyes, even though home-dyed cloth remains thicker and traditional waist looms are still used (Mali, pers. comm., August 2025). During the agricultural off-

season or when elders retire from farming, they weave cloth at home to make garments and bags. These serve household needs and are also sold at local markets.

With the rise of longan cultivation, basket weaving has emerged as a new craft. Noticing the village's extensive longan orchards, residents began crafting baskets for sale to growers as containers and packaging for fruit. This supplementary craft provides additional income and demonstrates village adaptability to new agricultural demands.

### **Drivers of changes to land use and livelihood strategies**

The transformation of land use and livelihood strategies in Mae Ngud Village is influenced by the interplay of three key factors: Thai state policy adjustments, ecological disaster impacts, and market influences.

#### *Thai policy adjustments*

Thailand's national land policies and agricultural management frameworks shape the village's land use and livelihoods, primarily through two dimensions: land tenure demarcation and agricultural production organization.

Through "forest protection zones" and compensation-land ownership policies, the government has directly altered the village's land tenure structure. In 1941 (B.E. 2484), Thailand's Protected Areas Act established a legal foundation for land demarcation. When the Mae Ngud community relocated in 1979, the new site became part of a national forest reserve and villagers lost ownership rights, retaining only usage rights. Following the 2011 floods, the Water Resources Department compensated villagers for submerged mango trees but reclaimed land ownership; villagers could continue using the land but were prohibited from cultivating cash crops, further restricting control over land use. Additionally, Thailand's complex land title system leaves villagers unable to obtain formal titles, confining them to informal possession documents, prolonging land use instability and hindering long-term investments (see Rigg, 2019, pp.139-140).

Through cooperative promotion, the government manages and guides village agricultural production, influencing livelihood decisions. After

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cooperatives were established in 1977 (B.E. 2520), land ownership boundaries were clarified, prohibiting land reclamation and ending the traditional “whoever reclaims owns” pattern. On one hand, cooperatives guided crop structure adjustments via loans and technical training (e.g. encouraging cultivation of peanuts, chili peppers, and later longan); on the other hand, they used a “pay-as-you-go” model for equipment such as water pumps to address funding shortages. They also strengthened control through loan interest collection and meetings (Phra, pers. comm., August 2025). These state policy adjustments drove governance-related shifts in land use and livelihoods, integrating the village into the national agricultural and land management system.

### *Ecological disaster impact*

The construction of the Bhumibol Dam contributed to severe flooding in the village, serving as the direct ecological catalyst for land use and livelihood shifts. Disasters degraded land conditions and undermined traditional subsistence foundations.

After the dam’s completion, frequent flooding played a role in Mae Ngud River siltation, raising the riverbed. Fertile rice fields became silted, reducing soil fertility and worsening drainage, significantly constraining rice cultivation. Floods also altered land use spatial patterns, forcing two relocations. Original farmland was submerged or designated as no-cultivation zones, drastically reducing arable land. During the dry season, water shortages caused by the raised riverbed forced villagers to use pumps for irrigation, increasing production costs (Sitthikriengkrai et al., 2025).

Rice cultivation had previously been the Karen’s traditional livelihood, but floods destroyed Mae Ngud’s rice fields, threatening this way of life. Villagers lost their primary food source and related activities (e.g. rice paddy fish farming, water buffalo breeding; buffalo numbers declined as paddies disappeared) (Saw, pers. comm., August 2025). To address this crisis, they abandoned rice farming and explored new paths (leasing external land and cultivating cash crops). The catastrophic 2011 floods further destroyed mango trees, prompting a complete shift to longan cultivation on higher ground,

reshaping the spatial pattern of land use. Ecological disasters directly damaged the living environment and traditional livelihoods, forcing adaptation to post-disaster conditions.



Fig. 10: Water pumps along the Mae Ngud River (*photo by the authors*)

### *Market factors*

With Thailand's agricultural marketization, factors like crop price fluctuations and shifts in demand increasingly influenced the villagers' land use and livelihood decisions, driving the transition to market-oriented strategies. Crop price fluctuations directly impact planting decisions. Between 2007 and 2008, high mango prices prompted cultivation; however, the 2011 floods destroyed mango trees, and subsequent price declines led villagers to abandon mangoes for longans. Shifting demand and expanded sales channels (e.g. the 2007 Thailand-China Free Trade Agreement on longan exports) provided more stable market opportunities. Today, villagers sell longan via intermediaries or trading groups, enhancing market engagement (Anan, pers. comm., August 2025).

Additionally, villagers gained exposure to external markets through their labor outside of the village (e.g. cultivating longan for Thai employers,

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participating in Royal Projects<sup>2</sup>), acquiring market knowledge and access to new sales channels. This facilitated agricultural marketization, establishing a “market information-cultivation decisions-sales” cycle despite price volatility risks (Preecha, pers. comm., August 2025). Market factors drove the shift from traditional subsistence to market-oriented agriculture, serving as a key economic driver of transformation.

### **Future challenges in land use and livelihood strategies**

#### *Land ownership uncertainty*

Lack of clarity regarding land ownership is the most fundamental challenge directly threatening long-term livelihood stability in Mae Ngud Village. It manifests as no ownership rights and vulnerable usage rights subject to policy changes. As village land is part of a national forest reserve, villagers only have usage rights, making long-term land investments risky. Despite spending on longan cultivation and water conservancy, they face significant losses with little compensation if policies change (e.g. land reclamation for other purposes).

Without ownership, villagers cannot use land as collateral for bank loans, but only rely on small cooperative loans. This limits the scale of agricultural investment (e.g. inability to expand longan areas), hindering livelihood development. Stricter forest reserve management or land rights certification requirements may impose stricter usage restrictions in the future, potentially including forced relocation—the government previously proposed resettling the villagers to a nearby area, but shelved the plan due to opposition (Phra, pers. comm., August 2025). Uncertainty regarding state policy prevents long-term land use and livelihood planning, hindering efforts toward sustainable development.

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2 Royal Projects are development initiatives in rural ethnic communities initiated by the Thai monarchy, with the aim of improving opportunities and livelihoods, reducing poverty, and protecting the environment.

*Frequent natural disasters and large-scale infrastructure development*

In the near future, Mae Ngud may face dual impacts from natural disasters such as flooding and large-scale infrastructure, in particular, the Yunnan-Salween River Diversion Project. With regard to natural disasters, the area is prone to flooding during the rainy season, which periodically destroys farmland, submerges crops, and washes away infrastructure. In addition, a large-scale water diversion project was proposed and officially approved by the Thai National Environmental Board in 2021. It includes the construction of a dam, water storage facilities, and a long tunnel to divert water from the Yuam River to the Bhumibol Dam reservoir. The project involves dredging and lining the Mae Ngud river course with concrete. This risks altering the river's hydrological cycle: dredging and lining reduce water retention, exacerbating dry-season drought. The diversion period (June to January) coincides with the flood season, potentially raising flood levels and submerging pumping stations/residential areas (Sitthikriengkrai et al., 2025). If longan orchards, the backbone of contemporary village livelihood, lose stable water supplies, villagers will face severe economic hardship.

The combined impact of natural disasters and the water diversion project will increase livelihood vulnerability. Without stable water and agricultural support, longan cultivation will become unsustainable, potentially triggering an income crisis in the village.

*Market volatility and risk*

As livelihoods become market-oriented, fluctuations and risks threaten stability. Villagers face volatile crop prices, unstable sales channels, and intensifying competition. Significant price fluctuations impact incomes. For longan, off-season prices can be four-to-five times higher than regular-season prices. If off-season cultivation fails (due to climate or technical constraints), incomes decline sharply; even with successful cultivation, reduced demand or high input costs may cause losses (Anan, pers. comm., August 2025). Prices are also influenced by pests and regional yields. Without mitigation mechanisms such as agricultural insurance, villagers struggle to withstand volatility.

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Sales channels remain limited, with villagers relying on intermediaries and local markets, but lacking direct access to external wholesale markets. This weakens bargaining power. For example, intermediaries suppress purchase prices, and villagers have no alternative but to accept (Preecha, pers. comm., August 2025). Expanding longan cultivation in neighboring villages intensifies competition, further lowering prices. Additionally, unstable off-season longan yields and crop quality prevent secure purchase agreements, leaving villagers without price protections and vulnerable to market volatility.

### **Discussion: Adaptive livelihood strategies under spatial and legal constraints**

The case of Mae Ngud reveals that local villagers' adaptive strategies are shaped by external pressures, particularly legal restrictions and market pressures. As outlined above, the villagers historically used local open plot resources for low-intensity cultivation, gathering, and cattle raising. Today, however, national forest reserve policies have prohibited the clearing or cultivation of forest land. As such, their strategies now focus on basin leasing, cash crop cultivation, and supplementary livelihoods such as forest gathering and handicrafts.

### *Links to agricultural transition theory*

Mae Ngud Village's livelihood transformation aligns with Jonathan Rigg's (2019) argument that Southeast Asian smallholder farmers navigate non-linear adjustments amid external dependencies. Mae Ngud villagers did not shift from subsistence rice to longan cultivation merely due to environmental pressures—they were also responding to market opportunities (China's longan demand) and cooperative support (technical training and cooperative support). This reflects how local strategies are embedded in regional agrarian change, encompassing both opportunities (stable cash crop income) and vulnerabilities (price volatility, land tenure risks).

This case challenges the stereotype of ethnic "mountain peoples" as passive recipients of external influences. Mae Ngud's ethnic Karen villagers have actively adjusted crop structures, developed informal land transfer systems, and diversified livelihoods to cope with constraints. Their agency demonstrates

that indigenous communities are not static, but rather that they actively negotiate with state policies, market forces, and environmental changes to sustain their livelihoods.

For agricultural transition research and policy formulation, Mae Ngud's situation highlights the need to acknowledge the uniqueness of communities facing specific spatial and institutional constraints. Policies should prioritize stabilizing land tenure (e.g. formalizing usage rights), improving market access (e.g. direct export channels), and enhancing disaster resilience (e.g. irrigation infrastructure) tailored to community-specific environmental, legal, and market contexts.

### **Conclusion and reflections**

This study has employed multiple qualitative approaches, including interviews, participatory observation, and feedback mechanisms to explore the land use changes and livelihood strategy adjustments of the Karen villagers in Mae Ngud. While these methods ensure richness and authenticity of the primary data to a certain extent, the fieldwork process also reveals several limitations that deserve attention, as well as suggestions for improvement in future research.

Firstly, our interviews were constrained by two key factors: language barriers and insufficient representation of interviewees. A considerable number of elderly villagers in the village only speak the Karen language, which necessitated reliance on local interpreters throughout the interview process. Despite the interpreters' familiarity with both Chinese and Karen languages and local culture, there remains a risk of information loss or misinterpretation when translating nuanced expressions, traditional concepts, or personal emotional accounts. This may have led to incomplete capture of the villagers' perceptions of land tenure, policy impacts, and cultural beliefs. Additionally, the interviewees were predominantly long-term resident villagers, such as the village head, elders, and experienced farmers. Younger workers who have left the village to seek employment were largely excluded from the interviews. As this group may hold distinct views on livelihood choices, land use, and the future development of the village, their absence resulted in a one-sided

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understanding of the community's livelihood dynamics, failing to fully reflect diverse perspectives across different age groups.

Secondly, the short duration of participatory observation restricted the depth of understanding of the village's agricultural production and daily life. Agricultural activities in Mae Ngud, such as longan cultivation, maize planting, and livestock rearing, are highly seasonal. Our seven-day fieldwork period was insufficient to capture the entire agricultural cycle, including key stages such as longan pruning, fertilization, off-season cultivation, and maize sowing and harvesting. Consequently, we could not observe the specific techniques, labor allocation, and challenges encountered in different production phases. For example, we were unable to explore the mechanisms of off-season longan cultivation, an important part of the villagers' cash crop strategy, and the specific impacts of climate factors on yields and quality. Moreover, our relatively short stay in the village limited our ability to witness subtle changes in villagers' livelihood activities and social interactions over time, making it difficult to grasp the dynamic evolution of informal land transfer practices and community trust networks.

Thirdly, there was a gap in the exploration of the influence of traditional culture and beliefs on land use and livelihood decisions. The Karen people have a profound cultural heritage and unique beliefs, such as the worship of forest spirits in sacred guardian forest areas and the taboos related to burial grounds that have driven past village relocations. However, due to cultural differences and limited research focus, we did not conduct in-depth investigations into how these traditional beliefs have shaped the villagers' land use behaviors and livelihood choices. For instance, the role of guardian spirit ceremonies in maintaining ecological balance and community cohesion, and how such cultural factors interact with policy and market forces to affect the villagers' adaptive strategies, remain understudied. This omission limits the comprehensiveness of the research in interpreting the sociocultural dimensions of livelihood adaptation.

To address these limitations, future research should be strengthened in the following aspects: Firstly, by extending the fieldwork duration to at least one full agricultural cycle to systematically observe seasonal agricultural

activities and capture the dynamic changes in livelihood strategies. Secondly, by expanding the scope of interviewees to include younger workers, women, and marginalized groups represented in the village, and using multi-language recording tools and cross-validation methods to reduce the impact of language barriers. Thirdly, by collaborating with scholars of the local culture or community leaders to conduct in-depth research on the Karen's traditional beliefs, cultural norms, and their interactions with land use and livelihoods, thereby enriching the cultural dimension of the research.

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### References

- Biswas, C. (2022). Local protest, global solidarity: Why is Mae Ngud's Karen community restive? *Counterinterview*. [https://www.researchgate.net/publication/364352909\\_Local\\_protest\\_global\\_solidarity\\_why\\_is\\_Ban\\_Mae\\_Ngud's\\_Karen\\_community\\_restive](https://www.researchgate.net/publication/364352909_Local_protest_global_solidarity_why_is_Ban_Mae_Ngud's_Karen_community_restive)
- Borras, S. M. (Ed.). (2010). *Critical perspectives in rural development studies*. Routledge.
- Bunditderdsakul, L. (2019). Local context, national law: The rights of Karen people on the Salween River in Thailand. In *Knowing the Salween River: Resource politics of a contested transboundary river* (pp. 141-158). Springer International Publishing.
- Cramb, R. A., Colfer, C. J. P., Dressler, W., Laungaramsri, P., Le, Q. T., Mulyoutami, E., & Wadley, R. L. (2009). Swidden transformations and rural livelihoods in Southeast Asia. *Human Ecology*, 37(3), 323-346. <https://doi.org/10.1007/s10745-009-9241-6>
- Rigg, J. (2019). *More than rural: Textures of Thailand's agrarian transformation*. University of Hawaii Press.
- Sitthikriengkrai, M., Gyoryary, S., International Rivers, & Center for Ethnic Studies and Development. (2025). *Karen livelihoods in the area of the Bhumibol Reservoir inflow augmentation project from the Yuam River to the Bhumibol Reservoir: People's environmental impact assessment report*. Faculty of Social Sciences, Chiang Mai University. [https://docs.nhrc.or.th/view\\_book/ID/14284/](https://docs.nhrc.or.th/view_book/ID/14284/)



# MAE THA

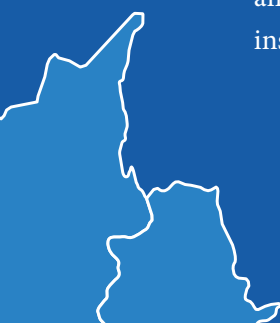
Mae Tha is a rural village located in Chiang Mai Province, northern Thailand, nestled along the Mae Tha River in the foothills of the Thai highlands. Historically an agricultural community, Mae Tha's farming practices like those of much of rural Thailand were deeply affected by the rise of the Green Revolution in the 1960s and the spread of contract farming in the decades that followed. This period marked a dramatic shift from traditional subsistence agriculture to monoculture cash crops, including tobacco and baby corn, often under contracts with large agribusinesses.



While contract farming initially offered a sense of stability by guaranteeing market access and providing inputs such as seeds, fertilizers, and machinery, it also created a dependency cycle. Small landholders faced increasing debts, as rising input costs and fixed crop prices narrowed their margins. Over time, many villagers began to express concerns over economic vulnerability, the rigidity of contract obligations, and declining health linked to chemical exposure in both farming and food consumption.

The economic crisis of 1997 acted as a catalyst for change. As trust in large-scale, profit-driven agriculture systems declined, Mae Tha farmers began to reflect on the long-term sustainability of their livelihoods and well-being. Drawing on traditional knowledge, environmental values, and the Thai King's philosophy of the "sufficiency economy," some villagers sought alternatives rooted in ecological harmony, food self-reliance, and local autonomy. These efforts were supported by NGOs such as the Earth Net Foundation and GreenNet, both of which provided training, organizational support, and market connections for organic farmers.

The transition to organic farming in Mae Tha was neither uniform nor immediate. Many farmers were hesitant due to concerns about lower yields, certification barriers, and labor intensity. However, over time, experience and research have demonstrated that organic practices—while requiring more manual labor and careful land management—result in improved soil health, lower household production costs, and greater food security. Organic farmers in the area now grow diverse crops on small plots, with significant portions reserved for family consumption—averaging over 30 percent compared to just over 20 percent under conventional systems (Pattanapant & Shivakoti, 2009). The shift has also allowed households to reduce their use of chemical fertilizers and insecticides, improving long-term health outcomes.



## SINO-THAI EXPLORATIONS

## Community Self-Organization in Agrarian Transition: A Study of Sustainable Agricultural Practices in Mae Tha

*He Jinhua and E Jilong*

### **Abstract**

This study examines community self-organization as a pathway to sustainable agriculture in the community of Mae Tha, northern Thailand. Through mixed-methods research combining interviews, participant observation, and key informant insights, we trace how villagers have transitioned from chemical-intensive monoculture cultivation to organic farming amid globalization-related pressures. Our findings reveal a multi-stage process: from informal mutual-aid networks to the creation of the formal Mae Tha Sustainable Agriculture Cooperative and the development of the youth-led Mae Tha Organic Community Enterprise. Community self-organization has emerged as a vital strategy for addressing ecological degradation, economic vulnerability, and social cohesion challenges. While NGOs such as Earth Net Foundation provided catalytic support, the transformation's driving force remained internal to the Mae Thai community, grounded in local knowledge, social capital, and intergenerational collaboration. Mae Tha's experience demonstrates that sustainable rural development depends not solely on technology or markets but fundamentally on local governance structures, collective identity, and social equity. This bottom-up model offers insights for agrarian communities navigating similar transitions worldwide.

**Keywords:** agrarian transition, sustainable livelihood, organic agriculture, community self-organization

## SINO-THAI EXPLORATIONS

### Introduction

In recent decades, agricultural transition has become a central concern in rural and development studies, particularly in Southeast Asia. The spread of chemical-intensive farming, market integration, and contract-based production has reshaped rural livelihoods, ecological conditions, and social organization in profound ways. In response, organic farming and cooperative-based models have emerged as important alternatives, offering not only environmental benefits but also new forms of collective organization and rural sustainability. At the same time, the role of young people in sustaining these alternative models has attracted increasing attention, especially in contexts where rural outmigration remains dominant.

This research was conducted as part of the 2025 Chiang Mai University-Yunnan University Sino-Thai Summer School, an interdisciplinary field-based program that brought together students and researchers from different academic backgrounds to examine rural change in northern Thailand. The summer school combined lectures, group discussions, and intensive fieldwork, encouraging participants to link theoretical debates with empirical observation. Within this framework, our research team was assigned to Mae Tha Village, a well-known hub of long-term organic farming and cooperative development in Chiang Mai Province.

Mae Tha is a large rural community located in eastern Chiang Mai Province, approximately 600 meters above sea level along the Mae Tha River. Administratively, it consists of seven smaller villages, with around 1,350 households and a population of over 4,000. More than 80 percent of Mae Tha residents are engaged in agriculture, primarily cultivating rice and bananas, which later became central to the village's organic transition. The village is accessible from Chiang Mai city by road, making it relatively well connected to regional markets while remaining embedded in a predominantly rural, agricultural landscape.

Drawing on interviews, participant observation, and site visits conducted during the period of field research, this chapter argues that Mae Tha's organic farming system is sustained through a dual organizational structure. On the one hand, the local agricultural cooperative provides a stable foundation for

agricultural production, collective decisionmaking, and community norms. On the other hand, youth-led initiatives—particularly company-based forms of organization—connect this foundation to markets, branding, and external networks. Together, these two layers form a mutually reinforcing system that allows organic farming to persist and adapt under changing economic and legal conditions.

The remainder of this chapter is structured as follows: the next section briefly outlines the emergence and functioning of the Mae Tha Sustainable Agriculture Cooperative, focusing on its organizational logic and governance practices. The following section examines how young people organize themselves through the Mae Tha Organic Community Enterprise and related initiatives, highlighting generational dynamics and new forms of economic engagement. The final section reflects on how the dynamic interactions between cooperative structures and youth-led organizations offer broader insights into rural sustainability and agricultural transition in northern Thailand.

### **Methodology**

The majority of our data for this research was collected from interviews with villagers and direct observation. Since none of us speak Thai, we worked with a Thai-Chinese translator throughout our fieldwork period. When interviewees could speak English, we communicated directly in English. However, in most cases, our translator would interpret our questions from Chinese into Thai and then translate the villagers' responses from Thai back into Chinese. This language support ensured that our communication was accurate and that we could collect reliable data. As part of the fieldwork process, we conducted a total of 15 semi-structured interviews with villagers in Mae Tha. Interviewees varied in age, gender, and occupation, and included cooperative leaders, former and current village heads, organic farmers, market managers, tourism operators, café staff, and other community members involved in different aspects of village life.

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Table 1: Interviewee information

No.	Name	Age	Gender	Occupation
1	Ann	35	male	host; committee member of the cooperative
2	Laung	60	male	former headman of Mae Tha community
3	Per	40	male	current cooperative headman
4	Fah	30	female	tourism operator in Mae Tha
5	Mam	60	female	staff of a local coffeeshop
6	Tungting	30	female	runs a coffee shop in another village; accounting
7	Namtan	26	female	runs a coffee shop in another village
8	Fo	50	male	forest ranger
9	Do	35	male	market manager for agricultural products
10	Ferd	24	male	sorts vegetables for the cooperative
11	Eud	50	female	works with an NGO

Many of the interviews were facilitated by our local host Ann, a committee member of the cooperative, and were conducted in his large, open dining room. This setting allowed us to quickly build rapport and gain an initial understanding of everyday social interactions in the community. At the early stage of fieldwork, this approach was particularly helpful in enabling access to key local actors and in situating our research within existing social networks. At the same time, this interview strategy also introduced certain limitations. Because many interviewees were introduced to us via Ann's personal and professional networks, a significant proportion of them were not directly engaged in agricultural planting, but instead worked in areas such as community management, cultural tourism, market coordination, and service-related activities. While this provided valuable insights into organizational structures, market relations, and non-farming livelihood strategies, it also meant that perspectives from full-time farmers were relatively less represented in the initial stage of data collection.

In addition to interviews, we conducted participant observation. This method requires researchers to immerse themselves in the natural setting or community they are studying, actively participating in daily activities, social interactions, and events while systematically observing, recording, and reflecting. We joined villagers in various aspects of organic farming and daily life, building relationships and experiencing the context in which they work and live. This allowed us to better understand their perspectives on organic farming, the cooperative, and Mae Tha Organic. Each evening after fieldwork, we documented our observations in detail, paying attention to people, events, interactions, and patterns within the village. This ongoing process helped us capture both the cultural meaning and practical realities of life in Mae Tha.

### **Research Questions**

1. How did villagers in Mae Tha begin organizing their community around organic farming and collective agricultural practices?
2. What is the role of the cooperative?
3. How do young people in the community organize themselves?

### **Findings and discussion**

During our time in the field, we divided the agricultural transition of the Mae Tha community into three stages. Before the 1960s, agriculture in Mae Tha was primarily subsistence-based and had little connection with the outside world. From the 1960s to 1986, influenced by agricultural globalization, Mae Tha became more connected to external markets and participated in the Green Revolution and contract farming. Since 1986, Mae Tha has been developing organic agriculture, a practice that continues to the present. Throughout this period of agricultural transition, various self-organized groups have emerged among the villagers, playing significant roles in the transformation process.

In this section, we will examine the roles of self-organized groups established in different periods in facilitating the community's agricultural transition. Based on our investigation, the most significant self-organized groups to have emerged during this transition are, in chronological order: the Mae Tha Institution, the Mae Tha Sustainable Agriculture Cooperative,

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and Mae Tha Organic Community Enterprise. These three associations were founded by villagers from different generations. According to the villagers' own classification, the earliest pioneers of agricultural transition are referred to as the first generation, who belong to the older cohort. The second generation consists of villagers with foundational knowledge (e.g. in finance). The third generation possesses more diverse expertise, such as in construction and tourism management. During our time in the field, we observed some overlap between the second and third generations, and therefore we group them together as the younger generation. The fourth generation refers to the new cohort who will inherit community organic agriculture in the future. In the following sections, we will discuss the three aforementioned self-organized initiatives in sequence, focusing on how they were established, by whom, and how they contributed to the agricultural transition in Mae Tha, with the aim of providing a typological reference for similar communities undergoing agricultural transition.

### **From groups to informal organization: Mae Tha Institution**

Agricultural practices in Mae Tha have been profoundly influenced by the Green Revolution and contract farming. Under this dual influence, locals transitioned from traditional subsistence agriculture to monoculture farming. Over time, the practice of monoculture cultivation led to a series of adverse effects, including villagers falling into debt, deteriorating health, and increased ecological fragility, which prompted the villagers to initiate self-organized experimental practices.

The Green Revolution originated in Mexico in the 1940s and subsequently spread to developing nations, gradually reaching various countries and regions in Asia, Latin America, and Africa. Its objective was to improve the efficiency of agricultural processes, boost crop yields, and assist developing countries in addressing the demands of their expanding populations (Ameen & Raza, 2018). In the 1960s, Thailand introduced high-yielding hybrid rice varieties from the Green Revolution, leading to the gradual biologization and chemicalization of Thai agricultural production techniques. This marked a significant step in the modernization of local agriculture. Similar to most

rural areas in Thailand, Mae Tha's agricultural practices involved cultivating new rice varieties to increase yields.

Contract farming primarily involves export companies providing seeds and chemical fertilizers to farmers, with agreements to purchase the crops at harvest time, deducting input costs from the crop prices. Farmers commit to growing specific crops, following production guidelines, and selling the products back to the contracting companies (Sriboonchitta & Wiboonpoongse, 2008). With the globalization and marketization of agriculture, Mae Tha also became involved in contract farming. Companies designated specific crops for the villagers to cultivate, requiring farmers to plant and supply these crops within stipulated timeframes. Crop prices were determined by the market and intermediary companies, leaving villagers with little autonomy. Moreover, as most land was allocated to cultivating these designated crops, there was insufficient land available for growing traditional subsistence crops such as rice, which are essential for meeting the daily needs of the villagers. The main crops grown in Mae Tha at that time included tobacco, baby corn, and beans. While there was high market demand for these cash crops, they depleted soil nutrients, and farmers were vulnerable to market price fluctuations. Production input costs continue to rise, yet profits do not increase accordingly. Companies typically pay villagers every three to four months. Sometimes, villagers lack sufficient funds to cover daily living expenses and are forced to borrow money, leading to a vicious cycle of debt accumulation over time (Ameen & Raza, 2018).

The long-term use of chemicals in contract farming adversely affected the villagers' health and the village's ecological balance. To achieve efficiency and high yields, villagers used large quantities of chemicals. Prolonged exposure to these substances harmed their health. One interviewee, Mam (pers. comm., August 2025), mentioned during an interview that her mother suffered respiratory damage due to agricultural chemical use at the time and still experiences minor sequelae, such as chest tightness and shortness of breath. Former cooperative leader Laung (pers. comm., August 2025) told us that villagers were not very knowledgeable about the chemicals they used. Sometimes, they applied as many as 13 or 14 different fertilizers simultaneously.

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Farmers who suffered severe health effects experienced symptoms such as fever and ulceration of the whole body, but lacking the means to seek hospital treatment, they could only endure without timely medical care. The fertility of the soil also declined due to extensive chemical use, and water resources and the living environment were damaged, rendering the entire village's ecosystem fragile. The adverse effects on health and the environment motivated villagers to seek change.

In 1986, some local farmers began reflecting on the sustainability of their livelihoods and future well-being. Their initial idea was to return to their pre-1960s way of life, growing crops they wanted to consume without using chemical fertilizers. This approach would not only improve their health but also strengthen relationships among villagers and enhance cohesion, as contract farming had previously operated on a household basis with little cooperation. Initially, nine households formed a group, helping each other mutually. At first, there was only one such group. Later, when they participated in activities in other villages, residents of those villages found this approach meaningful and emulated it by forming their own groups. Eventually, the scale expanded to over 20 groups, forming an informal organization, Mae Tha Institution. Two key events primarily prompted the establishment of the Mae Tha Institution.

The first precipitating event involved bananas. At the time, villagers cultivated bananas, and intermediaries purchased them at low prices to sell at higher market prices. For example, intermediaries would bargain down the price of a bundle of bananas from one Thai baht (THB) to one-half THB (US\$0.03 to \$0.015) before purchasing, then sell them in the market for five THB, leaving villagers with meager incomes. Consequently, representatives from different groups gathered to discuss this situation, tallied the full quantity of bananas they had, and decided to bypass intermediaries altogether by seeking markets in the city themselves. They selected the buyer offering the highest price, ultimately raising the selling price of a bundle of bananas from one-half THB to one-and-a-half THB (US\$0.015 to \$0.045), thereby increasing the group members' income.

The second event involved rice. After two reforms, forest area decreased, and the amount of arable land in the area also diminished. Under contract farming, villagers had to grow designated crops on arable land, leaving little room for household rice cultivation. To survive, those without rice had to borrow from villagers with surplus rice, with interest rates determined by the lenders, placing heavy pressure on the poor. Based on this situation, group members, with the help of a non-governmental organization (NGO), established a small collective, structuring it like a bank. The collective pooled surplus rice and lent it to those in need. No interest was charged for the first three months, after which interest was determined based on the borrower's economic situation. Influenced by these two events, they evolved from small groups into the informal Mae Tha Institution.<sup>3</sup>

During this transition period, the government and NGOs provided significant assistance. Initially, group members had no knowledge of organic farming; they only knew they wanted to pursue a more sustainable path without the use of chemical fertilizers. Later, with the help of NGOs, they decided to develop organic farming and obtain organic certification for their products. The Earth Net Foundation and GreenNet Cooperative started working with Mae Tha communities in 1998 to promote organic farming before the Mae Tha Sustainable Agriculture Cooperative was founded. NGOs also offered training courses. Villagers sent representatives to learn, and these villagers then conducted tutoring sessions in the village to share knowledge with others. These classes were attended by both villagers and monks and lasted approximately three to four years. Sometimes, villagers proactively requested knowledge in specific areas, and NGOs provided corresponding guidance, adhering to the principle of “teaching how to fish rather than giving a fish.”<sup>4</sup>

Members of the Mae Tha Institution had different areas of expertise, and everyone participated in decision-making processes to ensure its cohesion.

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3 Both of these incidents were conveyed to us by the former cooperative chairperson Laung (pers. comm., August 2025), who is one of the five founders of the Mae Tha Institution.

4 This is a traditional Chinese saying which means it is better to teach someone how to acquire something than simply to give it to them.

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At the time, there were five leading figures within the institution who took turns leading. However, as the institution was an informal organization, it lacked proper management and eventually faced issues of embezzlement. When one leader took office, the organization had 400,000 THB (US\$12,185) in funds. After two years, only 200,000 THB (US\$6,092) remained, with no clear financial records. Many began to distrust the organization, leading to an increasing number of withdrawals. Ultimately, the Mae Tha Institution dissolved. Although this early attempt at community self-organization failed, some members persisted, seeking learning experiences in other villages and countries, laying the foundation for the formal establishment of the subsequent cooperative.

Regarding the initial attempts at self-organized practices by the villagers of Mae Tha, we can identify three primary catalysts, all related to the effects of contract farming: the lack of agricultural autonomy among the villagers, the physical harm they suffered, and the fragility of the local ecology. These factors prompted a segment of the villagers to reflect and take action, progressing from internal discussions among themselves to actively seeking external markets and accepting assistance from NGOs. Throughout this process, they encountered setbacks but remained unwavering in their commitment to developing organic agriculture for the sake of their own health, their autonomy, the fertility of their land, and a sustainable ecological environment that would benefit future generations.

### **The role of the cooperative: Mae Tha Sustainable Agriculture Cooperative**

This section examines how collective organization in Mae Tha emerged and how it has been sustained over time, with particular attention to the role of the Mae Tha Sustainable Agriculture Cooperative. It addresses the question of how villagers began to organize themselves by tracing the formation of the cooperative out of existing social networks and shared economic concerns, rather than through formal political mobilization or external intervention (Scott, 1976). It then analyzes the cooperative as a key institutional actor, focusing on its organizational structure, economic support mechanisms, and cultural functions in promoting organic farming. Finally, the section considers

how these organizational arrangements have created space for younger generations to participate and internalize collective values, providing the foundation for intergenerational continuity in village organization.

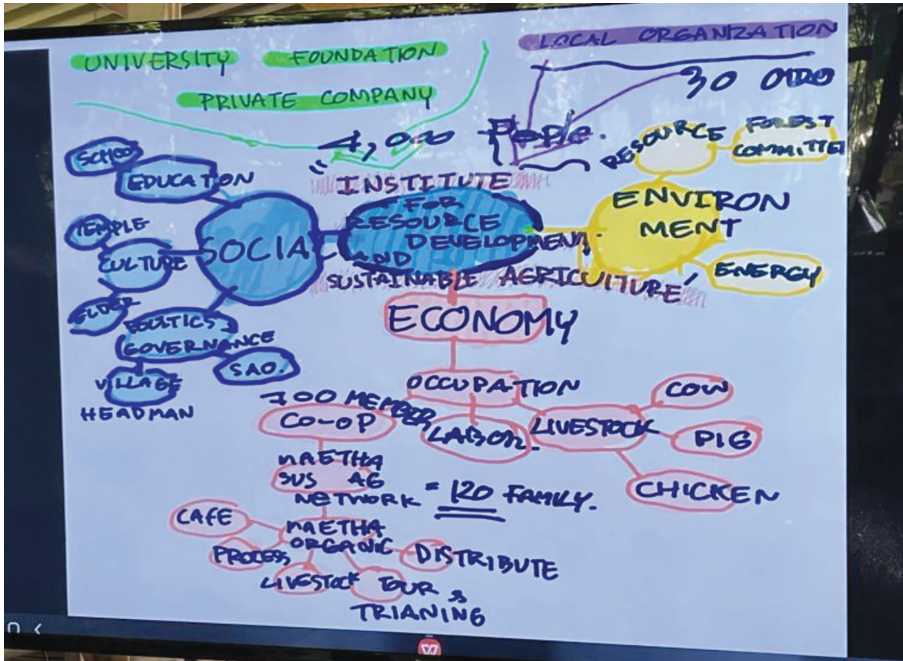


Fig. 11: Local villagers' views on the role of the cooperative  
(poster created by the authors)

The cooperative in Mae Tha plays a central role in organizing village life and supporting sustainable farming. It was established in 2001 to help small farmers overcome challenges such as high living costs, limited investment, and restricted access to markets. By promoting organic farming, the cooperative created a system that fits local conditions, respects traditional practices, and responds to farmers' needs. This has made it widely accepted and trusted by community members. The cooperative is built on kinship and neighborhood ties, and its management follows a clear structure of president–committee–group leaders–members, illustrating how formal institutions are assembled from existing social relations (Clever, 2002). All major decisions,

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such as admitting new members or setting crop prices, are made during collective meetings. This system combines traditional knowledge with modern organic practices, ensuring that farming guidelines are both practical and trusted. In this way, the cooperative strengthens community decisionmaking and ensures that farming standards are carried out consistently.

Another important function of the cooperative is to provide strong economic support. It shares organic farming techniques through training programs, supplies eco-friendly fertilizers and tools, and offers flexible loans with low or no interest. These financial and material supports reduce the cost of switching to organic farming and give members the stability to continue farming without turning to high-interest lenders. Over time, the cooperative has built its own financial reserves, creating a self-sustaining system of community support.

The cooperative also plays a cultural role by reinforcing shared values and identity. Through strict entry requirements, monthly meetings, and trainings,



Fig. 12: The office premises of the Mae Tha Sustainable Agriculture Cooperative (*photo by the authors*)

members learn to see organic farming not just as a technique but as a fundamental part of community life. The cooperative further strengthens these values by connecting organic practices with schools and local temples, transmitting the ideas to younger generations and linking them with traditional culture. This has made organic farming part of the community's collective identity, ensuring that it will continue into the future.

In short, the cooperative is the backbone of Mae Tha's organic farming system. It combines governance, economic support, and cultural values to create a sustainable model that benefits both the land and the people.

*Organizational structure: Building and sustaining an organic community*

The cooperative was founded in 2001, gradually formed on the basis of existing village groups, as explained by Laung, the former village head. Villagers' initial motivation to set up the cooperative came from the pursuit of "collective interests" and "resource sharing" (Laung, pers. comm., August 2025). The goal was to overcome, through cooperation, the difficulties that smallholder farmers faced in living costs, development inputs, and market access. The organic farming model promoted by the cooperative fit well with the local industrial situation, took villagers' practical needs into account, and at the same time, respected and perpetuated their traditional ways of life. As recalled by Laung, the cooperative was widely accepted by villagers in its early stage.

In terms of structure, the cooperative relied on kinship and local ties to establish a four-level management system of "president–committee–group leaders–members," as explained by Per, a cooperative leader. Professional managers were also brought in to handle specific affairs and daily operations. According to him, all major matters—including admitting new members, handling violations, and the use of funds—had to be decided collectively through democratic meetings. Especially in the early days of organic promotion, key decisions such as whether to ban chemical inputs and how to set purchase prices were made through open discussion (Per, pers. comm., August 2025). These decisions combined traditional experience with modern knowledge, resulting in localized organic production standards. Through this

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process, the organic idea shifted from being an outside demand to becoming a development path embraced by members themselves.

According to Per (pers. comm., August 2025), the cooperative established a comprehensive governance system to ensure participation and collective decision-making. At least one general meeting was held each month, and leaders were selected through democratic elections. According to him, this arrangement increased transparency, built consensus, and strengthened a sense of collective identity. In terms of shareholding, members were allowed to purchase shares and receive dividends, but a strict “one person, one vote” rule was enforced, and no individual or household was permitted to hold more than one-fifth of the total shares (Per, pers. comm., August 2025). This design effectively prevented capital interests from undermining ecological values and collective goals, keeping the cooperative oriented toward mutual benefit, democratic governance, and long-term sustainability.

To implement organic standards, the cooperative created a fine-grained “small group system,” as explained by Per (pers. comm., August 2025). Over 700 members were divided into 49 groups, each consisting of about 10 people. According to him, group leaders played two key roles: linking higher levels of the cooperative with individual groups, and supervising compliance within each group (Per, pers. comm., August 2025). Relying on close social ties, members supervised and helped each other. This soft, low-cost form of restraint proved highly effective in maintaining organic standards, relying more on moral pressure and everyday social surveillance than on formal punishment mechanisms (Scott, 1985).

With the objective of safeguarding the purity and cohesion of the community, the cooperative established a strict admission process. New members had to be recommended by current members, evaluated collectively, and complete one month of systematic training before being admitted. This was not just about checking individual qualifications; it was also about screening for cultural fit and shared values. In this way, new members aligned with the cooperative’s principles in both mindset and practice. The extremely low dropout rate shows that the cooperative—through unified marketing and purchasing, internal loans, mutual trust, networks of assistance, and a sense

of cultural belonging—has become indispensable for its members. In the end, maintaining the community and following organic standards became a conscious and rational choice for everyone.

*Economic support: Building an internal cycle for organic farming*

Mae Tha Cooperative systematically built an internal economic cycle to support organic farming, covering three key dimensions: technology transfer, farming inputs, and financial mutual aid. This cycle strengthened the resilience and sustainability of the community's agricultural transition.

In terms of technology, the cooperative invited external experts from countries such as South Korea and Japan, while establishing a training system of “one person learns, the whole village benefits,” as explained by Laung (pers. comm., August 2025). Village representatives who attended workshops would return to share knowledge locally. Villagers also organized their own classes. This greatly lowered barriers to new knowledge. Through this process, they developed organic farming practices suited to the local ecology—for example, diverse seasonal planting that both met organic standards and improved yields.

For farming inputs, the cooperative created its own supply system, prioritizing organic fertilizers and eco-friendly tools. Through steady awareness campaigns and price incentives, members were guided away from chemical inputs toward ecological alternatives. This reduced the cost of transition at the source and gave farmers the material foundation for scaling up and standardizing local organic production.

Financial mutual aid formed the key pillar of economic support. Using idle funds, the cooperative provided flexible loans: interest-free for the first three months, then at low rates. Before lending, repayment ability was collectively assessed to keep lending safe and reasonable. This effectively replaced traditional high-interest loans and relieved the burden of high upfront costs and long production cycles in the early stage of organic farming. From its early dependence on international NGO aid to today's 60 million THB (US\$1,827,708) of accumulated self-funds, the cooperative has achieved a self-sustaining financial cycle. This has greatly increased members' ability to manage risks and continue farming.

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### *Internalizing values and building cultural identity: The foundation for sustainable organic farming*

Beyond economic support, Mae Tha Cooperative realized that internalizing values and building cultural identity were fundamental for the long-term future of organic farming. Through multiple mechanisms, it wove organic ideas deeply into the community's shared values.

The admission process, along with regular meetings and democratically-made decisions, gradually transformed organic standards from externally-imposed rules into shared understanding and voluntary action. This not only strengthened members' technical alignment but also planted the organic idea firmly in their hearts, transforming it into cultural consensus.

To ensure generational transmission and cultural roots, the cooperative also expanded into education and religion. For example, it promoted organic farming education in schools so young people would recognize its value. At the same time, part of the cooperative's profits was donated to local temples, where religious activities reinforced the integration of organic and environmental values with traditional culture (Ann, pers. comm., August 2025). These initiatives deepened members' emotional attachment to organic farming. As a result, following organic rules and protecting collective interests became natural and rational behavior. Step by step, the cooperative built a solid foundation for sustainable organic farming across economic, social, and cultural dimensions.

These insights help answer the research questions by showing that villagers in Mae Tha did not begin organizing through confrontation or external imposition, but through the gradual institutionalization of existing social relations. The cooperative emerged as a collective response to shared economic pressures and ecological challenges, transforming kinship- and community-based forms of cooperation into a formal organizational structure. In this process, the cooperative functioned not merely as an economic institution, but as a key social and cultural mediator that linked governance, resource distribution, and value formation.

### **How young people organize themselves: Mae Tha Organic Community Enterprise**

In Mae Tha, young people—defined in this study as villagers roughly between their early 20s and late 30s—organize themselves primarily, though not exclusively, through a company called Mae Tha Organic Community Enterprise, which was founded in 2014. The company was initiated by five young villagers, most of whom are children of cooperative members, and has since expanded to include more than 30 members.

While the cooperative focuses on agricultural production and community governance, Mae Tha Organic adopts a more market-oriented and corporate structure, specializing in marketing, branding, and connecting with outside buyers (Do, pers. comm., August 2025). This balance between tradition and innovation allows young people to carry on their parents' legacies while also creating something new.

According to Do, the current leader of Mae Tha Organic, this organizational form reflects young people's attempt to engage the market without breaking away from the cooperative system. While the cooperative supports production, the company takes responsibility for sales and market access. For example, the cooperative buys crops from farmers and passes them to the company, which then sells them to supermarkets and restaurants. This arrangement reduces financial risks for the company while ensuring that farmers get paid fairly and on time. As Ann (pers. comm., August 2025), a member of Mae Tha Organic, explained, "the cooperative is like an umbrella, and the company works under it." This system shows how the younger generation builds on the foundation laid by the earlier generation.

Mae Tha Organic also plays a key role in opening new markets and raising the value of local products. The company adds stories and cultural meaning to its goods, inviting customers to visit the village and experience their agriculture directly. It also has specialized departments for quality control, planning, and finance, making it more efficient and professional (Ann, pers. comm., August 2025). Young people in the company bring energy and flexibility, while older members contribute stability and experience. Together,

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they make the community's farming more competitive and better connected to outside markets.

Perhaps most importantly, the company creates new jobs and opportunities that encourage young people to return to the village. It hires local youth for roles such as packaging, quality checks, and sales, while also supporting related local businesses like coffee shops and eco-tourism. Many young people who had left Mae Tha for cities are now coming back, motivated by the chance to work in a healthier, more meaningful environment. These initiatives not only reduce economic pressure on families but also strengthen the village by keeping young people engaged in community life.

### *Company structure: Generational continuity, organizational innovation, and its supporting relationship with the cooperative*

According to Do (pers. comm., August 2025), the principal leader of Mae Tha Organic, the company was founded by five young villagers who described themselves as “good friends with shared goals.” Before establishing the company, these young people had studied or worked outside the village—in areas such as wage labor, service jobs, or small-scale urban businesses—but maintained close ties to their families' farming activities. It later expanded to more than 30 members. Most core members are second- or third-generation members from cooperative families, whose parents are cooperative members. This background gives the company deep organizational roots and strong generational continuity (Do, pers. comm., August 2025). These young people received modern education but initially lacked farming experience; the older generation compensated for this by systematically teaching them knowledge about organic farming, blending traditional experience with modern ideas.

The company's membership structure is flexible, combining full-time staff with part-time farmers. This maintains their link with the land while also incorporating modern corporate elements. Participation through family ties softens organizational boundaries and strengthens members' sense of belonging. Parental support and the collective decision-making system within the “good friends” group further enhanced resilience and cooperation during the start-up process.

At the same time, the company and the cooperative developed a close and supportive relationship. Due to legal restrictions, the company could not transfer funds directly, but members took loans from the cooperative in their own names to support the company. More importantly, the company relied deeply on the cooperative's established organic production system, land resources, and community trust, forming a soft connection of resources (Ann, pers. comm., August 2025). As Ann (pers. comm., August 2025) explained, "the cooperative is like an umbrella, and the company works under it." The cooperative not only provided resources but also acted as a buffer in market transactions. It advanced funds to buy produce from farmers, handed it over to the company for sales, and settled accounts once the company received payments. This eased the company's cash flow pressure and demonstrated the cooperative's support for market expansion.

*Core functions of the company: Market expansion and value chain upgrading*

Mae Tha Organic's core functions lie in expanding markets and upgrading the value chain, both of which have effectively advanced local organic farming. For market expansion, the company took on the task of connecting with major retailers and outside businesses. It realized that high-quality products alone were not enough to access premium markets, so it worked to add strong "storytelling" value to its products. By conveying the traditions of collective action, sustainability, and cultural meaning behind village organic farming, the company developed trust with clients. It invited them to visit, see, and experience firsthand. Relationships started small with limited quantities and single product lines but gradually grew into stable supply chains.

For value chain upgrading, the company sought to deliver organic products in higher value-added forms that directly met consumer demand. It set up internal departments for quality control, finance, and planning, introducing professional specialization and significantly improving efficiency. The company also made good use of generational advantages: younger members handled flexible, complex market-facing tasks, while older members took on more routine roles. This balance showed its attention to harnessing the strengths of different age groups.



Fig. 13: Organic agricultural products from Mae Tha for sale in an urban supermarket (*photo by the authors*)

The company also acted as a channel of market information, relaying customer needs back to farmers to determine production scale. This reduced production uncertainty and improved the overall adaptability of local agriculture to the market.

Thus, the company does not operate independently of the cooperative system, but rather under its protection and with its support. It made up for the cooperative's limitations in market flexibility and legal standing, while focusing on breakthroughs in marketing and branding. In return, it brought benefits back to the cooperative and the wider community. By opening high-value markets and raising the level of the local organic value chain, it has made a significant impact on the future of the village.

### **Community impact: Creating diverse jobs and bringing youth back home**

Mae Tha Organic also plays an important role in creating diverse local jobs and encouraging young people to return to the community. Through

diversified business activities and specialized roles, it offers flexible work opportunities to residents of different ages and backgrounds. For example, it employs full-time youth to handle product sorting, packaging, quality inspection, and market liaison. At the same time, it has opened side businesses such as a coffee shop, hiring middle-aged local women as service staff. This has created jobs close to home, especially for women who had returned during the COVID-19 pandemic to care for their families.

The company has also become a key platform attracting young people back to the village. Many who had studied or worked in urban locales chose to return because they no longer wanted the high-pressure city lifestyle. They appreciated the idea that organic farming was “less harmful to the body” and saw opportunities in its link with rural tourism. Although about 80 percent of local youth still live outside the village, the number returning is slowly rising (First, pers. comm., August 2025). This trend has been encouraged by parents, who generally wish their children to come home and actively support them in organic-related work.

One woman’s story is particularly representative. Fah (pers. comm., August 2025), a partner of Mae Tha Organic, described her own experience as follows. She studied hotel management at university and later tried running an airport café, which closed during the pandemic, as well as raising and selling fighting fish in the city. Eventually, limited space and new opportunities at home led her to return to the village. At first, she joined a company involved in both farming and tourism and was assigned to her home village to develop tourism activities, where she met other local leaders. Five years ago, she began working in tourism; three years ago, she left that company and, together with five or six local partners, started a small team focused on community-based tourism.

Fah emphasized that, compared with the nearly 20-member team of her former employer, the current smaller local team is far more efficient and cooperative. Through tourism, she came to deeply appreciate the older generation’s efforts in organic farming and environmental protection (Fah, pers. comm., August 2025). Her team promotes three core themes: forest conservation, organic farming, and local community life. They highlight

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seasonal planting and local eating traditions as part of the story they share with visitors.

Although Mae Tha community tourism is not widely known and mostly serves group visitors, during the peak season (July to February) the team runs forest trekking as its main program, combined with organic experiences like visiting chicken coops or seasonal farm work. Tours can also be customized for visitors. Part of the profits is returned to the community, redistributed by the village head, with hosting duties rotated among seven villages to ensure fair benefit-sharing.

By creating modern-style jobs and entrepreneurial opportunities, Mae Tha Organic and small local teams like Fah's have helped returning youth break away from traditional rural-urban job patterns. They have also eased family financial pressures through organic farming and eco-tourism, supporting food self-sufficiency, reducing dependence on loans, and strengthening community stability and cohesion.

Taken together, this section reveals that young people in Mae Tha have organized themselves not by separating from the cooperative system, but by building a complementary organizational form on its foundation. Through Mae Tha Organic, youth bridge the gap between farming and markets by adopting company-based and market-oriented practices while remaining embedded in the cooperative's production system, social norms, and cultural values. This arrangement allows young people to create new livelihood opportunities, return to the village, and escape conventional rural-urban employment paths without undermining collective agricultural governance.

In relation to the research questions, this case provides the insight that youth organization in Mae Tha is best understood as an extension rather than a rupture of existing collective institutions, drawing on pre-existing cooperative norms and social networks (Clever, 2002). The cooperative continues to manage production, standards, and community cohesion, while the company takes responsibility for market engagement, branding, and legal flexibility. Together, they form a dual-layer system—the cooperative in charge of production, the company focused on the market—allowing market participation while keeping economic activities socially embedded (Polanyi,

1957)—that enhances the community’s capacity to respond to market pressures and institutional constraints. This generational division of labor not only strengthens the sustainability of organic farming but also demonstrates how intergenerational cooperation can produce innovative yet locally grounded forms of rural organization.

### **Conclusion**

Under the dual effects of globalization and agricultural modernization, the self-organization practices carried out by villagers in the Mae Tha community of northern Thailand demonstrate the initiative and adaptive capacity of rural communities when confronting ecological, economic, and social challenges. By tracing the community’s transition from traditional subsistence agriculture to monocrop cultivation and subsequently to organic farming practices, this study reveals how local self-organization serves to address challenges and guide transformation.

The attempts toward self-organization in the Mae Tha community originated from multiple crises. Long-term use of chemical fertilizers led to health issues, ecological degradation, and layers of debt, prompting farmers to critically reflect on the production model of monocropping and to initiate actions aimed at ecological restoration and the reclamation of economic autonomy. Such actions underscore the important role of local knowledge, community cohesion, and external social capital in driving agricultural transformation. The self-organization practices of the Mae Tha community have continuously evolved and improved over time. Initially, community members helped each other through small groups, which later developed into larger informal cross-village organizations based on resource sharing and knowledge dissemination, laying the foundation for the formal establishment of the Mae Tha Sustainable Agriculture Cooperative. In the new era, younger generations, equipped with more knowledge and updated perspectives, established Mae Tha Organic Community Enterprise, expanding the industrial chain of local organic agricultural development. The older generation’s cooperative now acts like a large umbrella, sheltering the entire village and supporting its development. The younger and older generations work together

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to promote the development of local organic agriculture. Throughout this process, external actors such as NGOs and investment companies have played important roles as collaborators, providing technical training, market access, and financial support. However, the core agency of the entire process has remained within the community, reflecting the villagers' wisdom in integrating external resources with local vision and capacity.

Nevertheless, the path of villager self-organization has been accompanied by internal and external challenges. Early informal organizations such as Mae Tha Initiative encountered setbacks due to inadequate governance structures, lack of financial oversight, and improper leadership, leading to the failure of initial organizations. In the subsequently established Mae Tha Sustainable Agriculture Cooperative, villagers learned from past lessons by bringing in external professionals to manage finances and oversee internal operations. They established a governance structure and more democratic decision-making methods, enabling more effective internal functioning through regular meetings. This reveals that sustainable self-organization requires not only a shared vision and enthusiasm but also sound institutional design and transparent management systems. Effective governance, democratic decision-making, and capacity building are crucial for maintaining organizational resilience and sustainable development.

In conclusion, the case of Mae Tha confirms that villager self-organization is a conscious adaptation to regain developmental autonomy in the context of modernization. It represents a local effort to restore ecological resilience, strengthen community sovereignty, and steer the local economy toward sustainable transformation. This case provides a reference model for other rural communities facing similar pressures, emphasizing that meaningful and lasting sustainability transitions require not only technological or market-level changes but also transformations in social organization forms, governance culture, and cognitive frameworks. Ultimately, self-organization, as an important mechanism for communities to respond to change according to their own contexts, offers an instructive local alternative to traditional top-down development pathways.

**References**

- Ameen, A., & Raza, S. (2018). Green Revolution: A review. *International Journal of Advances in Scientific Research*, 3(12), 129. <https://doi.org/10.7439/ijasr.v3i12.4410>
- Cleaver, F. (2002). Reinventing institutions: Bricolage and the social embeddedness of natural resource management. *European Journal of Development Research*, 14(2), 11-30.
- Polanyi, K. (1957). *The great transformation: The political and economic origins of our time*. Beacon Press.
- Scott, J. C. (1976). *The moral economy of the peasant: Rebellion and subsistence in Southeast Asia*. Yale University Press.
- Scott, J. C. (1985). *Weapons of the weak: Everyday forms of peasant resistance*. Yale University Press.
- Sriboonchitta, S. & Wiboonpongse, A. (2008). *Overview of contract farming in Thailand: Lessons learned*. Asian Development Bank Institute Discussion Paper No. 112, Tokyo, Japan.

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## Leaving to Sustain: Rethinking Youth Mobility and Organic Farming in Mae Tha

*Zhou Wenxuan, He Lingxin, and Kanokon Kongkaew*

### **Abstract**

This study examines sustainable livelihood strategies in Mae Tha, a rural agricultural community in northern Thailand undergoing agrarian transition. Based on ethnographic fieldwork conducted during 2025, our findings challenge the simplistic narrative that young people are abandoning organic farming. Through interviews with 15 community members supplemented with participatory observation, we identify two divergent understandings of sustainability: for older practitioners, organic farming represents autonomy and control over labor; for younger residents, sustainability lies in mobility and access to external opportunities. Rather than signaling community disintegration, our findings reveal that these seemingly contradictory livelihoods actively coordinate through remittances, seasonal migration, and knowledge transfer. We argue that Mae Tha's experience complicates the hypothesis of "depeasantization" by demonstrating how agricultural communities evolve through pluralistic livelihood arrangements. This research contributes to understanding agrarian transition in Southeast Asia beyond productivist frameworks, emphasizing the integration of farming and non-farming activities in sustaining rural communities.

**Keywords:** agrarian transition, sustainable livelihood, depeasantization, Mae Tha Village, northern Thai agriculture

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### Introduction

In front of a house stands a signboard. At first glance, certain areas of the sign appear to be marked with different shades of green. The lighter sections mostly indicate fields or farms, while the darker areas indicate forests. Above these shaded blocks, the words “Mae Tha Sustainable Living Space” are presented in English in yellow letters. Parallel to the message in yellow, there is another line of black Thai text that conveys the same meaning.

On our first day in the Mae Tha community, Ann showed us around his farm. He gestured toward the board and emphasized to us that the items produced on his family’s farm—from the rice in the paddy fields, to the sweet potatoes under the soil, and to the eggs in the chicken coop—are all organic. He then spoke to us about the benefits of organic farming in the local area, which has now become a calling card of the Mae Tha community. Compared to the village’s extensive monoculture model of the past, people can now harvest healthy produce for their own consumption. And some of the produce can also be sold in the city, which provides Mae Tha residents with small but stable incomes.

As a key informant, Ann then gave us a brief introduction to the historical development of organic farming in the Mae Tha community and pointed out the current operational predicament of local organic agriculture: a lack of successors. Compared with staying in Mae Tha to grow and sell agricultural products, young people are presently more inclined to work in big cities or to move abroad where it is assumed there will be better opportunities that provide higher incomes. But on that day, we did not expect to hear so many expressions from various people in Mae Tha so similar to what Ann (pers. comm., 2025) told us next: “Young people [here] are reluctant to inherit organic farming as their livelihood.” This notion became so deeply ingrained in our minds, it came to serve not only as a basic judgment of the Mae Tha community during our field research, but also a basic premise in the early stage of our writing.

After repeatedly hearing variations of the statement over the course of the next several days, we gradually realized that it reflected two positions at minimum. As a common basic fact, anyone in the Mae Tha community would

hardly deny that “Young people are reluctant to inherit organic farming as their livelihood.” But in the expressions of some organic farming leaders or community leaders, this basic fact is added with a layer of social expectation and may become “Young people should inherit organic farming as their livelihood.”

How does this subtle difference in expression reflect the different understandings of sustainable livelihood among Mae Tha residents? In Mae Tha, what kind of livelihood patterns are considered sustainable? How do different livelihood patterns coordinate with each other? These questions guide the investigation that follows.

This article will first introduce the background of Mae Tha’s agrarian transition and its impact on the community. We will then present our three research questions and explain our methodology and research process. In the findings section of the article, we will attempt to clarify how different livelihood patterns in the Mae Tha community coordinate with each other by combining different understandings of livelihood patterns and employment preferences among Mae Tha residents.

### **Mae Tha’s agrarian transition**

On our first day in the Mae Tha community, Ann (pers. comm., August 2025) also mentioned “Mae Tha is going through an agrarian transition.” An interpretation of the concept “agrarian transition,” or of the process of socioeconomic change, clearly affects our understanding of the Mae Tha community and its local practices. Firstly, an agrarian transition is foremost a process of transformation concerning modernization, or about capitalist industrialization. By examining the agricultural transformation in developed countries and regions, Byres (1991, pp. 18-19) presents the diversity of agricultural transformation paths, and he argues that the core of agricultural transformation lies in the contribution of agriculture to the accumulation of capital in the early stage of industrialization. This is manifested by the introduction of capitalism and its means of production (mainly the accumulation of agricultural capital and the popularization of hired labor) into agricultural production and keeping capitalism dominant in the

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agricultural production process (Bernstein, 2016, pp. 25-26, 39). This, in turn, affects the process of capitalist industrialization and the social demographic structure, such as a large portion of social resources and the labor force tilting toward industry and its related sectors.

But such a transformation comes at an expense. Although the capitalization of agriculture and the large-scale operation of agricultural enterprises may increase productivity, the process of agricultural transformation will eventually lead to a decline in the contribution of agriculture to economic development. A large number of agricultural workers moving to the urban industrial sector would lead to the shrinking of the peasant class and what Rigg (2014, p. 13) describes as “de-peasantisation [sic] in the countryside.”

Secondly, agrarian transition in modern society is also a process of transformation related to globalization. Especially in the current global development pattern dominated by developed countries in the northern hemisphere, “external sources of industrial accumulation (capital and technology) would be available through foreign investment, both private and public (aid)” (Bernstein, 2016, pp. 42-43). This requires us to take the global expansion of capitalism, transnational capital, and the circulation of food in the world market into consideration when we seek to understand agricultural transformation outside of currently developed countries and regions.

Because of the current situation, the relationship between the agricultural and industrial sectors is no longer simply “agriculture provides the initial capital accumulation for industrialization,” but presents a more complex form in the process of agricultural transformation in local societies. As Drahmoune (2013, p. 115) explains, agrarian transition describes “the broad range of specific, often intersecting, processes that transform a rural agrarian society economically based on agriculture into an increasingly urbanised one that relies on industrial production and services.” Thus, modern-day agrarian transitions encompass “rural restructuring in the developed world” and “its relevance to processes of change in the developing world” (Rigg, 2014, p. 13).

In summary, the problem with agricultural transition lies in a structural inequality: the existing international landscape, the historical experience of developed economies, and their idealized development models impose

constraints on lesser-developed countries. On one hand, many historical experiences after World War II show that the development of capitalism and its global expansion cannot provide sufficient or stable means of subsistence for the vast majority of people (Bernstein, 1996, pp. 42-43). On the other hand, neoliberal ideals have failed to provide a clear direction for the development of farmers in these regions (Drahmoune, 2013, p. 121). Different regions must carve out their own paths of transformation in light of their specific socioeconomic conditions. Nowadays, agricultural transformation no longer serves the single goal of “providing initial capital accumulation for industrialization.” Instead, it serves open-ended propositions such as exploring suitable development models for one’s own community and social group.

### **Agrarian transition and livelihood in Southeast Asia and Thailand**

Since the end of World War II, the Western market-oriented industrialization model has dominated the agricultural transformation process in latecomer countries and regions. This model advocates for the consolidation of small plots of land in rural areas and the takeover of agricultural production by large-scale, efficient enterprise production units. In turn, the surplus laborers from rural areas transfer themselves to cities, providing a cheap labor force for urban industrialization. But a key feature of Southeast Asia in modern history is the persistence of smallholder farmers, whose reproduction and sustainability as social and economic units constitute an opposition to the development model described above (Rigg et al., 2018, p. 327). Such local historical experiences remind us of the prospect of a more diversified path for agricultural transformation.

The focus on agricultural transformation in Southeast Asia can be roughly divided into three perspectives, while in practice these perspectives are always interwoven and overlapping (Drahmoune, 2013, pp. 119-121). The first is the consequences of agrarian transition and their local-level impacts on people’s livelihoods. This perspective focuses on inequalities in resource distribution and access to resources within agricultural communities. It examines social change through micro-level everyday life and community interaction, and emphasizes farmers’ resistance to structural elements. The second is the link

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between agricultural transformation and urban expansion. This perspective opposes the “urban-rural” divide, viewing urban and rural transformation as two aspects of the whole social change, and tends to adopt an integrated perspective to examine how social, cultural, political, economic, and other elements connect and interweave rural and urban areas. Finally, the third perspective is how farmers (mainly family-run smallholders) respond to aspects of social change and adopt adaptive strategies to sustain agricultural livelihoods under the expansion of neoliberalism and the market economy.

This article focuses on the third perspective, investigating what changes have occurred in the local agricultural livelihood patterns through the relevant practices of the Mae Tha region and its agriculture, and what inspiration it can provide for us to understand the changes of local livelihood patterns nowadays. According to Stewart Carloni and Crowley (2005, p. 1): “A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living.” It becomes sustainable “when it can cope with and recover from stresses and shocks and maintain its capabilities and assets both now and in the future, while not undermining the natural resource base.” The Mae Tha community provides a case through which to examine these dynamics.

### **Mae Tha community and its transition**

Mae Tha is a rural agricultural community in Chiang Mai Province in northern Thailand, located on the banks of the Mae Tha River at an average altitude of 600 meters. The community is adjacent to a national forest preservation area. In fact, a considerable part of Mae Tha Village coincides with the boundaries of a state-designated forest reserve, which has led to disputes and negotiations between local residents and the state over land title and land use rights. Residents of Mae Tha divide local land resources into three sections by usage: 52 percent in national reserves, 26.53 percent in community forests, and 22 percent in agricultural land (the main place where residents engage in agricultural activities).

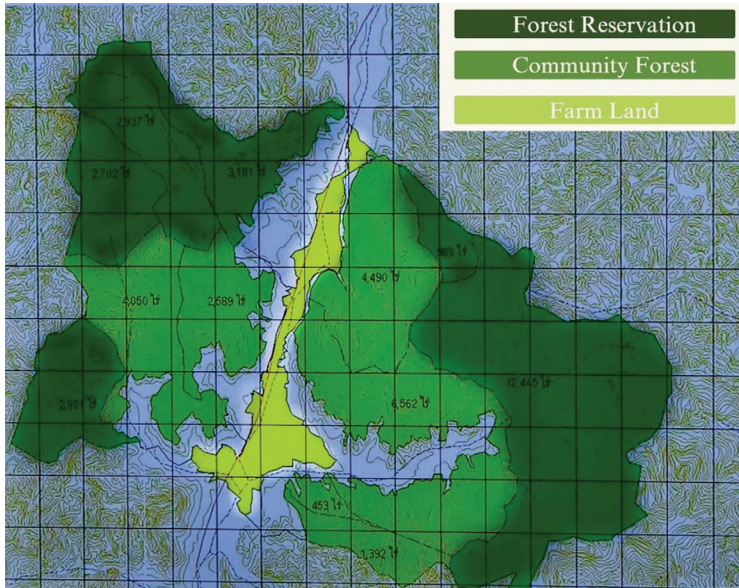


Fig. 14: Division of land resources in Mae Tha

The Mae Tha community consists of seven small villages with a total of 1,350 households and over 4,000 residents, among which more than 80 percent of the permanent residents are engaged in agricultural production. There were originally four distinct ethnic groups present in the community, but according to the residents themselves, about 300 years ago, individuals of these various ethnicities intermingled and gradually formed the Mae Tha community. Today, the regional identity of the Mae Tha residents is much greater than their ethnic identity. People no longer identify themselves as people belonging to a certain ethnic group, but rather collectively refer to themselves as “Mae Tha people.”

### Three stages of agriculture in Mae Tha

Agriculture in Mae Tha has undergone two significant transformations over the past half-century. According to the characteristics of agricultural activities in different periods, local residents have divided it into three stages: 1) self-

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sufficient farming; 2) chemical and contract farming; and 3) organic farming (Laung, pers. comm., 2025).

Before the 1960s, agricultural practices in the Mae Tha region were traditionally self-sufficient farming. During this period, Mae Tha people used cattle to plow the land. The purpose of agricultural production was to meet the villagers' daily food needs. The planting structure at this period was diverse, including edible crops such as rice, fruits, and vegetables. They also grew cash crops such as cotton, mainly for their own and the community's daily use rather than for sale in the market. In addition to traditional farming, villagers also raised chickens and engaged in some fishing and hunting activities, such as fishing in the river and catching wild boars and hares in the forest.

In the context of the Green Revolution from the 1960s to 1980s, government and large agricultural enterprises intervened in local agricultural production, and agricultural activities in Mae Tha were quickly transformed into chemical and contract farming. Such change was embodied in the monoculture and industrialization of agricultural production activities, with the local area beginning to promote the monoculture model of economic crops such as corn and tobacco. Funders (mainly large agricultural enterprises) sold the seeds for these crops to farmers in Mae Tha, encouraging farmers to buy and use large quantities of chemicals such as fertilizers, pesticides, and herbicides to increase crop yields. These funders also advocated for the expansion of planting and encouraged farmers to cut down trees and cultivate land. They also introduced some agricultural machinery and automation technologies, such as the use of tractors instead of oxen or cattle for plowing. In addition, based on contract farming, hired labor became popular in the Mae Tha community during this period. The funders paid farmers wages on a quarterly basis according to contracts, which indirectly caused many families to stop growing rice, fruits, and vegetables for their own consumption. The wages earned from contract farming were used to buy food at markets outside the village. As one of our interviewees (Mam, pers. comm., August 2025) recalled of this period: "We got nothing but money. We didn't grow food on our land any more. All the food we consumed was brought from the market outside the village."

Chemical and contract farming in the context of the Green Revolution had a lot of negative consequences for the Mae Tha community. In fact, almost all respondents during our interviews had a negative impression of agricultural activities during that period. The industrialized shift in agricultural production patterns, especially the massive abuse of industrial chemicals in agricultural activities, caused severe environmental damage and led to health problems for many local residents, which increased family health expenses and was not conducive to the self-recovery as well as intergenerational inheritance of the family workforce. At the same time, agricultural capitalization required farmers to purchase monoculture seeds, fertilizers, pesticides, and some agricultural machinery from large agricultural enterprises, which in turn increased their agricultural production costs. On the other hand, the monoculture model and the contract for quarterly wage settlement have prolonged the payback period of agricultural production activities, exposing farmers to more risk factors and making them more prone to debt.

As a result of these negative consequences, in the 1990s, some individual farmers who were dissatisfied with chemical and contract farming rallied on their own. With the help of external non-governmental organizations (NGOs), they sought to explore a different type of business model from chemical and contracting farming. Subsequently, the Mae Tha community gradually introduced and adapted the “organic concept” to establish a local industry featuring “healthy produce without industrial chemical additives.”

Two important local organizations were established during this process. In 2001, the Mae Tha community established its agricultural cooperative, which acts as an agent for villagers facing external markets and social systems. The main functions of the cooperative include raising funds for farmers and granting agricultural loans, conducting market demand research for farmers, assisting them in formulating planting plans, connecting farmers with markets for the sale of agricultural products, conducting agricultural technology trainings, and providing farmers with organic fertilizers, a small amount of industrial fertilizers, and some agricultural machinery. In 2014, Mae Tha Organic Community Enterprise was established, taking over most of the marketing and external cooperation functions from the cooperative, such as

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finding customers and markets for agricultural products, and also seeking cooperation with social organizations such as foundations, NGOs, and organic product certification institutions. In addition, Mae Tha Organic has several sub-organizations, each operated by a small team of four to six people, covering areas such as market research, farm farming, local tourism, and culture, providing jobs for young people in the Mae Tha community.

After more than 20 years of effort and cooperation, Mae Tha has built a relatively mature local brand and established a stable sales network and external partnerships. The long-term practice of organic farming has indeed formed a new and stable agricultural livelihood model, with farmers diversifying their planting structures and fulfilling their wish to “grow whatever they want.” They now also achieve surpluses in their yields, which can be sold through cooperatives and connected to the modern consumer market.

However, the Mae Tha community is currently facing one of its biggest problems: young people are reluctant to inherit this kind of livelihood operation model of organic farming, which more or less leaves many older Mae Tha residents unsure of the future of organic farming. Many of our respondents mentioned that young people in their 20s and 30s in the community prefer to stay in the city for higher salaries and more opportunities, or choose non-agricultural occupations in the Mae Tha community. With limited mechanization and automation, the Mae Tha community appears to be confronting a problem of “rural population outflow” or “a decline in the proportion of agricultural labor,” and its current predicament seems to confirm the judgment that “the peasant class is experiencing de-peasantisation [sic] during the agricultural transition” (Rigg, 2014, p. 13).

### **Mae Tha: Transition of the way “we make a living”**

Mae Tha’s agricultural transformation is undoubtedly a microcosm of the process of social agricultural transition in Thailand. Among small farmers in Thailand, agriculture that uses land as a means of production continues to play a significant role in the rural economy, but its importance as a source of income has declined. In fact, family livelihood patterns tend to be more diverse than just agricultural activities represented by crop cultivation (Drahmoune,

2013, p. 116; Promkhambut et al., 2023, p. 7). For instance, some family members are only engaged in agricultural activities seasonally and partially, and in non-agricultural labor at other times. Many younger family members are indeed more inclined to work in big cities and overseas to support their families. Sometimes this source of income contributes much more than agricultural production alone.

But the source of income constitutes only a productive part of livelihood. This leads us to reflect on the assertion that “depeasantization is occurring in the countryside” seems to be based on a premise that Rigg et al. (2018, p. 336) refer to as “a rural productivist approach.” Such a premise leans toward “use rural (mainly agricultural) production to reflect on rural livelihoods,” ignoring the non-agricultural aspects of the agricultural transformation that complement agriculture as well as the non-production aspects of livelihood activities such as “consumption and, therefore, social (re)distribution.” This is also a misconception we realize when looking back on our fieldwork experiences. In the field, the questions we asked were mostly about agricultural production and agricultural income, such as “What crops do you usually grow?,” “Who is the main farmer in your household?,” and “Do you think the returns of organic farming can sustain your life?” In terms of livelihood, we might have adhered too closely to the land and production dimension, which caused significant limitations in our early stages of data collection.

If non-farm employment of the rural laborer and practices outside of production in agricultural activities had been included in our investigation from the outset, we might have been able to perceive sustainable livelihood in Mae Tha from a different perspective. On one hand, we only saw the land-based, stable aspect of Mae Tha’s livelihood activities, and we failed to recognize that the non-agricultural work of Mae Tha residents who leave the community to work (or at least wish to leave to seek employment) is also quite typically unstable. On the other hand, we focused too much on how farmers in Mae Tha can convert their agricultural productivity into economic income through modern agricultural technology and marketing. We failed to realize what the circulation of items means while they are almost ubiquitous in the life of Mae

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Tha communities, such as the circulation of surplus crops within the community.

At this point, the residents of Mae Tha's understanding of livelihood may offer a simple reflection: "We do not grow crops for money, nor do we grow them for food. We grow crops so as to make a living" (Laung, pers. comm., August 2025). This inspires us to adopt a more holistic perspective. That is, not to view livelihood in Mae Tha in terms of household income structure alone, nor to be overly attached to the industrial label of local organic agriculture. Instead, we should delve into the daily community interactions and lives of the residents in Mae Tha, into their imaginations of the outside world, and perceive their understandings of the community, society, and the globalized world, as well as their expectations for the future.

### Research Questions

This article addresses two interrelated questions:

1. What are the differences in understanding of "sustainable livelihood" among Mae Tha community members?
2. How do people in Mae Tha coordinate different livelihoods?

### Methodology

#### *Interviews*

Interviews contributed a large part to our data collection process. During a seven-day field investigation in the Mae Tha community, we interviewed a total of 15 residents of the community. The sample size of young people was relatively small as the majority of the interviewees were between 30 and 50 years old. All of these interviewees were more or less involved in crop cultivation and had their own non-farming occupations to varying degrees.

Many of our interviewees were introduced by our host Ann in a communal space at the cooperative. In the early stages, this helped us get a quick understanding of some of the daily life in the Mae Tha community. But it also caused some limitations to our information collection at the time, such as the fact that most of the interviewees introduced by Ann were not directly engaged

Table 2: Interviewee information

No.	Name	Age	Gender	Occupation
1	Ann	35	male	host; committee member of the cooperative
2	Laung	60	male	former headman of Mae Tha community
3	Per	40	male	current cooperative headman
4	Tai	30	male	photographer, organic farmer
5	Mae Jinda	60	female	local vendor
6	Mae Tud	64	female	farmer; sells organic products
7	Fah	30	female	tourism operator in Mae Tha
8	Mam	45	female	staff of a local coffeeshop
9	Tungting	30	male	runs a coffee shop in another village; accounting
10	Namtan	26	female	runs a coffee shop in another village
11	Fo	50	male	forest ranger
12	Do	35	male	market manager for agricultural products
13	Ferd	24	male	sorts vegetables for the cooperative
14	Eud	50	female	works with an NGO
15	Eim	38	female	grows and sells organic products

in agricultural planting, but in other non-agricultural occupations such as community management, cultural tourism operation, and market planning. This was not in line with the direction we had initially intended to gather information, as we wanted to learn more about the details of agricultural production and livelihood operations. However, it now seems that this also provided an advantage for us in exploring the two aspects of non-farm employment of the rural laborer and practices in agricultural activities beyond production.

Most of the interviews lasted between 40 and 60 minutes. The longest one extended to approximately two hours. With the exception of one focus group interview with a few interviewees, most of the interviews were conducted individually. Most of the time, we did not use a formal interview outline. Questions mostly started with “When did you start to do organic farming?”

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or “When did you get to know the concept of organic farming?” The respondents would then often talk about some of their life experiences, and we followed the respondents’ timeline and asked specific follow-up questions about their personal experiences and their understandings of sustainable livelihood.

### *Participatory and non-participatory observation*

We also employed participatory observation and non-participatory observation methods. The advantage of such methods lies in assisting the researchers in: 1) openly collecting questions and materials; 2) reducing the distance between the researcher and the interlocutor so as to get closer to their living world; and 3) supporting the researcher’s ability to ask questions in their native language, and responding to the specific life situation of the research subjects with values, logic, and even emotions and body sensations.

Interviews may be overly dependent on spoken language and structured expressions that seem to make sense. In particular, many residents of Mae Tha have consciously developed a narrative about the history of organic farming as the community’s local brand, which creates some obstacles for us in understanding the true thoughts of Mae Tha residents on some matters. For example, as Per, the current head of the cooperative, spoke to us about the establishment of the Mae Tha cooperative, he would occasionally sneak a glance at notebooks which contained Arabic numerals and Thai language spread out in front of him on the table. While we do not know what exactly was written in Per’s notebook, we can imagine that as he told us the history, he probably had a logical and pre-crafted narrative pattern in his mind.

As a result, outside of the interviews, we advocate what Das (1998, p. 179) refers to as “an excess of description” so as to restore the dialogue context as much as possible and capture subtle information beyond language. These descriptions mainly include some details of life in the local community, notes on researchers’ involvement in interactions and casual conversations in the daily lives of local people, and some of the researchers’ subjective thoughts and understandings of the environment and events. In this chapter, these

materials will be presented in the form of direct field notes, observations, and quotes from interviews and photos.

### *Translation*

Translation into English, Thai, and Chinese was involved in our information collection process. Our team was accompanied by an interpreter, a Thai student studying in China with knowledge of both China and Thailand, who was mainly responsible for translating between Chinese and Thai. Our field assistant, writing mentor, and team partners also helped us translate Thai into English during the field research.

There were certain obstacles and difficulties in translating between the three languages in the early stage of our investigation. For example, based on thinking habits in a specific language context, our translator often translated the Thai word “cutting down the tree” into the Chinese “*jian shu*,” whose meaning is closer to the action of “trim.” The Thai word “rice” is translated into Chinese as “*dao cao*,” which means straw. This is not due to the translator’s lack of professionalism. In fact, our translator was quite careful and precise. She would repeatedly verify with all parties whether the meaning she attempted to convey was accurate.

There is no doubt that repeated translations between languages consumed considerable time and effort and were not precise enough for the interpretation of many concepts. Because our interviews are mostly oral translations, we tend not to quote long passages of the translated English text in this chapter. The major reason is because after multiple layers of translation, these texts are probably no longer able to reproduce their original context in Thai. Instead, we have sought to extract and summarize the core of the interviewee’s responses, and supplement them with text to explain the logic of the original context.

### *The embodiment of the researchers*

We also have sought to take the researchers’ embodiment in the field into consideration. In many studies, for the sake of objectivity, only the respondents’ responses are presented, while the researcher’s presence is concealed, as if the

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research were being conducted from an omniscient viewpoint. However, the presence of researchers in the field is bound to affect the responses and behaviors of the respondents. In this chapter, we have attempted to present our interactions with the respondents and supply contextual information from our interactions when necessary.

### *Locality in Mae Tha*

When we write an article with Mae Tha as our research location and subject, the first question that troubles us is “What is special about Mae Tha?” or “Why does the Mae Tha community exist?” What inspiration can the experience in Mae Tha offer when we face other similar agricultural communities?

We cannot overstate the particularity of Mae Tha’s local practice, because its local practice may also exist elsewhere or in other communities. Limited by the information we have access to ourselves, we may not know that some of the everyday practices in Mae Tha are also common in other rural areas of Thailand and many other regions. But our findings are based on localized, embodied experiences in the Mae Tha community, on conversations and contacts with local farmers as well as non-farmers, and on the resulting academic understanding. Although these understandings and findings are insufficient to encompass the reality of all agricultural communities, and may not even cover all practices in the Mae Tha community, they may provide insights into the different practices mentioned above.

### **Findings and discussion**

Based on our fieldwork in Mae Tha, we attempt to move beyond the simplistic narrative that “Young people are reluctant to inherit organic farming.” Instead, we argue that the divergent livelihood choices observed in the community represent different localized responses to the risks of agrarian transition. By analyzing how local actors navigate between organic agriculture and external employment, this section addresses two key inquiries: 1) How is “sustainable livelihood” understood differently among varying actors?, and 2) How are these seemingly contradictory livelihoods coordinated within the community structure?

### **The divergent imaginaries of sustainability: Autonomy vs. possibility**

The concept of “sustainability” was introduced to Mae Tha by various NGOs in the early 2000s. However, in local practice, its interpretation is far from monolithic. Our findings suggest that for different generations and actors, “sustainability” anchors to different values: for organic practitioners, it represents autonomy; for the younger generation engaging with the outside world, it represents possibility.

#### *Organic farming as the practice of autonomy*

For the core members of the Mae Tha cooperative, organic farming is not merely a mode of production but a reclamation of autonomy. Dor, the market manager for Mae Tha Organic, articulates this sentiment through the lens of decision-making power. Unlike contract farming, where crops and prices are dictated by external corporations, organic farming allows residents to “grow whatever you want” (Do, pers. comm., August 2025).

Do’s trajectory illustrates this value preference. Although his parents were initially unfamiliar with organic farming, they allocated him a small plot of land (one *rai*, or 0.4 acre) with which to experiment. “I made my own decision and tried what I wanted to do [...] It’s challenging and it won’t be easy. But I can practice some new ideas and I really enjoy it,” Do (pers. comm., August 2025) remarked. Here, sustainability is defined by the capacity to control one’s labor and time. It offers a buffer against the alienation of modern industrial agriculture like agricultural practice during the contract farming period.

However, this autonomy comes with the burden of uncertainty. Do acknowledges that relying solely on the “health” and “quality” narratives of organic produce is insufficient to sustain the community’s future. The risk lies in stagnation—the lack of new talents and innovative ideas to adapt to a fast-changing market. Thus, for the practitioners, “sustainability” is a dynamic struggle to maintain local autonomy amidst market pressures through continuous innovation, such as developing processed goods like dried sweet potatoes (Do, pers. comm., August 2025).

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### *Mobility as the pursuit of possibility*

Conversely, for many young people, “sustainability” is not found in the soil of Mae Tha, but in the mobility offered by the wider world. This is not necessarily a rejection of the community, but a strategy to cope with the economic limitations of rural life.

The case of Ferd, a 24-year-old vegetable sorter, exemplifies this alternative understanding of “sustainable livelihood.” Although his parents are cooperative members, Ferd remains on the periphery of the organic organization. He believes there is no necessity for him to engage in the cooperative, since his parents are already involved in it. His labor in Mae Tha—sorting vegetables—is viewed by himself as a temporary transit point. His sustainable plan involves migrating to Australia within the next five years: “I just desperately want to work there, learning some skills and gaining experience” (Ferd, pers. comm., August 2025).

For Ferd, remaining statically in Mae Tha feels precarious. “Going out” (mobility) promises a future of possibilities—access to global lifestyle, skill acquisition, and upward social mobility. In this context, the “reluctance” to farm is not a failure of cultural transmission, but a rational calculation. Young people like Ferd redefine sustainability as the ability to access opportunities even if it requires physical displacement from the community. Therefore, the tension in Mae Tha is not a binary opposition between “good organic farmers” and “bad runaway youth,” but a negotiation between two valid forms of resilience: one rooted in the security of land-based autonomy, and the other in the potentiality of trans-local mobility.

### **The coordination of livelihoods: Entanglement beyond dualism**

If we cease viewing farm and non-farm work as mutually exclusive, we begin to see how these livelihoods are complementary to each other. They coordinate to form a resilient community ecosystem. Our data shows that Mae Tha residents do not strictly choose one over the other. Instead, they engage in a complex division of labor and resource integration.

### *Economic and spatial integration*

Migration and local farming often function as complementary economic components. Per, the current head of the cooperative, provides a historical precedent. He spent much time during his youth working in South Korea and major cities in Thailand to earn money and gain skills before returning to Mae Tha. This pattern continues today: remittances from family members working in cities or abroad often subsidize the initial costs of organic farming or household expenses, providing a safety net that allows the remaining family members to pursue “slow” and self-determined organic agriculture without immediate survival pressure (Per, pers. comm., August 2025).

Furthermore, we observed a novel form of coordination: spatial and temporal integration. Tungting and Namtan, who primarily work and live in the city, return to Mae Tha on weekends to run a local coffee business. For them, the village is not merely a production base but serves as a counterbalance to their urban lives. They explicitly mentioned that running the coffee shop is “a way to take a break from the stressful city life” rather than just a financial side hustle (Tungting and Namtan, personal communication, August 2025). Here, the rural livelihood coordinates with the urban one by offering a temporal respite, allowing them to cycle between the intensity of urban labor and the slower pace of the village.

### **Knowledge transfer and hybrid livelihoods**

The most profound coordination occurs when urban skills are grafted onto rural practices. The “brain drain” narrative (ie., young people are reluctant to inherit organic farming) overlooks how young people bring urban knowledge back to the community.

Fah’s experience serves as a prime example. Having studied hotel and tourism management in the city, she did not return to traditional hoe-and-plow farming. Instead, she applied her education to help develop Mae Tha’s nascent ecological tourism sector (Fah, pers. comm., August 2025). This hybridization creates a new livelihood niche that requires neither pure physical labor nor total migration. It bridges the gap, allowing the community to

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commodify its “organic lifestyle” to urban and foreign visitors, thereby adding value to the agricultural products grown by the older generation.

In conclusion, the livelihood landscape in Mae Tha presents itself as pluralistic. The differences in understanding reveal that sustainability has been practiced as a situational concept—ranging from the autonomy of production to the mobility of labor. Meanwhile, the coordination of these livelihoods demonstrates that the community is not disintegrating under the pressure of modernization. Instead, through remittances (such as those from Per when he was younger), the circulation of people (weekend returnees like Tungting and Namtan), and the transfer of knowledge (as exemplified by Fah’s case), Mae Tha is evolving into a more flexible social unit where agrarian traditions and modern aspirations actively support one another.

### **Conclusion and reflections**

For a long time, the concept of agricultural modernization in Thailand has been dominated by models of operational scale and capital intensification (Rigg et al., 2018, p. 336; Promkhambut et al., 2023, p. 2), especially capital inflows into the industrial and service/tourism sectors, and urban expansion infiltration into the countryside. All of these aspects have exacerbated the marginalization of agriculture and its related jobs in the industrial transformation to varying degrees. Even in agricultural communities like Mae Tha, which have established large local brands, similar predicaments are reflected in the phenomenon that “Young people are reluctant to inherit organic farming.”

Up to this point, we are still unable to claim that organic agriculture in Mae Tha provides a local solution to, or wisdom in, the process of agricultural transformation or integration into modernization. But local practices in Mae Tha do offer a possible perspective when we think about risks and uncertainties of agricultural transformation. Among them, the ambiguity of Mae Tha’s organic produce is particularly intriguing. These products carry both the logic of the commodity market as commodities in the organic market and the logic of surplus transfer as crops and harvest goods.

Perhaps we can think that one way to interpret the transfer of the surplus lies in the fact that this transfer weaves a network of responsibilities. Whether it is the Mae Tha community's advocacy for "healthy living for more people," or the community's common practice of "giving out excess shares," these "surplus shares" in circulation connect different people. It links the older generation of Mae Tha farmers, the younger Mae Tha generation that is looking out to the outside world, and the consumers of the city supermarket to the same living world. It is precisely these different configurations that have made us realize that agricultural livelihoods do not necessarily have to continue in their original form, even if there are changes in agricultural operation models and an increase in the proportion of non-farm employment of rural laborers, agricultural livelihoods will always continue in a diversified, cross-sectoral manner.

Based on this, we may be able to reinterpret the fact that Ferd's ultimate vision for his future is to return to Mae Tha after a period in Australia. Mae Tha provides a kind of community insurance for his working outside. Because the community is responsible to him as a member of the community and can provide him with a bottom line for employment, even though Ferd knows he could not stay in Australia for the rest of his life, he would still be able to return to the Mae Tha community to engage in the local agricultural business and be accepted by the community's ethical system, even if he failed to do so.

Back to our discussion of macro issues, agricultural transformation is bound to involve marketization and enter its participants into a neoliberal market economy. Along with this comes the increasing mobility of production factors such as products and labor, and subsequent risks and uncertainties that come with it. Our findings suggest that when livelihood is understood pluralistically, agricultural communities can evolve rather than dissolve under the pressures of modernization.

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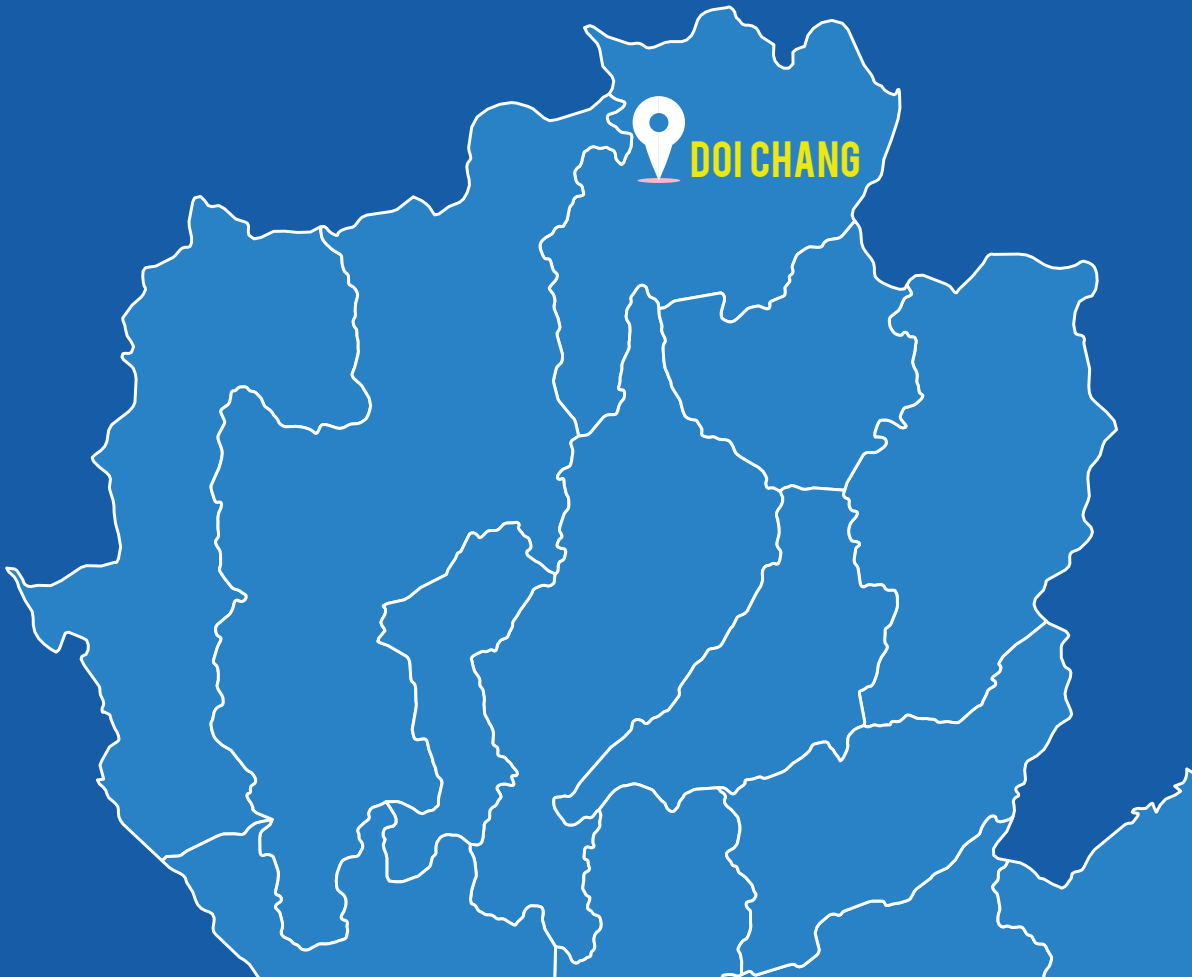
### References

- Bernstein, H. (2016). Agrarian questions then and now. In H. Bernstein & T. Brass (Eds.), *Agrarian questions: Essays in appreciation of T. J. Byres* (pp. 22-59). Routledge.
- Byres, T. J. (1991). The agrarian question and differing forms of capitalist agrarian transition: An essay with reference to Asia. In J. Breman & S. Mundle (Eds.), *Rural transformation in Asia* (pp. 3-76). Oxford University Press.
- Das, V. (1998). Wittgenstein and anthropology. *Annual Review of Anthropology*, 27(1), 171-195.
- Drahmoune, F. (2013). Agrarian transitions, rural resistance and peasant politics in Southeast Asia. *Journal of Current Southeast Asian Affairs*, 32(1), 111-139.
- Promkhambut, A., Yokying, P., Woods, K., Fisher, M., Yong, M. L., Manorom, K., & Fox, J. (2023). Rethinking agrarian transition in Southeast Asia through rice farming in Thailand. *World Development*, 169, 106309.
- Rigg, J. (2014). *More than the soil: Rural change in Southeast Asia*. Routledge.
- Rigg, J., Salamanca, A., Phongsiri, M., & Sripun, M. (2018). More farmers, less farming? Understanding the truncated agrarian transition in Thailand. *World Development*, 107, 327-337.
- Stewart Carloni, A., & Crowley, E. (2005). *Rapid guide for missions: Analysing local institutions and livelihoods*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/4/a0273e/a0273e00.pdf>



# DOI CHANG

Doi Chang, a small village located on Doi Chang Mountain in Chiang Rai Province, northern Thailand is primarily composed of the Akha, Lisu, and Yunnanese Chinese ethnic groups. In recent years, Doi Chang has witnessed an impressive growth in coffee production, becoming renowned worldwide for its high-quality coffee, some of which is produced under the Fair Trade label. This successful coffee business has transformed Doi Chang from a small, remote settlement into a community with over 1,500 households exporting coffee to Europe, Canada, and other regions. The Doi Chang Coffee brand has become widely recognized throughout Thailand.



In the 1980s, the Thai-German Highland Development Project aimed to eradicate poppy cultivation in Doi Chang, encouraging several ethnic Akha families to switch to cash crops like coffee, an initiative that was largely unsuccessful and left many indebted. In 2006, Canadian and Thai entrepreneurs founded Doi Chaang Co., giving farmers ownership and fair profits. This led to the creation of a community cooperative, enabling Fair Trade coffee exports.

The rise of the coffee industry has significantly changed the Doi Chang community, primarily through shifts in agricultural practices and migration patterns linked to coffee cultivation. On one hand, it has increased household incomes and significantly improved living standards. However, it has also led to environmental concerns as well as social issues, such as the erosion of traditional farming practices and related knowledge. Economic disparities persist, with wealthier farmers having better access to resources and international markets, while smaller farmers struggle. The village's youth often migrate away in search of better educational and employment opportunities. At the same time, the local coffee businesses rely on cheap labor from other ethnic groups and cross-border migrant workers from Myanmar, creating a diverse and complex community dynamic. Nowadays, Doi Chang has become a popular tourist destination with over 150 resorts. However, some residents still lack Thai citizenship, limiting their civil rights and access to social and economic benefits.



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## The Livelihood Strategies of Yunnanese Chinese in Baan Doi Chang

*Liu Ching, Lin Long, and Li Chunmei*

### **Abstract**

The village of Doi Chang is well suited for poppy cultivation with its high elevation and favorable climate. Following the launch of the Thai Royal Project in 1969 and subsequent Thai-German Highland Development Project initiatives promoting crop substitution, and especially after the establishment of the Doi Chaang Coffee factory, coffee has gradually replaced opium to become the defining crop and symbol of Doi Chang today. While existing research has primarily focused on the Akha and Lisu ethnic communities of Doi Chang, less attention has been paid to the relatively small community of Yunnanese Chinese residents. This article draws on literature and fieldwork to examine how the Yunnanese Chinese community engages in the Doi Chang coffee industry and their livelihood strategies. Our findings indicate that their participation in the coffee industry can be divided into three types: fully integrated operations extending into coffee branding and tourism; processing-based producers selling green coffee beans; and small-scale growers who sell coffee cherries without further processing. Coffee does not constitute the main source of income for most Yunnanese Chinese households in Doi Chang. Rather, they use diverse, risk-spreading livelihood strategies, combining small-scale retail, restaurant businesses, transport services, or the cultivation of alternative cash crops. In addition, Thai-Chinese bilingualism has opened up diverse urban employment opportunities for the younger generation, further reinforcing livelihood diversification and cross-regional mobility. Overall, within the Yunnanese Chinese community, coffee operates as a flexible

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resource embedded in broader historical and policy transformations, illustrating how the Yunnanese Chinese of Doi Chang have navigated and adapted to agrarian change.

**Keywords:** Yunnanese Chinese, coffee industry, livelihood strategy, agricultural transformation

### Introduction/Background

Doi Chang is located in Wawee Village, Mae Suai District, Chiang Rai Province, in northern Thailand. This high-mountain settlement sits at an elevation of about 1,200 to 1,800 meters. Due to its altitude, the yearly climate is cool, with an average temperature of around 18°C, and the fertile soil makes it well suited for cultivating a variety of crops.

After the end of the Chinese Civil War in 1949, some Kuomintang (KMT) troops fled south to the border areas of northern Myanmar and established a foothold there. The KMT's expansion alarmed the Myanmar government and they filed formal protests at the United Nations. Under growing international pressure, two operations were carried out between 1953 and 1961 to withdraw these troops to Taiwan. However, the third and fifth armies of the KMT refused to leave and instead relocated to mountainous areas of northern Thailand. To survive, they used horse caravans to conduct cross-border trade to earn a living. Later on, they also assisted the Thai military in their fight against domestic Hmong communist forces, and some groups of ex-KMT forces were permitted by the Thai government to settle temporarily in border areas such as Mae Salong, Baan Hin Taek, and Wawee (Chen, 2022; Hung & Hsu, 2017). Over time, some of them dispersed into smaller villages, and during this migration, some Yunnanese Chinese gradually relocated to Doi Chang. However, as early as 1955 a Chinese merchant with the surname Huang was already living there. Today Doi Chang has roughly 1,500 households, including about 1,200 Akha families, 200 Lisu families, and 25 Yunnanese Chinese families.

Before the Thai government began promoting opium-substitution crops, Doi Chang residents mainly cultivated rice, corn, and vegetables for subsistence. Livestock were raised largely for household use, with occasional sales. The main source of income was opium cultivation. Since the 19th century, the Golden Triangle, which is the shared border area of Thailand, Myanmar, and Laos, has been one of the world's key opium-producing regions (Hung & Hsu, 2017). Due to its high elevation and favorable climate, Doi Chang is well suited for opium poppy cultivation. Compared with other crops such as vegetables, fruit, or flowers, opium is cheaper and easier to transport. In

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addition, opium production was tied to a cross-border underground economy and broader drug-processing networks, and it intersected with Cold War-era geopolitics in the region, including United States involvement and anti-communist mobilization during the Vietnam War period. The Thai government began an active drive to reduce opium cultivation, especially targeting ethnic people in the highland areas of northern Thailand, as part of a larger counterinsurgency campaign. At the same time, the Thai state also came to view traditional slash-and-burn farming of highlanders as harmful to the forests of the region (Chen, 2022).

In 1969, King Bhumibol Adulyadej began focusing on highland area governance. He established the Royal Project to address ethnic highlanders' challenges and to eliminate opium cultivation (Ferguson & Ayuttacorn, 2025). The initiative promoted fruit trees and other cash crops as alternatives to opium and collaborated across government agencies and international partners. Under Thai-German government cooperation from 1981 to 1998, the Thai-German Highland Development Project (TG-HDP) operated in Chiang Rai's Wawee District, including the area of Doi Chang. In 1985, the Chiang Rai Highland Agricultural Research and Development Center, under the Ministry of Agriculture, joined TG-HDP to encourage farmers to shift toward fruit, vegetable, and coffee cultivation. They also provided coffee seedlings, technical knowledge, and workshops for the community (Cheung, 2015).

The conditions for coffee cultivation are determined by multiple factors that must be taken into account, including climate, rainfall, sunlight, soil drainage, and altitude. After coffee seedlings are planted, they typically take between three to five years to mature into coffee trees. Only mature coffee trees flower and bear fruit. Ripe coffee fruit is usually red or yellow and is commonly referred to as "coffee cherry." Inside each coffee cherry are generally two seeds (occasionally one). After processing, these seeds appear yellowish-green and are called green beans, a key term that will be used frequently in this paper. Once green beans are roasted, they turn dark brown and become the roasted coffee beans commonly sold on the market.



Fig. 15: A section of Doi Chang Village, seen from a high elevation viewpoint (*photo by the authors*)

Today, coffee is the foremost industry in Doi Chang, with a reputation that extends nationwide and abroad. Nonetheless, when people think of Doi Chang coffee, they mostly think of the ethnic Akha and Lisu communities who are frequently portrayed in media and in popular representations of Doi Chang coffee's "ethnic" character. What is not commonly known is that in Doi Chang there is also a small community of Yunnanese Chinese families, many of whom are involved in the coffee business at varying levels. While the majority of these Yunnanese Chinese families grow coffee, only one household has created its own brand, built a full coffee production chain, and expanded into coffee-related tourism. The remainder have not focused as heavily on the local coffee economy.

This article aims to examine the livelihood strategies and varying levels of participation in the coffee industry among Doi Chang's Yunnanese Chinese residents, and to analyze how this local minority ethnic group has developed diverse livelihood patterns in the context of Thailand's poppy eradication policies and the broader global coffee economy.

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### **Research Questions**

1. How do Yunnanese Chinese in Doi Chang engage in the coffee industry?
2. What are the other livelihoods of Yunnanese Chinese people in Doi Chang?

### **Methodology**

This study adopts an ethnographic methodology. Fieldwork was conducted in Doi Chang Village, Wawee District, Chiang Rai Province, from August 9 to 15, 2025. It was conducted by a cross-cultural team consisting of Liu Ching from Chiang Mai University and Li Chunmei and Lin Long from Yunnan University. The advisory team included Dr. Malee Sittthikriengkrai of Chiang Mai University, Dr. Shi Ji of Yunnan University, and writing mentor Jeffrey Moynihan of Chiang Mai University, with additional support from field assistant Ampha Wusue and Chinese-Thai interpreter Yan Wenbao of Chiang Mai University.

During the fieldwork period, our team used participant observation to document the everyday activities and daily lives of Yunnanese Chinese people in Doi Chang. We also conducted in-depth interviews and focused on locals' involvement in the coffee industry and their livelihood strategies. We interviewed six Yunnanese Chinese households including those of Somchai, Mr. and Mrs. He, A-Zhong and his mother, the father and son of the Zhou household, Grandma Lee, and Yu Lian. Interview recordings and transcripts were compiled as primary data. We also reviewed secondary sources including Thai government documents to support the background of this study.

### **Findings**

#### **From opium cultivation to the flourishing of coffee**

Before coffee became synonymous with Doi Chang, the highland economy was focused on opium cultivation, which is particularly well suited to the high-altitude conditions of northern Thailand's mountainous regions. For most Yunnanese Chinese people in the area, they largely depended on opium as their primary cash crop, while corn and rice were cultivated for household consumption. Nearly every interviewee pointed out that opium was easy to

cultivate and provided quick and direct income. In 1969, King Bhumibol launched the Royal Project, seeking to address the problems caused by opium (Royal Project Foundation, 2019). The program sought to introduce alternative high-value crops, including various fruits, to replace opium as the main source of income for highland communities. Building on this momentum, the Thai-German Highland Development Project (TG-HDP) extended its programs into Wawee District of Chiang Rai Province, including Doi Chang, in 1981. Through the provision of coffee seedlings, technical training, and marketing support, TG-HDP actively encouraged local villagers to transition toward coffee cultivation, laying the foundation for coffee's eventual rise as a central livelihood component in the region. In 1985, the Chiang Rai Highland Agricultural Research and Development Center, under Thailand's Ministry of Agriculture, began working in collaboration with the TG-HDP. A field station was established in Doi Chang with the mandate to research and promote crops suitable for highland climates, particularly coffee and temperate fruits and vegetables. The center distributed coffee seedlings and provided technical support, further institutionalizing the shift toward coffee cultivation (Deutsche Gesellschaft für Internationale Zusammenarbeit, 2019).

In 2004, the Thai Cabinet extended the Royal Project's development model nationwide by establishing the Highland Research and Development Institute (HRDI). Beginning in 2006, HRDI implemented alternative crop cultivation and market integration programs in 25 villages, including Doi Chang. These initiatives played a significant role in institutionalizing the promotion of agricultural cultivation and provided an important foundation for the later growth of the coffee industry (HRDI, n.d.). However, the transition was far from smooth. Geng (2023) notes that early efforts faced repeated setbacks due to poorly adapted coffee varieties, price volatility, and farmers' limited knowledge. Additionally, the son of the Zhou family (personal communication, August 2025) noted:

Back then, none of us really knew how to grow coffee. No one taught us, and even if the coffee trees grew well, no one would buy the coffee cherry. It wasn't like now. Coffee wasn't popular

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at that time, and we couldn't sell it or make any money. In the end, some of the first batch of coffee trees were even cut down.

Somchai (pers. comm., August 2025) also said that coffee had not yet taken off at the time. Coffee cherries were hard to sell, growers lacked knowledge about processing, and there were no reliable or regular marketing channels.

After coffee cherries are harvested, they are typically soaked in water for at least 24 hours to separate immature or damaged cherries that float to the surface. They next proceed through processing. The most common methods generally fall into three categories: the natural process, the washed process, and *miel*, also known as the “honey” process. In the natural process, whole coffee cherries are spread out under the sun to dry, then run through a hulling machine to remove the outer layers, leaving the green beans. The steps are relatively straightforward. In washed process, the coffee cherries are first hulled by a hulling machine, then fermented, washed, and dried. After drying, they go through a second round of hulling to produce green beans. In the *miel* process, the coffee cherries are mechanically hulled, but part of the sticky mucilage layer is left on the beans. The beans are then fermented and sun-dried before undergoing a second round of hulling. As the mucilage dries, it can absorb moisture from the air and influence how sugars develop in the bean. It is often described as producing a noticeably sweeter cup with more pronounced fruity aromas.

The turning point for coffee in Doi Chang can be traced to local Akha farmer Piko Saedoo, who collaborated with Bangkok-based investor Wicha Promyong to establish the Doi Chaang Coffee factory in 2003. This enterprise introduced modern coffee machinery and disseminated technical knowledge in the village.

This period was also when the specialty coffee concepts and washed-processing techniques discussed above began to be introduced in Doi Chang. More importantly, the Doi Chaang Coffee factory started placing orders with smallholders and established a stable, regular purchasing arrangement for



Fig. 16: Bags of Doi Chang brand coffee beans on retail display  
(photo by the authors)

their coffee. By contrast, before this, small farmers lacked reliable marketing channels and often had to sell coffee cherries through informal middlemen. Satimanon (2021) notes that the coffee cherry price offered by middlemen at the time was about five baht (US\$0.15) per kilogram. In comparison, Srisakun (2021) writes that when Doi Chaang Coffee began purchasing directly from farmers, the price was roughly three to four times higher than what middlemen paid.

While the factory initially sourced beans from a broad range of households, within two years its partnerships narrowed to seven long-term suppliers, six Akha and one Lisu. Beyond providing market access, the factory also played a transformative role by enhancing both local prices and technical expertise, while simultaneously attracting external competitors such as Bluekoff and Hillkoff into the village. As Thailand's domestic coffee market was still underdeveloped at that time, most of Doi Chaang Coffee's beans were exported abroad. It is only in the past decade, with the emergence of urban coffee culture and the growth of domestic coffee tourism that Doi Chang has established

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itself as a major source of coffee within Thailand. According to a HRDI staff member (pers. comm., August 2025), the first homestay of Doi Chang opened in 2008 and now there are more than 140 coffee-related shops and accommodations in the village. Coffee has become a central economic symbol and a defining local brand for this highland community.

### **The Yunnanese Chinese and coffee in Doi Chang**

In Doi Chang, the Yunnanese Chinese comprise a small community of roughly 25 households. This is far fewer than the 1,200 Akha and 200 Lisu households. Along the main road from Mae Suai toward Doi Chang, cafés and restaurants become increasingly visible on the approach to the village, many decorated with Akha designs. During the COVID pandemic of 2020-2021, domestic tourism in Thailand grew rapidly. Doi Chang, which was already a tourist destination, became even more popular than before. The number of coffee shops rapidly multiplied. It transformed the village into a “coffee tourism village” that blends scenic views with economic activity.

In the village, the houses of Yunnanese Chinese are understated, concentrated in the interior of the village, and gathered around Guanghua Chinese School. Most houses are modern concrete structures, with only one traditional wooden house remaining today. Most doorways display red Chinese spring couplets, reflecting a clear cultural identity, though the overall presence remains understated.

According to our in-depth interviews, all six Yunnanese Chinese households are engaged in coffee cultivation, but their scales of production and levels of involvement differ considerably. Their participation can be roughly divided into three categories:

#### ***1: Full-scale engagement***

Somchai is a 55-year-old man whose father was a Kuomintang (KMT) soldier. Somchai’s household is the only one that has expanded its coffee enterprise to include brand management and coffee-related tourism. Somchai has built up his own complete coffee industrial chain. He manages cultivation, processing, and marketing by himself. He operates a campsite, has a customer-

facing cupping and tasting café, operates coffee eco-tourism tours, and even sells his beans to international markets.

## *2: Coffee processors*

He Sanjie and Yu Lian represent the type of households who are doing coffee processing. He Sanjie is 60 years old. Her father was also a KMT soldier, and her husband is from southern Thailand. Her neighbor Yu Lian and her husband are 32 and 31. Yu Lian's husband is from Doi Chang, while she married into the community from Baan Hin Taek. These two households own their coffee pulping machines and process coffee cherries into green beans for sale. He Sanjie does large-scale processing, and she has hired both long-term and seasonal workers. She not only handles her own coffee cherries, but also purchases from other villagers for washing, pulping, and sun-drying before sale. She initially sold her processed green beans to Bluekoff, but later, through connections established by her grandfather, she eventually signed a contract with Hillkoff. The collaboration has continued for over a decade until now.

Yu Lian and her husband worked in Bangkok and Chiang Mai until the pandemic disrupted their jobs and they decided to return to Doi Chang to work in the coffee business. They bought a small pulping machine for processing their own green beans before selling. Because the pulping machine was small and had limited capacity, the processing required heavy manual labor, but it produced low results and could not reach demand. To improve processing efficiency while reducing labor demands, they replaced the small pulping machine with a larger, higher capacity version. It streamlines processing and has boosted their production capacity. They now employ two full-time workers and additional seasonal workers. For processed beans sales, Yu Lian primarily relies on social media platforms and local buyers. While this sales model offers flexibility and facilitates direct engagement with buyers, providing immediate access to market demand and feedback, it also faces an unstable customer base and limited scalability, in contrast to He Sanjie, who has secured stable sales through long-term contracts.

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### 3: *Coffee cherry sellers*

Grandma Lee, A-Zhong and his mother, and the father-son team of the Zhou family belong to this category. Grandma Lee is 62 years old and moved to Doi Chang with her mother when she was 14 years old. A-Zhong's mother is 69 years old, and A-Zhong himself is 38 years old. A-Zhong's father was a KMT soldier, and the family came to Doi Chang when A-Zhong was three years old. Mr. Zhou is 77 and his son is 40 years old; Mr. Zhou's father was also a member of the KMT.

These three households participate in the coffee industry only at the stages of harvesting and selling coffee cherries directly, without engaging in any processing. In the case of Grandma Lee, she owns only 10 *rai* (four acres) of land, but the land is located far from her home. Daily cultivation requires additional time and effort, so it is significantly challenging for her to manage the land and coffee. At the same time, a shortage of available labor makes it difficult to look after the land. As a result, these three households are unable to take on more complex processing tasks beyond cultivation and harvesting, instead of simpler “pick-and-sell” model.

The Yunnanese Chinese households of Doi Chang are involved in coffee cultivation, but their depth of participation and modes of engagement vary significantly. Yu Lian and A-Zhong have expressed ambitions to expand their coffee businesses, but these plans remain constrained by capital and labor shortages. Coffee farming relies heavily on labor, especially during the harvest season from October to March, with repeated picking of ripe coffee cherries. Any delay risks the cherries overripening and dropping off the tree. Most of the younger generation has migrated out of the village, leaving behind a population largely composed of middle-aged and elderly residents over 40. As a result, coffee farmers have had to hire additional workers during busy harvest seasons, which raises both costs and management pressures. Moreover, local wages during peak periods are often calculated by volume of cherries picked, and hiring skilled workers to operate the pulping machines requires even higher pay. All of these factors increase the risks and burdens of expanding coffee production.

In contrast, the three households of He Sanjie, Grandma Lee, and Mr. Zhou clearly expressed that they have decided to maintain their current status. For the most part, their existing income is enough for their needs, and they have already diversified their livelihoods. For instance, Grandma Lee has opened a noodle shop, and the other households cultivate alternative crops. These diversification strategies reflect different generations of the Yunnanese Chinese community's attitudes toward land. The land is viewed primarily as a resource for subsistence and supplementary income, rather than as the pathway to wealth.

Other relevant factors have been important in each household's decisions around livelihood. For example, Mr. Zhou (pers. comm., August 2025) told us that his father arrived in Doi Chang with the retreating KMT troops. Coming from a military background, his father was unfamiliar with farming and did not see agriculture as a primary economic pursuit. In turn, this shaped the limited depth of their engagement in the coffee industry. The market environment is another important factor. Yu Lian (pers. comm., August 2025) explained that as Doi Chang coffee has gained wider recognition, significant capital inflows have poured into the area, leading to a rapid increase in cafés, roasteries, brands, and intensifying market competition. To stand out in such an environment requires the development of distinctive branding, and in some cases integration with resort-style businesses or coffee tourism. Yet these strategies demand substantial financial investment and long-term planning. For small- and medium-scale households, the risks are prohibitively high. This makes it more attractive for her to maintain her current status rather than pursue larger involvement in the coffee industry.

### **The coffee story of Somchai**

When it comes to coffee, among all the Yunnanese Chinese families, the story of Somchai stands out in particular. Somchai was born in Doi Chang. His father is from Sichuan, China, and his mother is of Dai ethnicity, also from China. His father once served as a soldier in the KMT army just like many other Yunnanese people in Doi Chang. After the KMT forces retreated from northern Myanmar to northern Thailand, the first, second, and fourth armies

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were later withdrawn to Taiwan. The third army was stationed in Tham Ngob Village, Chiang Mai, while the fifth Army, led by General Duan Xiwen, was garrisoned in what is now Mae Salong Village in Chiang Rai. After assisting the Thai government fight against the communists, Somchai's father did not choose to remain in the larger Chinese village. Instead, he relocated to Doi Chang. At that time, it is said that there were only about 16 Lisu households, including that of Mr. Huang, the first Chinese trader to live in Doi Chang.

Like most families, Somchai's family initially cultivated corn and rice for subsistence while relying on opium as an income resource. When the Thai government prohibited poppy cultivation, they shifted to high-value crops, including coffee. However, coffee was not as popular then as it is today. Prices were low and demand was limited, and because pulping machines and processing knowledge had not yet reached Doi Chang, farmers generally sold their coffee cherries directly without further processing. It was not until the establishment of the Doi Chaang Coffee factory in 2003 that both the price and reputation of local coffee began to rise. In 2010, Wicha Promyong, president of Doi Chaang Coffee, introduced pulping machines into the village, along with the concepts of washed processing and specialty coffee, and began placing purchase orders with smallholder farmers. Two years later, however, the factory revised its procurement model and restricted purchases to only seven partner farmers—six Akha and one Lisu. The one Lisu partner is Somchai's uncle, and this family connection allowed Somchai to partner with him and sell coffee beans together to Doi Chaang Coffee.

At the same time, Somchai sought to further expand his role in the coffee industry by actively building his own customer base as well. His first partnership was with a customer in Tak Province to whom he sold 1,000 kilograms of coffee beans annually for three consecutive years. He later collaborated with the owner of a coffee shop in Bangkok, supplying about 600 kilograms per year over a period of five to six years. Later, he also established a connection with a café owner in Taiwan, selling 10 tons of beans in the first year and increasing the volume to 15 tons in the second. To fulfill this growing demand, Somchai even purchased additional land from relatives to expand his coffee cultivation. However, during the pandemic, disagreements over his

attempts to raise the selling price of coffee beans led to a breakdown in negotiations with his Taiwanese buyer, and his annual sales ultimately dropped to five tons.

In the three years surrounding the pandemic, Somchai's eldest daughter went to Australia to study English and work in a café, seeking to deepen her understanding of coffee culture, especially specialty coffee. After the pandemic, she returned home with the ambition of developing her family's coffee beans into specialty coffee. However, one of the challenges was the specialty coffee production approach and flavor profiles she learned in Australia could not be applied directly to her family's coffee. Their varieties and local processing conditions were different, so she had to adapt and figure out what worked on the ground. At that point, she knew that Somchai's Taiwanese buyer was also interested in specialty coffee, and they decided to collaborate on an experiment. They invested in new equipment and began fermenting their beans with yeast, eventually producing a distinctive flavor profile. Some of these beans were later sold not only to clients in Taiwan and Australia, but even to customers in Saudi Arabia.



Fig. 17: Somchai in the “Queen of Coffee” coffee brewing and sampling bar where he does tastings and workshops (*photo by the authors*)

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Today, Somchai owns approximately 120 *rai* (47.5 acres) of land. Rather than purchasing new land, he now expands production by buying coffee cherries from relatives and processing them himself. At present, he employs about 15 workers: five permanent and 10 seasonal. Four years ago, with the help of his eldest daughter, Somchai established his family's coffee brand, Queen of Coffee, and built an open-air covered café on his land. The café offers coffee cupping and tasting, and is integrated with a campsite and other coffee-related eco-tourism activities, creating a complete coffee chain from cultivation and processing to branding, retail, and tourism. Somchai has also expanded his coffee market to new Chinese-speaking regions such as Malaysia, China, and Hong Kong. In addition, Somchai also collaborates with the HRDI, where he has built a greenhouse vineyard on his land that produces two harvests a year, supplying mainly to nearby guesthouses. When visiting his semi-open café, we also noticed a Coffee Quality Institute (CQI) training certificate displayed on the wall. CQI is an internationally recognized system for coffee quality training and certification, with tiered courses, and offers the "Q grader" certification, which is considered a kind of "gold standard" in the specialty coffee industry. The fees for their courses range from several thousand to tens of thousands of Thai baht. Somchai (personal communication, August 2025) explained that these certificates are the results of his participation in coffee courses, and he added that his eldest daughter has enrolled in even more advanced levels of coffee training.

Somchai has become involved in nearly every part of the entire coffee industry. He has not only connected local agriculture with international buyers, but has also linked traditional village-based agriculture with the global specialty coffee market. His achievements have depended not only on access to land, capital, labor, and marketing networks, but also on his willingness to keep learning and the strong support of his family. His eldest daughter has been particularly influential; she has combined overseas study with local practice, leveraging her multilingual skills and international networks to help the family expand into broader markets. Although the Yunnanese Chinese community in Doi Chang is relatively small in number, through collective effort this family has established its own distinctive place in the coffee industry.

### Alternative livelihoods and the youth

For the Yunnanese Chinese in Doi Chang, coffee has never been the only means of making a living. Diversifying beyond coffee has become an accepted and routine way of life. The alternative livelihoods of Yunnanese Chinese in Doi Chang are closely tied to the skills, backgrounds, and social networks of each family's members, providing a steady supplement to coffee income. The choice of what each family pursues beyond coffee is often inseparable from their individual life histories. From our interviews, Mr. Zhou (pers. comm., August 2025) provided a typical example. Having served in the military in his youth, he had no experience with farming, and when he first arrived in Doi Chang he relied on delivering and selling goods in the village. His livelihood was sustained entirely through petty trade rather than cultivation.

Grandma Lee's (pers. comm., August 2025) story is equally illustrative. At the age of 15, she worked as a domestic helper for a Yunnanese household in Chiang Mai for seven years, where she learned how to make pickled foods. After getting married, she and her mother began producing pickled radishes and chilies at home. Their products had a distinctive taste that appealed not only to Chinese customers but also to Akha and Lisu people. It provided her with steady daily income. She recalled that at the time she had to support both herself and her children, so selling foods that could be eaten as well as sold was the most practical option. Today, her daughter-in-law has opened a noodle shop in the village, which has many customers at lunch and dinnertime. The noodle shop has now become a major source of their household income.

He Sanjie and her husband took out a loan in 1992 to buy one of the first cars in the village. In addition to delivering groceries for their own livelihood, her husband also delivered goods for other villagers, charging by the kilogram for freight or by distance for passengers. From 2002 to 2010, she ran a grocery store in the village, sourcing goods from Wawee District and selling daily necessities and snacks.

Coffee cultivation is seasonal, and its market price is unstable. To manage these uncertainties, the villagers have sought to diversify their income streams. They often combine different crops based on their characteristics. Short-term crops are planted to cover lean periods, while long-term fruit trees provide

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more stable income, thereby filling financial gaps during the off-season of coffee. For example, Mr. Zhou has 30 *rai* (12 acres) of land, and he uses it not only to cultivate coffee but also corn, avocados, macadamia, and vegetables. Corn is food for the family and also feed for livestock. They sell avocados through social media platforms, getting significantly higher prices than coffee. However, the avocado is highly vulnerable to climate conditions; if the trees flower during rainy periods, the blossoms often rot. To improve yields, the farmer's son independently learned pruning techniques from Chinese social media, seeking to increase the fruiting rate. Macadamia are a perennial crop. The family's 60 trees, planted more than 20 years ago, continue to provide harvest at fixed times each year. They do not demand frequent attention but still provide a steady stream of revenue.

In another case, A-Zhong's mother cultivated coffee, corn, and other vegetables in the past. As she grew older and lacked the energy to manage their land, much of the farm work was gradually taken over by A-Zhong. In addition to adjusting crop choices according to market demand and consumer preferences, such as coffee and tomatoes, A-Zhong also began durian cultivation. Moreover, he has allowed ethnic Akha migrants from Myanmar to use part of his land freely in exchange for a share of their profits as a supplementary source of income.

Unlike many ethnic Akha in Doi Chang who have managed to collectively upscale their coffee businesses, the Yunnanese Chinese in Doi Chang have not been able to increase the size of their coffee industry, and this has kept coffee a small component of their livelihoods. Of those involved in the coffee business, the Yunnanese Chinese coffee farmers, processors, and sellers tend to operate independently of each other. Yu Lian (pers. comm., August 2025) thinks that when money and profit are involved, it is easy for conflicts to arise even among relatives and friends. In the past, some village groups tried to do cherry processing together, but arguments broke out over unfair revenue sharing, and since then no one has proposed cooperation again. Moreover, most Yunnanese Chinese in Doi Chang already have their own livelihood priorities. Some focus on non-agricultural businesses, while others rely on remittances from children, so their dependence on coffee is relatively limited.

Forming cooperatives would require additional investment in machinery and marketing, and if losses were incurred, the risks would outweigh the gains. For many families, it seems safer to work independently.

The younger generation has largely moved beyond the agricultural framework. They leverage their bilingual education as a springboard to pursue new careers in cities. Their development path is largely built around the advantage of Chinese language proficiency, drawing them increasingly away from coffee. Nearly all third-generation Yunnanese Chinese of Doi Chang under the age of 40 have received bilingual education in Thai and Chinese. During the day they attend Thai schools for compulsory education, while in the evenings or on weekends they study Chinese at village schools such as Guanghua Primary School and Xiangmiao Primary School. After finishing primary-level Chinese schooling, some continue their Thai-Chinese bilingual education at middle and high school in Wawee District, and some even pursue university studies, with opportunities to participate in exchange programs in China. This bilingual ability enables them to both integrate into Thai society and to tap into business opportunities connected to the Chinese market.

The children of He Sanjie are an illustrative example. After completing Chinese and Thai high school in Wawee District, they enrolled at Chiang Rai Rajabhat University and spent half a year on an exchange program in China. Their bilingual proficiency and higher education have given them distinctive advantages in the Thai job market. Before the pandemic, both her daughter and son worked in Phuket as Thai-Chinese tour guides. After the pandemic, the daughter shifted to open a hair salon in the Huai Khwang district of Bangkok, known for its concentration of Chinese customers. The second daughter of the Zhou family we interviewed has studied Chinese from a young age, and her strong proficiency has already secured her employment with a Chinese-owned media company in Thailand. The third daughter also works for a Chinese-owned company in Thailand, where she sells children's products imported wholesale from China on TikTok to customers in Thailand.

A-Zhong's life provides another example. He studied Chinese throughout his time in high school. After graduating from university in Chiang Rai, he first worked as a Thai-Chinese translator at a Chinese fruit import-export

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company. Later, he moved to Phuket to work as a Chinese-speaking tour guide and assisted with wedding planning for Chinese clients. However, during the pandemic, the number of Chinese tourists in Thailand sharply declined. Drawing on his Chinese language skills once again, he shifted into a new line of work, repairing condominiums for Chinese residents in Bangkok.

Chinese-language education has opened up new horizons and employment opportunities for young people in urban areas, enabling them to access more lucrative income streams. At the same time, they feel that coffee farming is both arduous and financially unstable, so they are not currently considering returning to the village to pursue coffee-related livelihoods. Many of them assisted in coffee harvesting and processing during childhood, gaining firsthand experience of the demanding nature of the work: rising before dawn to collect cherries, laboring under the hot sun, and waiting months for a harvest, the value of which was subject to volatile market fluctuations. Mrs. He's son assisted his family with coffee harvesting in their fields, but finding the work overly strenuous, he chose not to participate again. Mr. Zhou's son spent five years working in coffee pulping and processing. He described the work as exhausting and highly time-consuming. Originally, he was studying in high school in Chiang Rai. But when his mother's health declined and she needed someone to take care of her, he returned to the village. If his mother had not fallen ill, he would not have returned, nor would he have considered engaging in coffee-related work. Most young people have already left the village, leaving behind an aging population. Even as the elderly continue to grow coffee, they must hire laborers to help with cultivating and harvesting, which drives up costs and reduces the profits that can be earned from coffee.

In the livelihood histories of Yunnanese Chinese households in Doi Chang, coffee has never constituted the sole source of income. Diversified livelihood patterns have been in place since the early period, and in recent years the gradual withdrawal of younger generations from agriculture has further reinforced this existing pattern.

## Conclusion

From this fieldwork among the Yunnanese Chinese in Doi Chang, we found that while coffee plays an important economic role in Doi Chang, it is not the primary source of income for most Yunnanese Chinese of the community. No matter at what period (prior to the prohibition of opium cultivation, during the gradual state-led introduction of alternative crops, or nowadays) coffee has never been a main source of income. Instead, most households have developed a diversified livelihood arrangement. For example, small-scale trading, running noodle stalls, grocery retail, transport services, or cultivating other cash crops to spread livelihood risks.

We found clear differences in how the Yunnanese Chinese participate in the coffee sector. Only Somchai's household has established a fully integrated coffee value chain, covering planting, processing, sales, and marketing, while most households remain engaged at the basic levels such as selling coffee cherries or conducting primary processing. These differences are closely related to each household's access to labor and capital, life experiences, and risk assessment. Households such as Ah Zhong's and Yu Lian's would like to expand but are mainly constrained by limited capital and labor, and therefore have yet to take further action. The remaining three households have chosen to maintain their current scale, as age, physical limitations, and the stability of their existing operations make expansion less appealing. For them, maintaining the status quo is seen as the safest livelihood strategy.

Moreover, the younger generation's gradual disengagement from agriculture has further reinforced diversified livelihood strategies. The younger generations of Yunnanese Chinese generally receive bilingual education in Thai and Chinese, and some have even participated in exchange programs in China. In recent years, China's influence in Thailand has expanded, whether through corporate investment, business exchanges, immigration, settlement, tourism, medical care, or real estate. The demand for access to the Chinese market and for Chinese language skills has increased. As a result, the new generation of Yunnanese Chinese-Thais can draw on their bilingual skills and cross-regional networks to gain access to broader opportunities and career choices. Post-graduation, many of them choose to move to big cities such as

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Bangkok and Chiang Mai, working in fields where they can use their Chinese language skills, such as tour guiding, translation, and cross-border e-commerce, among others. The urban life offers a wider horizon for development, which further incentivizes the younger generations to seek opportunities outside the village. At the same time, this outmigration has contributed to an aging rural labor force and rising labor costs, as workers must be hired to replace aging older workers or young people who have left the community. Under these conditions, the coffee sector is not seen as a stand-alone source of income by Yunnanese Chinese households, but rather as just one component within diversified and flexible livelihood strategies. These strategies have been shaped by the interplay of historical forces, educational opportunity, linguistic capital, and trans-local networks.

Overall, for most Yunnanese Chinese in Doi Chang, coffee is not their main livelihood. From an external perspective, the shift from opium to coffee was driven by geopolitics, national policies, and development programs that encouraged agricultural transformation. At the same time, this transformation has been shaped by how people responded to these outside powers and influences. The Yunnanese Chinese of Doi Chang have shaped their personal histories through their language skills and available resources in combination with outside development projects and national laws. For the new generation, some now have higher education, giving them broader perspectives and more opportunities to explore different ways of making a living. In the end, through a maze of complex factors, they continue to shape their own paths for survival.

## References

- Chen, H.-Y. (2022). *Hybrid identity and flowing capital: The historical and cultural roots of Kuomintang legacy's 93rd army coffee in northern Thailand* (Master's thesis). National Chi Nan University.
- Cheung, A. (2015). Thailand: Doi Chang Coffee Farm (DCCF): A family-run coffee enterprise in northern Thailand. In D. Macqueen, A. Bolin, & M. Greijmans (Eds.), *Democratizing forest business: A compendium of successful locally controlled forest business organizations* (pp. 349-374). International Institute for Environment and Development.
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2019, June 3). *Thai-German Highland Development Project (TG-HDP)*. [https://www.thai-german-cooperation.info/en\\_US/history\\_rural\\_6/](https://www.thai-german-cooperation.info/en_US/history_rural_6/)
- Ferguson, J. & Ayuttacorn, A. (2025). From Cold War to cold brew: Crop replacement strategies, bean logistics, and ethnicized coffee commerce in northern Thailand. *Critical Asian Studies* 57, 1-23. 10.1080/14672715.2025.2450476
- Geng, X. (2023). *Coffee and ethnic entrepreneurship at Doi Chaang in Chiang Rai Province* (Master's thesis). Chiang Mai University.
- Highland Research and Development Institute. (n.d.). *Basic information of the Wawee Highland Development Project (Royal Project Model), Wawee Sub-district, Mae Suai District, Chiang Rai Province*. <https://www.hrdi.or.th/public/files/Areas-Profile/33-Areas/WaWee.pdf>
- Hung, P.-Y., & Hsu, C.-Y. (2017). From battlefield to tea place: Tea production and the territory effect at North Thai borderlands. *Journal of Geographical Science* 84, 1-29.
- Royal Project Foundation. (2019). *The Royal Project model: Best practice alternative development approach for sustainable economic, social, and environmental development in the highlands* (Executive summary). <https://www.hrdi.or.th/en/public/files/rpfcon/ConferenceInformation/ExecutiveSummaryTheRoyalProjectModel.pdf>
- Satimanon, T. (2021). From the mountains to the stars: Doi Chaang Coffee for sustainability. *NIDA Case Research Journal*, 12(2), 81-101. <https://so04.tci-thaijo.org/index.php/NCRJ/article/view/244760>

## SINO-THAI EXPLORATIONS

Srisakun, C. (2021). Doi Chaang Coffee: More than quality is social responsibility. *NIDA Case Research Journal* 12(2), 102-124. <https://so04.tci-thaijo.org/index.php/NCRJ/article/view/241917/185057>

## Beyond Coffee: New Organic Farming Livelihoods in the Doi Chang Akha Community

*Cai Junqing, Ye Yint Kyaw, and Mou Jiaming*

### **Abstract**

Doi Chang, a multiethnic village in the hills of northern Thailand, has transitioned from being a remote community reliant on poppy cultivation during the Cold War decades to a coffee cultivation center that has developed a thriving coffee industry. However, some ethnic Akha farmers in Doi Chang have recently reduced their area of coffee planting and have begun cultivating organic vegetables. This research explores four sample cases to better understand how Akha farmers have begun to turn to growing organic vegetables while continuing coffee cultivation, and what advantages organic vegetable growing has offered them in this process. This study finds that, compared to the demands of coffee cultivation, Akha farmers who grow organic vegetables need to use less land, labor, and capital investment to achieve higher profitability, and that assistance from the Highland Research and Development Institute along with the network of Akha growers within the community has been key to Akha farmers' success with organic vegetables in Doi Chang. For the Akha organic farmers of Doi Chang, the success and profitability of the last few years points to a likely future expansion of organic vegetable cultivation.

**Keywords:** organic farming, agrarian transition, Akha, northern Thailand

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### Introduction

Doi Chang Village in Chiang Rai Province, northern Thailand is located in the mountains that range between northern Thailand, Myanmar's Shan State, and northern Laos at an altitude of 1,000-1,800 meters above sea level. The relatively high altitude gives Doi Chang a cool annual average temperature (18 to 25°C), with well-drained fertile soil and a misty climate, making it an ideal habitat for high-altitude cash crops. Doi Chang is known for its high-quality coffee beans, and its population of approximately 1,500 households (6,000 residents in total) of ethnic Akha, Lisu, and Yunnanese Chinese people makes its living mostly from coffee (Soralump et al., 2021).

Akha people are the majority ethnic group in Doi Chang, and they began migrating to the area primarily from neighboring Myanmar and Laos, as well as indirectly from Yunnan, China, in significant numbers from the 1970s onward, driven by regional conflicts and the search for arable land. However, increased migration failed to resolve the dilemma of official identity: early Akha migrants often lacked official identification and thus encountered challenges in accessing state services and land rights. It was not until the early 21st century, through community advocacy and policies like the 2008 Nationality Act, that many gained Thai citizenship, resolving their legal identification status (Ye Moe Oo, Chen, & Nui, 2025). Historically, the Akha people relied primarily on subsistence agriculture and opium cultivation for their livelihoods. From the mid-20th century, opium production was curbed globally, and Doi Chang's agricultural landscape changed. In cooperation with the United Nations, the Royal Government of Thailand launched a development project in 1973 aimed at replacing opium with other cash crops (Angkasith, 1991). In the 1980s, the Wawee Highlands Development Project distributed coffee seedlings to villagers and taught coffee cultivation techniques. Over time, coffee plantations replaced poppy fields, and today the Akha mostly rely on coffee as their main source of income (Lu, Tokamolthum, & Fan, 2025).

In the early 2000s, coffee from Doi Chang began gaining international recognition, largely through the export efforts of companies like Doi Chang Coffee Original. Its beans reached markets in North America, Europe, and

East Asia, establishing the region's reputation for quality arabica beans (Lu, Tokamolthum, & Fan, 2025). Now world-renowned for its high-quality arabica beans, Doi Chang's coffee industry has become a key driver of economic growth in the region, contributing new jobs, income, and livelihood avenues. Over time, coffee's influence on the social structure, cultural identity, and mobility patterns of the local Akha people has also gradually emerged, bringing new challenges (Ye Moe Oo, Chen, & Nui, 2025).

While coffee has brought economic benefits, its socioeconomic impact on the Akha community has been complex. The industry is characterized by price volatility in global markets, labor-intensive harvesting processes, and a lengthy growth-to-income cycle (coffee trees take several years to mature). These factors create livelihood precarity, particularly for smallholders. Furthermore, the physical demands of coffee farming, often involving trekking on steep slopes, are increasingly seen as too arduous by the younger generation. This combination of economic uncertainty and generational shift in work preferences has prompted some Akha farmers to diversify or seek alternative livelihoods that offer quicker returns, lower physical strain, and greater resilience.

This shift aligns with broader trends in Thailand. Spurred by global demand, domestic middle-class growth, and government policy support (e.g. the 2015-2021 Organic Crop Development Strategy), Thailand's organic sector has expanded significantly (Panyakul, 2004; Yanakittkul & Aungvaravong, 2020). The "organic wave" is most prominent in niche, high-value sectors, with demand for vegetables that are suited to or only possible to grow in highland environments (Vandergeest, 2009).

As demand for organic produce has greatly increased, the Thai government and quasi-governmental agencies have spearheaded several initiatives in Doi Chang, which has also contributed to the agricultural transformation of the area. For example, the Royal Project and Thai-German Cooperation have been promoting alternative cultivation in the region since the 1980s to support the development of cash crops such as coffee. The Highland Research and Development Institute (HRDI) also is an important body, supporting agricultural transition to organic agriculture, providing farmers with technical

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training, organic certification, and market connection resources. The involvement of these institutions not only improves agricultural productivity, but also strengthens the community's ability to respond to market and environmental challenges.

It is within this context that an increasing number of Akha farmers in Doi Chang are turning to greenhouse-based organic vegetable cultivation as a new source of income. They leverage the area's natural advantages, including its cool climate and clean water, while combining newly-introduced organic cultivation techniques with their agricultural experience to develop this new practice.

### Research questions

Upon investigation, we learned that there are currently more than 50 households in the village growing organic vegetables, and these families are interested in expanding the scale of their organic vegetable planting in the future. Why organic vegetable cultivation has quietly emerged and been chosen by Akha people in this community famous for its coffee is a question worth studying. Therefore, this research aims to focus on the process of how the Akha people of Doi Chang are in transition from coffee cultivation to organic vegetable cultivation.

1. How have livelihoods in the Akha community in Doi Chang changed since adopting organic vegetable cultivation?

This question focuses on the process of developing organic agriculture by Akha people, reflecting the dynamic nature of livelihood transformation represented by organic agriculture.

2. Why have some Akha farmers in Doi Chang started organic vegetable farming despite the continued success of coffee cultivation?

This question aims to clarify what motivates certain Akha farmers to choose organic vegetable cultivation and examines the conditions necessary for them to transform their livelihoods.

## **Methods**

Because this study seeks to understand personal decision-making, on-the-ground practices, and the intersection of tradition with new farming methods, qualitative methods are well-suited to capture the nuanced and contextual details that numbers alone cannot reveal. Through interviews and observations, we collected multi-source data on ethnic Akha people cultivating organic vegetables in the Doi Chang community. By digging into individual stories and situational details, we have sought to understand the rationality of Akha farmers who have started growing organic vegetables.

### *In-depth semi-structured interviews*

For this study, our team interviewed 11 representative Doi Chang villagers, including four organic farm owners as the main cases. The interviews primarily focused on topics such as villagers' reasons for choosing to grow organic vegetables, livelihood difference between coffee and organic vegetables, experience, benefits and difficulties in developing organic agriculture, and plans for the future development of organic agriculture. We listened to the interviewees' specific experiences and stories of organic farming and gained initial insights into what organic agriculture means to Akha people at the individual level.

### *Observation*

To better understand interview data, and to verify contextual authenticity, we visited multiple vegetable greenhouses and the surrounding agricultural environments of organic farmers to better visualize and understand beyond language limitations.

### *Snowball information collecting*

Through the introductions of our first interviewee, we were able to interact with three other interviewees and uncover more diverse individual experiences. Our information-gathering about organic vegetables was like a snowball, rolling bigger and bigger, and the "snowballing" was made possible through close relationships of family and community between different Akha farmers.

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### *Other sources*

Beyond observation, interviews, and the snowball method for information collection, we also used multimedia recordings and secondary sources for data collection. Multimedia recordings consisted mainly of notebook data, audio recordings, and photographic information. For example, we took note of non-verbal signs and contextual details during interviews. Audio recordings helped preserve the informants' original expressions for later analysis. Visuals such as photos helped us to analyze the physical structure of organic farms, look closely at organic vegetable packaging, and better understand land use practices, supplementing information that words cannot as easily convey.

Secondary sources: Historical documents and existing research on Doi Chang provided contextual and historical information about the community as well as the ethnic Akha people specifically. Secondary sources gave us useful background information on the history of development and migration in Doi Chang, statistics and media reports showing the perception of the Thai market towards organic agricultural products, and general background knowledge for this study.



Fig. 18: Greenhouses for growing organic vegetables in Doi Chang  
*(photo by the authors)*

*Positionality*

The three authors of this chapter are all student researchers majoring in social science. Two students are Chinese, and one is ethnic Shan from Myanmar who is studying in Thailand, and this joint research is conducive to cross-border exchanges and collaboration. Cai Junqing is a master's student majoring in ecological anthropology and Mou Jiaming is an undergraduate studying ethnology at Yunnan University. As their backgrounds are from a mountainous area of China and both are unfamiliar with rural agriculture, they have the position as the foreign outsiders in this research. Because of the language barrier, our translator Yan Wenbao was our medium for data collecting and influenced our data collection and interpretation not just through his knowledge of the language but also his understanding of the Thai context. Another member of our team is an undergraduate student of the social science and development program at Chiang Mai University named Ye Yint Kyaw. Ye Yint Kyaw has a rural Myanmar background and is familiar with agriculture and culture. He speaks intermediate Thai and Chinese, and he acts as a partial insider. Although he also depended on our translator, he could communicate directly with Doi Chang farmers. The collaboration of our three team members and our interpreter allowed us to have fruitful group discussions to challenge each other's interpretations and reduce individual bias.

We went to the field site with an 11-member group led by Yunnan University and Chiang Mai University academics and staff Dr. Ji Shi, Dr. Malee Sithikriengkrai, writing mentor Jeff Moynihan, and field assistant Ampha Wusue. The fact that Chiang Mai University served as the institutional authority in the field created a power relationship between us and farmers, and influenced our data collecting process. Unfortunately, because our time was limited, we could not fully integrate into the daily lives of the villagers, so we worked under the time constraints to collect relevant and necessary data, and much of the work of building up a relationship we were able to "shortcut" and directly access many of the people of Doi Chang through the existing relationships and access made possible particularly by Dr. Malee Sithikriengkrai and her relationship with the Center for Ethnic Studies and Development at Chiang Mai University.

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This article regards field materials as narratives generated in specific research contexts and social relationships, and continuously focuses on the impact of the researcher's position on data collection and interpretation in the analysis process in order to present the authenticity and complexity of the gradual introduction of organic agriculture among the Akha people with as much self-conscious awareness of our position in relation to the local community as possible.

### Findings

#### *Case 1: Worawit: The organic vegetable farming pioneer of Doi Chang*

Seven years ago, most Akha farmers of Doi Chang were still dedicating their energy to growing coffee. Unexpectedly, the organic vegetable business today has sprouted in Doi Chang. Key to this story is a young Akha man named Worawit.

When we first met Worawit at his farm, which looked vaguely like a factory, it was busy with workers sorting vegetables. He took time out to speak with us, resting his rough hands on the table while seated across from us. He is a lean, sun-darkened man, around 30 years old, with wrinkles spread across the corners of his eyes. He is the son of an Akha farmer, and he smiled as he recounted his journey, explaining how he gradually expanded his organic vegetable business after graduation from college.

Worawit graduated from university in 2008. Because his family has a large coffee plantation in Doi Chang, he came back home after graduating with the idea of continuing and expanding his father's coffee farm business. In that year, a Thai official working on organic vegetables at the HRDI started introducing organic vegetable farming to people in Doi Chang. He introduced organic cultivation to a young Worawit who was hungry to expand his business. Worawit saw that organic farming had future potential and was confident enough to give it a try. He participated in a year-long training program held by the HRDI. Upon completing the training and passing an exam, he obtained his organic vegetable cultivation certification. With this certification, he was ready to engage in organic vegetable farming and take the next step of this journey.

Some vacant land remained on his family property when he returned to Doi Chang, and he used it to start organic farming. On that land he built a nine by 17 meter greenhouse in 2018. However, his first round of organic vegetables was a loss, earning only a few hundred baht. He was deeply doubtful and even considered giving up. He persisted, trying new techniques that he had learned from HRDI. As a result, his income reached around 7,000 baht (US\$213) in the second round, and by the third harvest, approximately 13,000 baht (US\$396). His revenue from organic vegetables continued to increase steadily, and he now consistently earns around 100,000 baht per month.

In the beginning, HRDI also helped connect Worawit with partner companies to purchase his mature organic vegetables. Worawit and his buying partners directly determined production volumes and purchase prices. Later, he expanded his network with new buyers in Bangkok and supplied them directly as these companies offered him better terms. These companies make an order one month in advance, and pay three weeks after receiving the vegetable delivery.

Nowadays, Worawit has 12 local partners in his organic vegetable farming network in Doi Chang, with a total of 110 greenhouses on three plots of land. This marks his seventh year cultivating organic vegetables, having expanded his family business into vegetable farming. He explained that the cycle for organic vegetables allows them to be harvested up to 10 times annually, though typically seven to nine harvests are achieved. The organic growing cycle spans roughly one month. After each harvest, he adjusts the greenhouse and ceases all soil work for one to two weeks before planting new crops. He currently crossbreeds his own organic seeds, produces his own organic fertilizer, and maintains a cold storage facility to preserve the freshness of harvested produce. His operation is now very professional. However, he also faces challenges, particularly pest infestations. Worawit has adapted a new technique, rotating his crops every six cycles, changing the vegetable variety to reduce pests' ability to recognize specific crops. Additionally, he also incorporates "interruptor vegetables" to confuse pests' memory of organic varieties, such as baby bok choy greens and high-altitude mustard greens.

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Worawit also explained that, compared to coffee cultivation, organic vegetable production not only demands less physical exertion from farmers but also requires fewer laborers. Additional labor is only needed when expanding facilities, or for harvesting and packaging vegetables. He only hires laborers for rush orders, typically employing nine to 10 acquaintances at about 100 baht (US\$3.05) per hour. These figures for labor cost and workforce differ greatly from those of coffee farming, where he hires mostly migrant workers at around 250 baht (US\$7.62) per day. He explained, “Coffee cultivation requires labor only for harvesting beans—simple picking that demands no specialized knowledge. But selecting organic vegetables requires discernment to distinguish acceptable from unacceptable produce, which needs specific knowledge. That’s why labor costs for organic vegetables are higher than coffee.”

Since switching to organic vegetable farming, Worawit’s lifestyle has transformed. He mentioned that when living in the city, he had many friends and could engage in social activities like drinking after work or playing football with friends. But now he does not have time to socialize. Organic vegetable farming, contacting and negotiating with buyers, managing workers, transportation, storage, finances, and expansion of his farm consumes all of his time, making him too busy to participate in social activities.

Regarding his future plans, Worawit and his partners intend to expand from 110 greenhouses to 150 next year, but he said he will still keep some coffee plots to lower the risk of organic losses. However, he says that, so far, organic vegetables have not encountered a problem of oversupply in the market and he has not experienced any huge losses. Worawit mentioned that since organic vegetables are consistently cultivated and readily available, people incorporate them into their diets, making for high demand at a price that is fair and easily accessible. Beyond expansion, he also plans to encourage other young Doi Chang villagers to grow organic vegetables. His motivations are twofold: first, he believes organic farming is beneficial for everyone’s health; and second, having successfully profited from organic vegetable cultivation himself, he sees an opportunity for the village’s young Akha people to return to the village and earn income without having to leave Doi Chang to work outside.



Fig. 19: Team members interview Worawit at his farm while his employees sort and trim vegetables nearby. (*photo by the authors*)

*Case 2: From tour guide to organic farming: Somsak's career transformation in Doi Chang*

We spoke with another organic farmer, a man named Somsak, who was wearing gray clothes, carrying a small black tool bag, and wearing a pair of rubber slippers when we first met. His eyes were filled with confidence when he talked with us, and he looked like had experience communicating with many people. He spoke in a gentle voice with a smile on his face. We thought he was a local Thai man from Doi Chang until he shared his background. Somsak is from a Yunnanese Chinese family in Baan Viang Mok near Chiang Khong. He once worked as a tour guide in Pattaya and knew nothing about agriculture before coming to Doi Chang. In 2019, he married an Akha woman from a family in Doi Chang. Late that year, the COVID-19 pandemic swept the world and destroyed his career as a tour guide. He came to Doi Chang with his wife and did not know what to do. At that time, his father-in-law knew of other Akha people in Doi Chang earning money by growing organic vegetables, so he extended a helping hand and provided Somsak with one *rai*

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(0.4 acre) from his 80 *rai* (31.5 acres) of coffee fields to grow organic vegetables. This was the beginning of Somsak's organic vegetable business.

On that single *rai* of land, Somsak started with an initial investment of 60,000 Thai baht (US\$1,828) to cut down coffee trees, prepare the land for cultivation, and to build two greenhouses, each with 12 rows of planting beds and measuring 10 by 40 meters. He needed to buy seeds from a company. At that time, organic vegetable seeds were selling for between 350 and 800 baht (US\$10.66 to \$24.37) per 10 grams. The production cycle of organic vegetables can yield about 10 harvests per year. Other requirements include natural fertilizers, primarily chicken manure compost, which Somsak purchases from HRDI.

His first attempt at organic vegetable cultivation failed due to his lack of knowledge and experience. Somsak continued growing for a second round, this time consulting more with experts at HDRI, obtaining technical support and also assistance with market access. By the second harvest, his farm achieved a small profit. Now he has expanded to four greenhouses and is growing leafy green vegetables (such as Hong Kong kale, *bok choy*, and others).



Fig. 20: Somsak shows the research team his greenhouse. (photo by the authors)

With four greenhouses full of organic vegetables, he earns a stable income of nearly 100,000 baht (US\$3,046) per month. “Do you want to go and see my organic vegetable greenhouse?” Somsak asked when we visited him. We accepted his offer and went to observe his farm, which was located between his father-in-law’s coffee fields, with turbulent and abundant water streams nearby. In the greenhouse, he pointed to small pipes in the soil and explained that these were his automatic irrigation system, containing both water and organic fertilizer. Every morning, he simply needs to turn on the automatic irrigation water flow system and check his plants for insects. While talking with us, he reached out his hand and grabbed a black bug from a leaf, crushing it in front of us. According to Somsak, pests infiltrate the soil through connections to the outside, gaps in ventilation, and insect eggs carried by natural water sources.

Somsak told us that growing organic vegetables actually does not require a lot of labor. Generally, no more than 10 workers are required during the vegetable harvesting period. At peak period, his Akha relatives, a network of people who help each other in organic vegetable farming, assist him with no need for direct payment. Somsak is connected with the Doi Chang Akha community through marriage, a kinship relation. Once he was able to access his wife’s family’s land, Somsak introduced organic vegetables to his Akha relatives and shared his techniques with them, becoming a member of the network where they share, collaborate, and cooperate with each other. Now four of his extended family members are working together on organic vegetable cultivation.

For Somsak, access to agricultural land is his major challenge. He was able to access land to plant organic vegetables through his wife’s family, and this access was facilitated by his father-in-law. However, according to Akha customs, all property is inherited by the son. Somsak risks one day losing his land access. Further, land in Doi Chang has become limited due to the increasing population, more coffee plantations, and an increase in agritourism and organic vegetable farms. Organic vegetables have specific requirements like cool weather, moist air, water access, and specific areas of high elevation.

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Somsak emphasizes that organic vegetables are “safe, healthy, and aromatic,” providing not only income but also family well-being. He mentions that, compared to his past career as a tour guide, organic vegetable farming allows him to more flexibly manage his time with an independent lifestyle. He feels his current occupation enables him to take care of his family and children, and strengthen his kinship relations through cooperation.

### *Case 3: Returning to the land: livelihood transition from migrant labor to organic farming*

Wacharatchai is a new farmer who only just started organic vegetable farming in Doi Chang three months prior to our interview. He has so far only harvested two times. Wacharatchai is Akha from Doi Chang. He is of the second generation of an Akha family who migrated from Kengtung, Shan State, Myanmar, and have now become Thai citizens. Wacharatchai was also employed as a migrant worker in Japan and South Korea for more than a decade before returning to Doi Chang in 2024. His case demonstrates how livelihood changes can bring global migrant workers back to local agrarian life—in Wacharatchai’s case, by working in the new organic vegetable industry of Doi Chang.

Upon completing his education with *matayom* 3 (equivalent to grade 9 of high school), he was very motivated to strike out independently and earn an income. He decided to migrate to South Korea as a wage laborer with a five-year contract. Even though he is Akha with extensive relations and a strong family network in Doi Chang, he did not have the capital to invest in agriculture or other local businesses. Using his physical labor to earn a stable, relatively high income abroad was the best choice for him. After five years in South Korea, he transferred to Japan, working there too as an agricultural laborer, growing sweet potatoes on a six-year contract. In total, he was a migrant worker for 11 years before coming back to Doi Chang. In 2025, while still working in Japan, he purchased 10 *rai* (four acres) of land in Doi Chang with the savings from his decade of hard work. His 10 *rai* of land are used for growing coffee, and were managed by his wife and family while he still was abroad. This was the first step that Wacharatchai took into agriculture in Doi

Chang, relying on kinship relations with relatives in Doi Chang to look after his land while he was away.

Moreover, modern technology helped him to stay in touch with the local community while he was working abroad for many years. Even while living in other countries for over a decade, he maintained good relationships with his neighbors and kept in touch with everyone in the community digitally. This sustained connection helped him to adapt quickly when he arrived back in Doi Chang, and he connected successfully with institutions like HRDI. Later, these connections served as a network that helped him connect to outside markets to sell his organic vegetables. Wacharatchai's strong social and personal capital have enabled him to change his livelihood, establish security, and expand his agrarian livelihood.

As for human capital, training and consultation with HDRI staff has provided him with the necessary knowledge and skills to start in the organic vegetable business, providing technical assistance to build a greenhouse and set up his water and fertilizer supply system. His experience in agriculture while working in South Korea and Japan, as well as some experience in traditional agricultural practice, also encouraged him to go into organic farming. Wacharatchai had the financial capital to start organic vegetable farming from his time working abroad. In May 2025, he built an 18 by 17 meter greenhouse with an initial investment of 60,000 baht (US\$1,827) that also covered other basic requirements, including costs like seeds and organic compost fertilizer. Currently, he can earn 13,000 to 14,000 baht (US\$396 to \$426) per harvest from his organic vegetable farm. Before organic vegetables, his coffee farm provided him with a stable income. Now, organic farming has become his primary source of income. His experience, external supports, education, and traditional kinship ties have provided him with the capital to invest and the capacity to operate both his coffee and organic vegetable farms.

Doi Chang provides good natural capital for Wacharatchai to expand into organic vegetable agriculture because of its cool weather, fertile soil, and mountain streams. Vegetable cultivation requires a lot of water, much more than coffee, for which rainfall is sufficient. Organic farming thus needs a more specialized and controlled environment compared to coffee. The land that he

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uses to grow vegetables was once owned by his father, and is separate from the 10 *rai* (four acres) of coffee land that he bought later. The land on which he built his greenhouse was once used by his mother to grow vegetables and raise livestock. It has good access to water resources and provides food security for the family. The vegetables and livestock raised on this land in the past were for family consumption and did not generate income, a part of family subsistence and not for commercial agriculture until Wacharatchai began organic farming. This case provides a clear example of how organic vegetable farming is part of the agrarian transition in Doi Chang, a change from subsistence to market-based agriculture for small households to generate both income and food security.

Wacharatchai is part of an Akha organic vegetable farming network which has about 20 members. The leader of the network holds the most power as he is the middleman between local farmers and the outside market. However, the leader does not have the power to adjust the price of vegetables, which is set by the outside buying company and depends on market demand. As a new farmer who has not expanded his outside market network, Wacharatchai relies on a buyer he connected with through HRDI to sell his products. Payment is received 10 days to one month after the products are sent to the company, and farmers are responsible for any damage or loss during transportation. Currently, the loss rate for vegetables in transport is 12.5 percent, and the rate of below-grade vegetables that cannot be sent to the market can reach 20 percent.

As a new farmer, Wacharatchai also faces challenges with insects and market access. Pests are a major factor that contributes to the 20 percent damage to his yield. He has managed to reduce his loss rate by upgrading his pest management skills through consultation with HRDI staff who assist him in gaining the best possible yield from organic farming. Even though Wacharatchai has only three months of experience in organic vegetable farming, he has so far successfully adapted to this new agrarian livelihood in Doi Chang. He plans to expand to three greenhouses in the near future in order to meet market demand and generate higher profits.

*Case 4: New generation farmer: Office or farm?*

When we first met Surachai, he was wearing bright red clothes, with a slight red tint to his dark skin, and had a hairstyle common among young Thai boys. He smiled and told us his story, speaking very politely and somewhat restrained. One could feel that he was indeed very young, and in fact, he is only 25 years old. But before telling Surachai's story of being a youth of Doi Chang who decided to return to do agriculture after graduation, we need to return to the story of Worawit, the pioneer of organic vegetable farming. These two farmers belong to the same family as uncle and nephew. As previously mentioned, Worawit is constantly expanding his organic network. Surachai is one of Worawit's new recruits among the increasing number of organic business partners in Doi Chang who are working in the same network.

Surachai's uncle Worawit has been actively recruiting young people to return to Doi Chang and cultivate organic vegetables, as encouraged by HRDI. After Surachai graduated from university at age 21, he received an invitation from his uncle to step into organic vegetable farming in Doi Chang. Surachai thought that by participating in organic farming, he could leverage the capital earned from his family's coffee farm as his startup fund and eventually earn more compared to taking a full-time wage job in an urban area. He is also the oldest brother in his family, believing he has the responsibility to take care of his five younger siblings and manage the family coffee business. With all this in mind, he decided to try organic farming as a new income source in order to support his younger siblings, feeling the weight of responsibility as the eldest brother.

His parents also encouraged and supported him to pursue this livelihood because they witnessed Worawit's success with organic vegetable farming. The family agreed to use one *rai* (0.4 acre) of land that they had used to plant coffee in the past to start an organic vegetable farm. It takes two years to prepare soil for organic agriculture, to ensure that chemical compounds in the soil remaining from past coffee cultivation have sufficiently dissipated. Surachai started building his greenhouse on the land as soon as he received his quality approval certificate from HRDI. Today he operates 11 organic vegetable greenhouses, each measuring six by 30 meters. Nonetheless, he has

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not completely left the coffee business behind, expanding his coffee cultivation by approximately 15 *rai* (six acres) of land, providing another source of income besides green bean coffee. He told us very honestly that organic vegetable cultivation has brought him a lot of money. He has been able to support a sibling who is studying Japanese language and receiving their basic education outside of Doi Chang. He has also paid off all his debts and has surpassed one million baht (US\$30,462) in annual income after four years of organic vegetable cultivation.

Worawit has 12 partners in addition to Surachai who help supply his organic vegetable network to have enough produce to meet the demand of various distribution channels. While Surachai's parents assist with daily management, he now also employs two regular short-term workers. If manpower is insufficient or if these two regular workers are unavailable, he hires additional workers via Worawit or other organic farmers. Because sorting and trimming produce requires a level of skill to discern which to keep and which to discard, Surachai needs to invest time and resources to recruit and train new workers. He prefers to hire skilled workers, even if at a higher wage. Overall, Surachai told us that he believes organic vegetable production is far less strenuous than coffee farming. Coffee bean harvesting requires trekking into the mountains with big baskets, and the weight of the basket steadily increases during picking, a physically demanding and exhausting task. In contrast, harvesting organic vegetables is easy: if it gets too hot, he simply moves to a cooler spot; if standing tires him, he squats instead.

As a member of the younger generation of Doi Chang, Surachai has not considered branding either for his coffee or organic vegetables. Building a brand requires substantial capital and time, he explains. He remains focused on expanding his organic vegetable production and selling green bean coffee rather than developing his own coffee brand.

## Analysis and Discussion

### **Institutional and community networks and organic agriculture in Doi Chang**

The Highland Research and Development Institute (HRDI) works to promote food security, poverty alleviation, and environmental conservation in Thailand's highland regions. The HRDI's programs focus on organic agriculture, including promotion of the "good agriculture practices" (GAP) standard, biological extract usage (herbal treatments and remedies), and other organic standards to ensure that highland farming is a sustainable livelihood and is part of a healthy ecosystem. HRDI operates five specialized groups: fruits, vegetables, environmental management and monitoring, coffee, and others. Each group receives funding from the Highlands Fund to expand its operations and generate income (Highland Research and Development Institute, n.d.).

Based on our seven-day investigation, we found that the HRDI is a key actor in Doi Chang farmers' move toward organic vegetable cultivation. Farmers rely on the support of HRDI for fundamental knowledge of organic farming, organic standards, maintenance of organic farms, and assistance in selling vegetables and connecting with markets and buyers. HRDI assists farmers in overcoming difficulties encountered during the process, and helps them locate sales channels.

One crucial factor for organic vegetable cultivation is that producers need special knowledge and technical skills. Farmers must complete a one-year training program facilitated by HRDI. During the post-training phase, HRDI provides continuous technical and knowledge support. Only by passing an exam and obtaining a document certifying their organic practices are farmers able to start cultivation and sell to the larger organic vegetable market with this document and its logo, attesting to their adherence to organic standards. Farmers need to strictly follow all the HRDI standards in order to pass the qualification test. For example, Surachai mentioned that he spent two years converting his soil to organic status, during which no chemical fertilizers were permitted. HRDI controls standards strictly through its certificate issuing program and helps establish trust between consumer, company, and farmer.

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Furthermore, HRDI also supplies farmers with organic vegetable cultivation inputs such as organic fertilizers and pesticides, giving growers easy access to these key raw materials. Worawit explained: “Organic vegetables cannot use chemical fertilizers, so I had to learn how to cultivate biofertilizers and other organic fertilizers. Later, I started purchasing organic fertilizers from HRDI because their products meet organic production standards and are permissible for use.” As Somsak told us, he goes to the HRDI office to buy organic fertilizer because it saves him time; buying it directly is more convenient than composting and making his own organic fertilizer. HRDI reduces the difficulties for farmers and makes it more convenient to transition to organic agriculture.

New farmers like Wacharatchai rely on HRDI’s leads to sell their produce to companies because they have limited market connections. Wacharatchai told us that HRDI provides him with information on different buyers, allowing him to choose to which company he will sell his vegetables. Furthermore, if farmers encounter issues while collaborating with a company, HRDI can step in to mediate. For example, Somsak mentioned that a company called 88 Farm was one of his previous partners. However, excessive vegetable waste rates (large quantities of produce deemed substandard and discarded by the company during transport) significantly reduced his income. HRDI attempted to mediate between Somsak and 88 Farm. When mediation failed, HRDI secured Somsak a new partner company to ensure the organic vegetables produced by farmers could be sold without undermining their profits. The vegetables need to be sent within several days under special conditions, so market access is very important for the farmer. HRDI’s network is thus very important for them to get access to markets.

The level of support HRDI provides farmers also depends on the stage of their organic vegetable venture. Somsak told us that if farmers encounter any issues with crops, they can directly consult HRDI staff. In contrast, Worawit, a seasoned organic farmer with seven years of experience, has now separated from HRDI. He independently produces his crops using his accumulated knowledge, establishes business relationships with merchants outside HRDI, and strengthens his own market connections. He proudly informed us that

his vegetables are sold in the produce sections of large 7-Eleven stores in Bangkok.

HRDI has enabled Akha farmers in Doi Chang to successfully cultivate organic vegetables by providing advice, knowledge, techniques, market access, and raw materials. Ultimately, the community and farmers specifically have access to the benefits of interaction with HRDI because of their status as subjects of the Thai state, targeted by a long-running government policy for developmental assistance. In some aspects, this is not dependent on their citizenship status, with HRDI programs and supports available also to long-term residents of border areas who still lack Thai citizenship. However, to become officially certified as an organic supplier as a farmer who has achieved organic standards, or to receive funding or other official government support or recognition, Thai citizenship is necessary. In this way, for the organic farmers of Doi Chang, one of the most important network connections they have is that with the Thai government and its resources, which can only be fully unlocked by being citizens of Thailand.

### **Internal Akha community networks and culture**

Mr. Zhang Taichang, a local Doi Chang resident of Yunnanese Chinese ancestry, told us that very few members of Doi Chang's Chinese community grow organic vegetables—only three households currently. This is because organic farming demands strict chemical-free conditions and faces limited sales channels, making it unsustainable for most to continue.

However, the situation among the Akha in Doi Chang is entirely different. The number of organic vegetable farms is increasing in the Akha community, while the other ethnic communities of Doi Chang seem to have limited engagement in organic vegetable cultivation. Why do other communities (Lisu and Yunnanese Chinese) and the Akha differ in their enthusiasm for organic vegetable farming, even though they share the same atmosphere, soil, and water conditions, and equal access to the support of agencies like HRDI in Doi Chang? One of the reasons that the Akha are able to sustain and even expand their organic vegetable farming is their kinship network, the “internal” network of the Akha community.

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According to research conducted by Ampha Wuseu (2021), the reason why the Akha have such a large population in Doi Chang is because as they have historically avoided chaos and war, they have secured resources to establish a stable population base. Over time, the growth of the Doi Chang coffee industry's demand for laborers began to attract more Akha people, who learned of and came to Doi Chang through their clan network of Akha families, ultimately resulting in a large population of ethnic Akha people in Doi Chang. This resulted in a larger population and land holdings greater than that of other ethnic communities in the same area. The mutual aid and reciprocal culture of the Akha people originates in old cultural values of work exchange—that is, the culture of helping each other's relatives, close friends, and neighboring residents in the past with farmwork without immediate payment or compensation. Although this culture of shared labor has largely been replaced by paid wage labor, Akha farmers and Akha community members still rely strongly on their large, extended family and networks for help from those with whom they have relationships.

This ethos of mutual aid is also reflected in the Akha community's organic vegetable farming initiatives. Worawit stands as a successful example of organic vegetable cultivation in the Doi Chang community. He shared that, after achieving success with organic vegetables, he has recommended the practice to his friends and relatives, all of whom are Akha, as a way for them to increase their income. Currently, his organic vegetable greenhouse project involves 12 Akha collaborators, to all of whom he recommended organic vegetable farming. Surachai is also one of these 12. Wacharatchai and Surachai, along with Wacharatchai's partner, learned about organic vegetable farming from their Akha acquaintances. Hearing that it was profitable—more so than coffee cultivation—and witnessing these success stories motivated them to return to Doi Chang and start their own organic vegetable farms.

Somsak and his three partners operate three greenhouses. By observing their cooperation, we witnessed how Akha people mutually support each other in organic vegetable development. Somsak told us that the other two joined after seeing the profits from his organic crops. At first, his inexperienced Akha partners did not know how to do organic farming, so he taught them

the essential practices, like watering, that are specific to organic cultivation. Now that the other two have gradually developed their own organic farms, the trio supports each other. When no short-term labor is available for harvesting mature organic vegetables, whoever needs help in their greenhouse receives assistance from the other two. Although Somsak is not himself Akha, he has married into a local Akha family, and this cultural influence and kinship relation inevitably shapes his approach to farming in Doi Chang.

We also learned that organic vegetable production demands specific technical skills and knowledge, requiring young workers who are open to new methods, whether as farm owners or hired laborers. This is also why they need training and certification from HRDI before they can cultivate and sell their organic vegetables. The Akha community in Doi Chang has enough young people to meet this labor requirement, satisfying the human element needed for sustainable organic development. As seen across these four cases, Worawit and his 12 partners, Wacharatchai and his two partners, and the short-term laborers employed by the fourth case study are all younger farmers in their 20s and 30s.

### **The role of infrastructure and technology**

The improvement of infrastructure and technology has helped Akha organic farmers in Doi Chang build a network with outside companies (Rattanawong, Ongkunaruk, & Leingpibul, 2024). We learned from Mr. Zhang Taichang, a local Yunnanese Chinese resident, that prior to the year 2003, many roads in Doi Chang were dirt paths, and travel and transportation was extremely difficult for people. It was not until the assistance of the Chiang Rai provincial governor and support from the Royal Project that paved all-weather roads were gradually constructed. Later, following the growth of Doi Chang's coffee industry, villagers used some of their earnings to further improve the roads to facilitate coffee transportation and boost production.

The roads originally built for coffee development now equally benefit the transport of Doi Chang's organic vegetables. Unlike coffee, organic vegetables demand freshness for marketability. Doi Chang, located over 150 kilometers away from the large city of Chiang Mai, and nearly 800 kilometers from

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markets in Bangkok, requires refrigerated transport to maintain vegetable quality. Improved roads allow refrigerated trucks to reach other areas far away from Doi Chang quickly, ensuring fresh vegetable delivery. Wacharatchai explained the steps: after harvesting and packing vegetables from his greenhouse, he loads them into his pickup truck. He then transports the organic produce to the village's intersection with a major national road, where a refrigerated truck from their partner company is waiting. After transferring Wacharatchai's vegetables, the truck carries the fresh produce to Chiang Mai.

Finally, the internet has strengthened local connections to the outside world. Worawit's story suggests that experienced organic vegetable farmers may eventually separate from HRDI to pursue their own independent development. Throughout this process, the internet is an invaluable resource. After Worawit decided to end his connection with HRDI, he began establishing relationships with external suppliers and actively sought out new markets and buyers. Throughout his ongoing communication with suppliers, he relies on social networks and various applications to connect with them. Roads and internet access are fundamental in the new local organic vegetable livelihood in order to connect with purchasing companies and to quickly transport vegetables with as low a rate of waste as possible.

As Doi Chang has developed and grown, the HRDI, the close-knit network within the Akha community, and critical infrastructure such as roads and internet have made it possible to develop the community's organic vegetable business.

### Conclusion

Before arriving in Doi Chang, we thought of coffee as the symbol of the local agricultural economy and the focus of the agrarian transition in the area. But once on the ground in the community, we observed greenhouses everywhere that have in recent years popped up alongside coffee plantations. Organic vegetables seem to hold a new promise of prosperity and security for Akha people in Doi Chang. Many Akha farmers are only just beginning to transition from growing mainly coffee to gradually increasing their cultivation of organic vegetables. Compared with cultivating coffee, organic vegetables have the

advantage of being harvested and sold in a short one month-to-six week timeframe, as they grow and mature quickly. On the same piece of land, income from growing organic vegetables can be higher than that from growing coffee.

Compared with growing coffee, organic vegetables are quick and also require less strenuous labor, and for the young generation, this “quick-result” livelihood is appealing. We met some young Akha women, high school students studying at the Chinese school of Doi Chang, who told us that, despite the success of the coffee industry in Doi Chang, they do not want to grow coffee because it is too tiring for them. From this point of view, a young farmer like Surachai shows that cultivating organic vegetables has appeal for the new generation, and in the future is likely to continue to expand in Doi Chang. The interest in coffee cultivation may decrease among Akha people in Doi Chang in the future.

The difficulties related to coffee cultivation are real: coffee requires years of planting with a high investment in labor, land, skills, equipment, and knowledge to grow quality coffee that obtains a high price. However, coffee has a large, global business network, and in Doi Chang, Akha coffee entrepreneurs in the last two decades have already built up and invested in almost every step of the coffee production chain, from planting to processing, roasting, packaging, retail, online sales and marketing, and coffee-related tourism facilities. Thus, despite the fact that the amount of coffee planted may decrease, it seems unlikely that it will completely disappear at any time in the near future, and almost impossible that it will be completely replaced by organic vegetables.

The high potential for growth of organic vegetable cultivation, however, may increase pressure on the amount of land available for coffee, as available land in Doi Chang is in short supply due to the increasing population, coffee plantations, agritourism, and now organic farming. We saw that, in at least one case, a farmer wanted to expand his organic vegetable greenhouses, but due to limited land had to reduce his coffee cultivation to open land for organic vegetables. Coffee in Doi Chang will definitely not be replaced by organic vegetables, but organic farming seems likely to contribute to the problem of

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limited land for coffee growing in the future. Even Worawit, one of the most successful organic farmers, still reserves land to continue growing coffee.

One limitation of this research is its very limited gender perspective. We did not have the opportunity to interview female organic vegetable farmers or women involved in other jobs in Doi Chang organic farming, so we have little to no understanding of the role of women in organic vegetable cultivation. Organic vegetable farming in Doi Chang seems to be following traditional male-dominated agricultural practices of the Akha people, perhaps at least in part because of Akha families' gendered practice of only men inheriting family land. Women do not have any inheritance rights to land in customary Akha practice. The level of involvement, role, and responsibility of Akha women in the new world of organic vegetable farming deserves investigation to provide a different view on this new livelihood.

Organic vegetable farming is not an economic choice achieved at once, nor is it the result of a single market-driven cause, but it is gradually becoming a new economic, social, and cultural practice, pushed and shaped by individual choices and multi-layered social networks. The success of organic vegetable farming does not depend solely on the promotion of new technology or market incentives, but also on the social relations and continuation of knowledge sharing. The experience of the organic Akha vegetable growers of Doi Chang provides important insight into how smallholder societies seek sustainable living in the context of globalization and livelihood change. Organic transformation is not only an economic behavior, but also a practice of cultural reengineering and social cooperation.

## References

- Angkasith, P. (1991). Attitude of the hilltribe coffee growers towards coffee growing and extension in the highlands. *Kasetsart Journal of Social Sciences*, 12(1), 68-75. <https://so04.tci-thaijo.org/index.php/kjss/article/view/243997>
- Highland Research and Development Institute [HRDI]. (n.d.). *Mountain partnership, Food and Agriculture Organization of the United Nations*. <https://www.fao.org/mountain-partnership/members/detail/highland-research-and-development-institute-hrdi/en>
- Lu, M., Tokamolthum, R., & Fan, Y. (2025). Lisu community of Doi Chang: Wicked problems of adaptation to changing livelihood. In *Sino-Thai explorations: Agricultural transition of ethnic groups and livelihoods* (pp. 140-162). Regional Center for Social Science and Sustainable Development, Chiang Mai University.
- Panyakul, V. (2004). Organic agriculture in Thailand. In *Production and export of organic fruit and vegetables in Asia*. Food and Agriculture Organization.
- Rattanawong, A., Ongkunaruk, P., & Leingpibul, T. (2024). Investigating the structural composition of contemporary sustainable organic agriculture supply chains: A case study from Thailand. *AGRARIS: Journal of Agribusiness and Rural Development Research*, 10(1), 136-155. <https://doi.org/10.18196/agraris.v10i1.307>
- Soralump, S., Shrestha, A., Thowiwat, W., et al. (2021). Assessment of landslide behaviour in colluvium deposit at Doi Chang, Thailand. *Scientific Reports* 11, 22960. <https://doi.org/10.1038/s41598-021-02363-3>
- Vandergeest, P. (2009). Opening the green box: How organic became the standard for alternative agriculture in Thailand. Paper presented at the Berkeley Workshop on Environmental Politics, April 17, 2009.
- Wusue, A. [อำนาจวู้ซึเอ] (2021). *Labor, ethnicity, and social relations in coffee production for the global market among the Akha ethnic community of Baan Doi Chang* (Master's thesis). Chiang Mai University.
- Yanakittkul, P., & Aungvaravong, C. (2020). A model of farmers' intentions toward organic farming: A case study of rice farming in Thailand. *Heliyon*, 6(1), e03346.

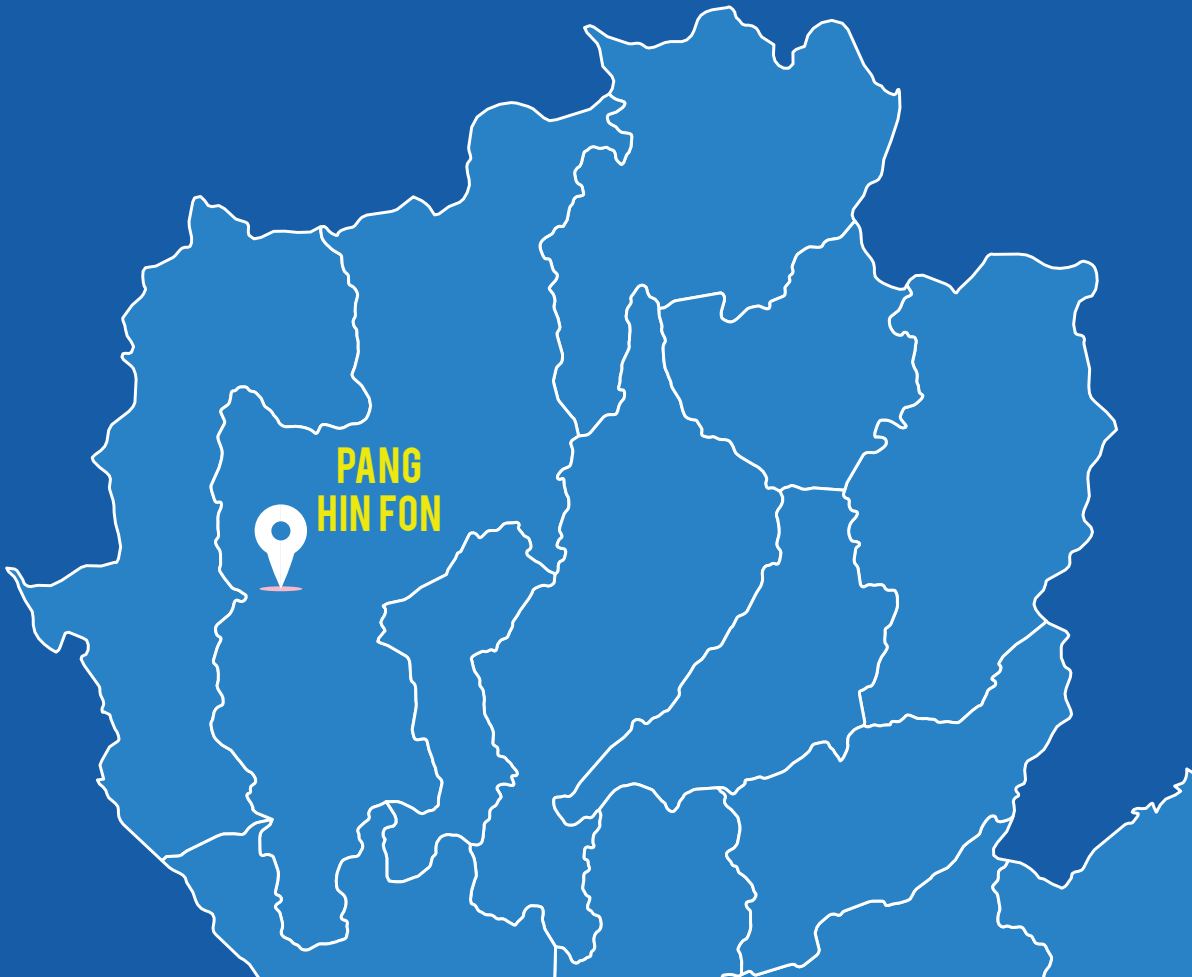
## SINO-THAI EXPLORATIONS

Ye Moe Oo, Chen, Y., & Nui, R. (2025). Akha mobility in agricultural transition of Doi Chang: Where does the journey lead? In *Sino-Thai explorations: Agricultural transition of ethnic groups and livelihoods* (pp. 163-190). Regional Center for Social Science and Sustainable Development, Chiang Mai University.



# PANG HIN FON

Pang Hin Fon Village is a multiethnic community comprised of three main ethnic groups: the Hmong, the Karen, and the Northern Thai (*Khon Mueang*). The first group to settle in the area were the Hmong, followed shortly thereafter by the Karen. The name “Pang Hin Fon” derives from Northern Thai dialect. The word “*pang*” refers to a place or settlement, while “*hin fon*” refers to a type of stone commonly used for sharpening knives, which are abundant in the area. Today, Pang Hin Fon is located in Village No. 10, Pang Hin Fon Subdistrict, Mae Chaem District, Chiang Mai Province, within the boundaries of the Mae Chaem National Reserved Forest, declared in 1974. In 2005, this area was separated from the Mae Tho National Park.



The community consists of 95 households (55 Hmong, 35 Karen, and 10 *Khon Mueang*) with an approximate total of 255 residents. Among them, the Yang clan is the largest family group in the village. In the past, the Hmong villagers cultivated opium. Today, the layout of the village consists of houses built in a linear fashion along a five-kilometer stretch of road with homes spaced apart. This is because most villagers chose to build their houses near their agricultural land. Much of their farmland is located in the areas of neighboring villages.

Most villagers own farmland; only about five percent of the population lack farmland and must rent land for cultivation—either from others in the village or from outside. The average rental price is 1,000 baht (US\$30.46) per *rai* (0.4 acre). Pang Hin Fon currently has five government local agencies including Baan Pang Hin Fon School, Subdistrict Health Promotion Hospital, Watershed Management Unit, Pang Hin Fon Subdistrict Administrative Organization, and the Pang Hin Fon Royal Project Extension Center.

Between 1988 and 1990, a road was first constructed through the village, and in 1994, Pang Hin Fon Subdistrict was separated from neighboring Baan Thap Subdistrict. Mountain tap water was introduced in 1999 through a community request submitted via the Royal Project. Electricity first reached the village in 2010.

Due to its cool climate and elevation—1,400 meters above sea level—this area is well-suited for opium cultivation. Today, however, the community has transitioned to growing cabbage, potatoes, Japanese onions, tomatoes, and fruit trees instead. Nonetheless, the terrain is not suitable for cultivating upland rice, corn, or pumpkins.



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## Effects of Crop and Market Adaptations Over Time in Pang Hin Fon Village, Chiang Mai, Thailand

*Lu Xinlei, Zhang Yuelin, and Tan Yumei*

### **Abstract**

Against the backdrop of capitalist agricultural transformation, state interventions and local initiatives have driven the agrarian transition of northern Thailand's Pang Hin Fon Village from subsistence farming and opium cultivation to diversified, market-oriented agriculture. This study examines how villagers access markets through intermediaries, organizational channels, direct merchant partnerships, and online platforms. Adaptive strategies such as greenhouse farming, flexible planting schedules, cooperative pricing, and product branding enhance villagers' market competitiveness. While these aspects of the village's crop and market transformations have raised incomes and living standards, they have also increased costs, labor demands, and exposure to market risks, including competition from low-cost Chinese imports. Relations with the state remain variable as villagers adapt official government programs to local conditions and contest land-use restrictions.

**Keywords:** agrarian transition, northern Thailand, organic farming, adaptive strategies

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### Introduction

Pang Hin Fon is a mountainous rural village located in northern Thailand's Mae Chaem District, Chiang Mai Province, comprising 95 households with a total of 255 residents from three main ethnic groups: Hmong, Karen, and Northern Thai (*Khon Mueang*). Ethnic Wa people were the earliest community to inhabit the village area when the first settlement in this location emerged in 1927. However, the Wa later abandoned the nascent village and moved away due to an outbreak of disease in the area. Subsequently, Hmong people began migrating from other mountainous areas to settle here in the mid-to-late 1940s. The first Hmong group to arrive consisted of only four households, all with the surname Yang (Worawut Saeyang, group discussion, August 2025). In the 1980s the village was officially established and the first roads were constructed.

Early residents of Pang Hin Fon primarily grew glutinous or waxy corn and upland rice as food crops, which were generally for their own household consumption and not traded in the market. The Hmong villagers also grew opium as a cash crop. Although the Thai government officially banned opium in 1958, "insufficient resources and the lack of understanding among the highland peoples resulted in an unsuccessful campaign to restrict poppy cultivation" and poppy eradication did not begin in earnest until several decades later (Gongsakdi, 2022). Villagers in Pang Hin Fon cultivated and sold opium to traders from outside the village for money, which they used to purchase daily necessities and to cover living expenses. Barter was also sometimes used. For example, opium produced in the village was directly exchanged for textiles, salt, and other essential items. Following the introduction of the Thai Royal Project in Pang Hin Fon, a large number of migrant workers from other ethnic groups arrived in the village in order to plant trees to reduce forest fires, and these workers became the main group of opium consumers in the village (Saifon Damrongkanchanakun, pers. comm., August 2025).

Over time, the village's agricultural areas eventually suffered from severe deterioration in soil quality due to long-term opium cultivation and overuse of the land (Somchai Yangsantiwong, pers. comm., August 2025). In addition

to new restrictions on the production of opium, reduced soil productivity provided additional motivation for the introduction of new crops and technologies in Pang Hin Fon. The village began a significant agricultural transformation following state-led interventions in the 1990s such as the Royal Project's crop replacement programs and the state's strengthening of national land use policies aimed at eradicating illicit crops and promoting sustainable alternatives in highland areas.

The total land area in Pang Hin Fon village is relatively small. On average, each family has 20 *rai* (eight acres) of land. The villagers received their official land allocations relatively recently (Somchai Yangsantiwong, pers. comm., August 2025). In 1991, the government launched a forest protection project in areas surrounding the village. Government personnel worked together with the villagers to measure and determine the land area, dividing it into protected forest areas, living areas, and designated agricultural areas. All the land within the designated forest area belongs to the government, and the local people are prohibited from encroaching on this land. The forest area surrounding the village was later reclassified as a Class A Forest Reserve where all agricultural production activities are prohibited. Road construction in areas surrounding the forest reserve is also restricted.



Fig. 21: Landscape of Pang Hin Fon showing residential and agricultural areas with forest reserves in the surrounding hills (*photo by the authors*)

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Natural geography and land use restrictions have prevented villagers from expanding the village and its farmland area, exacerbating the land shortage situation and restricting the agricultural development of the village. Since 2021, however, the government's forestry department has been gradually removing some previous restrictions on land use in the forest reserve area, and is currently working to determine agricultural planting rights and road construction rights (Worawut Saeyang, group discussion, August 2025). The government has allowed villagers to develop new roads in residential and agricultural areas of the village. Although some problems have been solved, the land shortage dilemma persists. Efforts by some villagers to negotiate planting rights inside areas of the forest reserve surrounding the village are ongoing.

The village's agricultural transition reflects a broader agrarian shift from subsistence-oriented farming to market-integrated production. Villagers today engage with markets through multiple channels: middlemen, the Royal Project, and self-organized sales, often using digital tools like Facebook to negotiate prices and access real-time market information. This phenomenon resonates strongly with similar agrarian transformations observed across many areas of Southeast Asia.

As Rigg (2000) argues in *More Than the Soil*, the very nature of rural livelihoods is undergoing a fundamental change. For many households, farming is no longer the sole or even primary source of sustenance. Instead, they strategically construct "hybrid livelihoods" that deliberately combine farm and non-farm income, a process indicative of a broader regional trend where the economic center of gravity in the countryside is shifting away from pure agriculture. For example, villager Pravit Yangsantiwong is a full-time farmer in Pang Hin Fon whose family also runs a small dry-goods shop in the village. It is precisely through this adaptive strategy that the family farm, as an institution, demonstrates remarkable resilience despite being deeply integrated into markets. Farmers' agency is evident in how they strategically engage markets via middlemen, state schemes, and digital platforms. Consequently, this transition is not a uniform takeover by capital but a negoti-

ated process, where global forces are mediated by state action and household-level ingenuity (Rigg, 2000).

Today, villagers in Pang Hin Fon grow a diverse range of licit cash crops, including tomatoes, oranges, cabbages, cucumbers, avocados, flowers, and coffee, using both traditional and modern methods such as greenhouse cultivation following standards and requirements for Good Agricultural Practices (GAP) and organic certification systems. While these changes have increased incomes for some villagers—enabling investments in new homes, vehicles, and farm infrastructure—they have also introduced new challenges, including rising production costs, chemical exposure risks, and dependency on external capital and certification systems. The complex interplay between local practices, state policies, and market mechanisms illustrates ongoing tensions between capital-led agricultural modernization and the pursuit of smallholder autonomy and livelihood sustainability.

### **Research Questions**

1. How do the villagers of Pang Hin Fon make connections to markets and gain knowledge about organic and GAP cultivation practices?
2. How have the crop and market transitions affected the daily lives of villagers in Pang Hin Fon?

### **Methodology and positionality**

Both qualitative and quantitative methods have been used for this research. The former includes participant observation, in-depth interviews with key informants, focus group discussions, preliminary presentation of data and findings to community members for input and feedback, and village mapping (see Figure 2). Quantitative methods include collection of specific data regarding crop prices, seed costs, transportation costs, amount of chemicals used, etc.

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Fig. 22: Village map created by the authors

As for our positionality, we three authors are all female university students from southern China from three different ethnic minority groups (Tujia, Yi, and Zhuang). This study was undertaken as the primary component of a two-week Sino-Thai summer school program organized in August 2025 by Chiang Mai University and Yunnan University focusing on agrarian transitions in ethnic communities of northern Thailand. None of us speak the same language or dialects as the villagers, which presented some difficulties with our ability to communicate effectively during interviews. Interviews and group discussions were conducted with the assistance of a Thai-Chinese interpreter.

Our positionality as citizens of a foreign country may have caused the villagers some difficulty with initially feeling comfortable or trusting us due to our cultural differences. To gradually build trust and strengthen our relationship with our informants, we relied heavily on both formal and informal interactions. Assisted by our interpreter, we not only conducted structured interviews but also engaged in casual conversations in daily settings.

Over time, we bonded with the villagers by helping with cooking, chatting informally with women similar in age to ourselves, playing with children, and sharing snacks and stories about our own lives, traditional clothing, and food in China. One evening, this growing familiarity led to a particularly memorable moment when the female villagers affectionately gave us Thai nicknames.

Our openness and genuine curiosity also helped dissolve initial doubts. For example, when one of our informants inquired directly about our intentions for the research we were conducting in the village, we explained that our purpose was not profit-driven but stemmed from an ethnographic interest in how resilient villagers sustain their livelihoods through times of change and hardship. This frankness was well received, and the villager became more willing to share details of his private farming plans, even sketching his cultivation schedule for us. Finally, by sharing a presentation of our preliminary research to the villagers—detailing our initial findings and analysis, and inviting their feedback—on our final morning in the village we attempted to demonstrate respect for their knowledge and voices, further deepening mutual trust.

## Findings and Discussion

### **How do the villagers of Pang Hin Fon make connections to markets and access knowledge about organic and GAP cultivation practices?**

As part of the Thai government's continuing opium eradication and alternative development efforts, the villagers, the Royal Project Foundation, and the Highland Research and Development Institute (HRDI) continue to actively seek viable alternative industries to completely replace illicit cultivation activities and support economic opportunities for villagers in Pang Hin Fon. There are three primary licit agricultural paths the villagers are currently engaged in. The first group, represented by the villagers themselves, focuses on cultivation of oranges; another group, led by former village head Somchai Yansantiwong, cultivates different varieties of tomatoes; and the third group is currently experimenting with grapes. The Royal Project, established in 1970 following King Bhumibol Adulyadej's visit to Chiang Mai in 1969 (Chutintorn

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Gongsakdi, 2022), works alongside the HRDI and other government organizations. These agencies are under royal patronage but are managed by the government with the main purpose of helping ethnic and rural highland farmers cooperate successfully with private enterprises. They have also played an important role in promoting greenhouse cultivation in Pang Hin Fon.

Most villagers are unable to clearly distinguish among the different organizations. The Royal Project and the HRDI primarily deploy their resources and information channels to help villagers introduce new crops and learn planting techniques. They also serve as intermediaries to connect villagers with markets. In recent years, these two organizations have primarily promoted Good Agricultural Practices (GAP) and organic farming projects in the village. GAP encourages and supports villagers to reduce pesticide use in agricultural production and to rely on environmentally friendlier alternatives at minimal levels. Organic agriculture goes a step further: no pesticides are allowed, only ecological fertilizers, and farmers must control pests themselves. Irrigation sources and soil must also be tested regularly by relevant institutions. Both organic agriculture and GAP certifications require strict compliance with standards. Only with certification from the appropriate institutions can agricultural products be accepted by the market. Before acceptance, the market also tests these products, and unqualified products can lead to the revocation of farmers' certificates.

This section utilizes case studies of individual farmers to illustrate three primary methods Pang Hin Fon villagers use to make connections to markets—reliance on intermediaries, contracts with enterprises and organizations, and independent use of private networks—and to explain how villagers gain knowledge about organic and GAP agricultural activities.

### *Relying on intermediaries (middlemen) to access markets: Pravit's oranges, Maithong's tomatoes and cucumbers*

Pravit Yangsantiwong is a Hmong villager born in Pang Hin Fon whose family also operates a minimart in the village. During previous training organized by the HRDI on the cultivation and sale of various crops, he discovered that he is most interested in oranges. He then began studying and experimenting

with orange-growing techniques on his own. Now, after more than 10 years, his orange trees have matured and his orchard has taken shape with about 2,000 trees.

In terms of sales, Pravit chooses to sell all of his oranges through intermediaries, mostly via offline channels. The main job of an intermediary is to purchase agricultural products from farmers and then sell them in other markets. In this process, the difference between the market price and the purchase price is the profit that the intermediary earns. The intermediary is like a bridge connecting farmers and the market. Intermediaries are usually very familiar with regional market information. They make use of market information to earn more money and also spread the market information.

Although Pravit sometimes asks his son to help him find intermediaries online, he feels that offline agents are more trustworthy. There is a specialized orange market in Mae Chaem District where he personally seeks out intermediaries. However, sales agents are not stable over the long term, and Pravit notes that his intermediaries frequently change. There are several reasons for these changes. Sometimes the price offered by an intermediary is too low, and at other times Pravit feels that he does not get along well with the trader, prompting him to seek a new middleman. According to Pravit (group discussion, August 2025), the price of oranges should not fall below 31 Thai baht (THB) (approximately US\$1) per kilogram, but this year the orange market has been weak, with prices dropping as low as 21 THB (US\$0.65) per kilogram.

Similar to Pravit and his reliance on intermediaries for connections to markets for his oranges, villager Maithong Saeyang (see Figure 3) also connects with middlemen to sell her crops. Maithong's farm is a typical example of GAP tomato and cucumber cultivation. Maithong, a Hmong woman who is not a native of the village but married into Pang Hin Fon through the traditional Hmong custom of marriage by capture, runs the farm with her husband. She previously grew fresh flowers, but due to poor economic performance, she switched to tomatoes in 2020 and later expanded her use of GAP practices to grow both tomatoes and cucumbers. In terms of sales, Maithong's farm relies entirely on her own efforts to find sales channels. Most

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of her produce is sold to intermediaries she identifies herself, while a small portion is sold directly by herself or in the local market.



Fig. 23: Maithong Saeyang (Mae Luang) in her GAP cucumber greenhouse (photo by the authors)

It is interesting to note that Maithong previously contracted directly with the Royal Project to sell her products. However, because the Royal Project imposed stricter product requirements and was less efficient in processing payments, Maithong eventually decided to end her contract with the state organization, choosing to sell her tomatoes and cucumbers directly to intermediaries (pers. comm., August 10, 2025).

### *Relying on private enterprises and governmental organizations: Saifon's organic and GAP products*

Saifon Damrongkanchanakun, a Karen villager, works on a small farm she shares with her husband. She manages the organic agriculture, while her husband takes care of GAP farming. She has more than 10 years of experience in traditional farming techniques. After observing the success of some villagers who had switched to GAP farming, she decided to adopt it as well. Her farm is conveniently located near a main road, providing good transportation

access. At the beginning of her transition to GAP and organic farming, Saifon hesitated due to the various requirements set by the government, but her family persevered. Eventually, their tomatoes, cabbage, coffee, and other agricultural products successfully passed GAP inspections and received certification. Her family's GAP farm has since been recognized as exemplary by the Royal Project.

After Saifon's produce matures, some items are sold directly to the Royal Project, such as GAP coffee, which is purchased at 18 THB (US\$0.55) per kilogram. Organic produce, such as cabbage, is sold through a collaboration between the Royal Project and Ohkajhu, a well-known organic restaurant with several branches throughout Chiang Mai. Using an order-based approach, Ohkajhu typically plans its seasonal menus in advance, specifying the type and quantities of produce it requires. The restaurant then contacts its in-network farmers and provides them with specialized organic seeds, which are planted only by farmers holding organic certificates. When the produce is ready, Ohkajhu sends a vehicle to the village to purchase and transport it (Saifon Damrongkanchanakun, pers. comm., August 2025).

Ohkajhu is a modern enterprise with a complete production line from production materials (seeds) to sales channels (restaurants). Rural farms function as workshops within this production line, responsible only for receiving orders and transforming seeds into mature agricultural products. Farmers are embedded within the entire market-oriented system. Ohkajhu's purchase price for organic and GAP agricultural products is several times higher than that of ordinary products in the market. For example, the market price of conventional tomatoes is 20 THB (US\$0.60) per kilogram, whereas Ohkajhu pays 150 THB (US\$4.60) per kilogram for GAP-certified tomatoes. Common cabbage sells for only 1 to 2 THB (US\$0.03 to \$0.06) per kilogram at the local market, while Ohkajhu purchases organic varieties at 35 THB (US\$1.10) per kilogram. Although Ohkajhu buys organic and GAP vegetables at eight to 30 times the price of vegetables grown with chemical fertilizers and pesticides, organic cultivation requires more effort than conventional farming and typically produces smaller yields.

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### *Finding markets independently: Pravit's tomatoes*

Unlike his use of intermediaries to connect with markets for his oranges, villager Pravit prefers to rely on his own networks to independently source markets for the GAP-certified tomatoes he grows. Pravit was once employed by the HRDI where he participated in the institute's agricultural advocacy training programs and gained extensive knowledge of GAP cultivation techniques. He left the HRDI around 2019 and has since been growing tomatoes in greenhouses according to GAP standards. In terms of sales, Pravit's tomato farm relies on his own channels and connections rather than intermediaries. He connects directly with merchants, and all the tomatoes he harvests are transported to Ratchaburi Province near Bangkok, where many agricultural businesses are clustered, supported by designated shipping companies. Pravit also notes that some of the merchants he deals with are his former HRDI colleagues, which makes discussions about sales channels smoother and cooperation more pleasant.

Another important point is that over the past five to six years, Pravit has been independently establishing connections with the market. For example, he has a partnership agreement with a dealer in Ratchaburi under which Pravit is responsible for cultivating while the dealer manages market access. This arrangement provides Pravit's farm with a stable and reliable market. The agreement is flexible: if the partnership is successful in a given year, it can be extended to the following year; otherwise, the agreement is terminated, and Pravit seeks other partners.

### *Learning organic and GAP techniques: State organizations and informal networks*

Saifon (pers. comm., August 2025) notes that during the planting and marketing process, staff from the Royal Project and HRDI provide technical training and relevant market information to villagers. GAP is a set of science- and risk-based standards applied throughout the entire agricultural production process. Its core objective is to ensure the safety and quality of primary agricultural products while promoting sustainable agricultural development through effective control of every stage in production. This technical system

was introduced to Pang Hin Fon by the Royal Project in 2007 and has since become a source of important cultivation guidelines for the village, primarily for tomatoes, cucumbers, and oranges.

Following GAP technical requirements, Maithong has participated in trainings organized by the HRDI where she has learned key cultivation techniques such as greenhouse construction, soil mounding, seedling raising, and pesticide application ratios. She has mastered these methods through continuous practice and applied them on her farm. Pravit, a former member of the HRDI, participated in the institute's agricultural promotion training and acquired extensive knowledge of GAP cultivation techniques. In addition to information shared with villagers by state organizations, Saifon (pers. comm., August 2025) reports that there is also a network for informal exchange of technical information and cooperation among Karen villagers in Pang Hin Fon. The local Karen farmers exchange knowledge about agricultural skills and problem-solving suggestions with their neighbors.

### **How have crop and market transitions affected the daily lives of villagers in Pang Hin Fon?**

This section examines how the transition toward market-oriented agriculture has reshaped various aspects of villagers' everyday lives in detail: quality of life, pesticide use, farming costs and changes in daily routines, increased interaction with markets and competition, land use practices, and the relationship between the village and the national government.

#### *Quality of life: Income and living conditions*

To begin with, the transition in crops and markets has significantly improved villagers' quality of life, particularly in terms of income and material conditions. For example, Pravit (pers. comm., August 2025) initially borrowed 500,000 THB (US\$15,400) and combined it with his personal savings to invest 1,000,000 THB (US\$30,800) in oranges and 2,000,000 THB (US\$61,600) in tomatoes. Within six to seven years, he had fully recouped his investment. With the profits, he purchased a new truck in 2023 and allocated most of the remaining funds to expanding his greenhouses, acquiring fertilizers, and

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upgrading infrastructure for his crops. Looking ahead, he plans to buy another car and build a new house for his family within the next one to two years.

Somchai (pers. comm., August 2025) similarly observes that the introduction of greenhouse technologies has reshaped everyday village life and improved living conditions. Farmers now engage in more intensive management of their fields, adopt professional farming tools and practices, and even construct small pavilions in their fields for rest. Importantly, household incomes have risen steadily. This growth is supported by notable increases in crop prices. While open-field potatoes once sold for only 10 to 15 THB (US\$0.30 to \$0.45) per kilogram and the same weight of tomatoes for 5 to 30 THB (US\$0.15 to \$0.90), greenhouse-grown tomatoes now command 30 to 70 THB (US\$0.90 to \$2.15) (Thomas variety) or even 50 to 150 THB (US\$1.55 to \$4.60) (Laxini variety). These changes reflect not only higher productivity but also the enhanced market value of greenhouse crops.

### *Reduced pesticide use and exposure*

A common challenge for farmers, whether working in greenhouses or open fields, is controlling pests while ensuring that use of pesticides remains non-harmful for humans. This is equally true for villagers in Pang Hin Fon, who outwardly emphasize pesticide safety while simultaneously taking extra precautions in practice.

Pravit, who studied agriculture at university and conducted research on pest control with corn, has incorporated his expertise into his tomato cultivation practices. His production follows GAP standards. As he explains, he applies “low-toxicity” pesticide brands recommended by the Royal Project and carefully controls the dosage according to prescribed guidelines, ensuring both effective pest management and compliance with safety requirements (pers. comm., 2025). To qualify for market distribution, his produce undergoes two GAP inspections: one conducted 15 days prior to shipment and another upon delivery. His tomatoes have consistently passed both inspections, enabling them to enter the market efficiently.

In practice, Pravit applies pesticides to his crops once a week, either with a handheld sprayer or a machine. He always wears full protective gear—

including a mask, gloves, goggles, boots, and a raincoat-like suit—and the spraying process usually takes one to two hours. He regards pesticide application as a straightforward task and stresses that his tomatoes remain safe, often noting that he himself regularly consumes them (Pravit, pers. comm., August 2025).

Somchai (group discussion, August 2025) shares similar views, explaining that villagers generally feel confident in using pesticides safely because of trainings and supervision provided by the HRDI. Under GAP standards, pesticides must be relatively mild, applied in small amounts, and dissipate within a few days. Villagers also recognize that overuse harms both crops and human health, and thus handle pesticides cautiously. Initially, workers wore full protective gear during applications. However, as they gained experience, they began spraying more efficiently and often with less equipment, minimizing direct exposure. Today, many farmers adopt a pragmatic approach: if pests are present but do not threaten yields, they often choose not to spray at all.

For villager Chatuporn Yangsantiwong, however, pesticide use remains a source of discomfort. Although he wears protective equipment, he admits frankly that he dislikes the process and often delegates spraying tasks to hired migrant laborers, preferring to avoid exposure himself (pers. comm., August 2025).

### *Farming costs and changes to routines*

In recent years, villagers such as Pravit and Somchai have faced rising farming costs, including expenditures on labor, facilities, and inputs, as well as increasing demands on their time. To sustain his daily farm operations, Pravit now employs three full-time migrant laborers from Myanmar, each paid 6,000 THB (US\$185) per month. Their wages are paid every six months in addition to the food and lodging Pravit provides for them and their children. If the workers find the compensation inadequate or encounter significant personal problems, they may request additional payment (Pravit, pers. comm., August 2025). Meanwhile, Somchai has experienced sharp increases in fertilizer costs: items that once cost 180 THB (US\$5.50) now cost 700 THB (US\$21.50), those priced at 250 THB (US\$7.50) have risen to 1,000 THB (US\$30.70), and

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products previously priced at 350 THB (US\$10.75) now reach 1,300 THB (US\$40) (group discussion, August 2025).

Beyond financial pressures, farmers have also become more deeply involved in the agricultural supply chain. Instead of focusing solely on planting and harvesting, they now must also handle packing, transportation, and interactions with intermediaries and markets, further altering their daily routines. For instance, Pravit (pers. comm., August 2025) adjusts his schedule depending on customer demand. If a client requests a large quantity of tomatoes, he spends one full day harvesting, another day packing, and delivers on the third day. For smaller orders, he can complete packing in the morning and deliver in the afternoon. He personally repackages the tomatoes into small baskets, each with a transport fee of 50 THB (US\$1.50) per basket.



Fig. 24: Pravit Yangsantiwong surrounded by tomato plants in one of his greenhouses (*photo by Garrett Kostin*)

With about 70 to 80 baskets per shipment, transportation costs average around 3,500 THB (US\$108) per trip. Typically, he delivers two truckloads of tomatoes per week, amounting to six to eight trips per month, or roughly 100 trips per year. The produce is transported to the Mae Chaem market, a five-hour round trip. If he chooses to outsource delivery to an intermediary, he must pay an additional 1,500 to 2,000 THB (US\$46 to \$61) in transport fees. From Mae Chaem, a freight company then transports the goods onward to Ratchaburi Province.

Pravit's daily routine has also become more demanding. He usually wakes between 6 and 7am and goes to bed anytime between 8pm and midnight. Twice a week, he stays up late to inspect tomato growth and trim excess branches in his greenhouses. Although he regularly hires migrant laborers, much of the farm work ultimately falls to him with only limited assistance (pers. comm., August 2025).

Somchai also finds his routine heavily shaped by delivery schedules. Preparing produce for intermediaries often keeps him working until late at night—sometimes as late as 10pm or even 1am—depending on delivery routes and harvest volumes. For example, a harvest on Tuesday may be shipped on Wednesday, while a Saturday harvest is typically shipped on Sunday. Deliveries require coordination with multiple freight companies serving different markets, while Somchai must also manage paperwork and logistics before returning home (group discussion, August 2025).

For Chatuporn, the day begins even earlier. He typically wakes between 5 and 6am and finishes his work around 9 or 10pm. On delivery days, however, he sometimes wakes as early as 2am to prepare for the drive to Chiang Mai markets. This schedule helps him avoid peak traffic hours (before 8am) and ensures he can return home the same day, thus avoiding expenses related to overnight stays. Four to five years ago, his main delivery route was to the city of Fang, about 260 kilometers away, requiring an eight-hour round trip. Now, he delivers only to markets in Chiang Mai city, roughly 130 kilometers away. Depending on market demand and the ripening rate of his crops, he sells oranges every two-to-three days during peak periods, or once every seven-to-eight days when ripening is slower (Chatuporn, pers. comm., August 2025).

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In the face of these rising costs, heavier workloads, and longer work days, villagers have been actively seeking adaptive strategies. Somchai, for instance, reduces his costs by avoiding expensive fertilizers and focusing on crops that require fewer inputs (group discussion, August 2025). Pravit, on the other hand, initially invested in steel rather than plastic greenhouse structures, a choice that has significantly reduced his long-term maintenance and replacement expenses (pers. comm., August 2025).

### *Market interaction and competition*

The villagers' ties to certain markets have deepened considerably over time. In the early years following the establishment of the village, the village economy was centered on the opium trade, as was the case among many ethnic highland communities in Southeast Asia. As the mountainous terrain was unsuitable for extensive rice cultivation, villagers relied primarily on corn as their staple food. Later, they began descending to the lowland markets to purchase rice, which was gradually incorporated alongside corn in their diets. Eventually, because of its affordability, purchased rice fully replaced corn as the staple (Chatuporn, pers. comm., August 2025). Beyond rice, villagers have also come to rely on lowland markets for clothing, salt, and other necessities (Somchai, group discussion, August 2025). This progression illustrates the villagers' growing dependence on external markets.

At the same time, their capacity to participate in market-oriented agriculture has steadily expanded. Initially, they had little to sell, but today a wide range of crops from Pang Hin Fon manage to find buyers. Today, the villagers have become reliable suppliers to outside markets and play a role in the broader food industry. With this integration, however, comes risks. One pressing challenge is competition from low-priced agricultural products imported from China. According to Somchai (group discussion, August 2025), these imports undercut sales of local produce, forcing villagers to adapt. One strategy has been to gather more information from intermediaries and markets, to observe and reflect on shifting conditions, and to adjust crop choices accordingly. For example, if tomatoes offer stable demand and relatively low

risk, farmers may prioritize tomato cultivation or greenhouse production to secure consistent returns.

Somchai himself has developed a distinctive approach to dealing with competition. By purchasing tomatoes from other villagers and selling them alongside his own, he is able to set a higher selling price for all the tomatoes. Even if the market price is only 30 THB (US\$0.90) per kilogram, he can sell his entire harvest mixed with tomatoes from his neighbors at 45 THB (US\$1.45) per kilogram. In this way, he not only helps fellow villagers sell at better prices but also improves his own profit margin. Moreover, this practice contributes to raising the general purchasing standard for tomatoes in the village. Looking forward, he envisions a unified system of packaging and branding. He hopes all tomatoes leaving the village will meet the same quality standards, with packaging that clearly indicates origin and contact information. Such branding, he believes, would strengthen consumer trust, as repeat buyers could easily identify products originating from Pang Hin Fon. To this end, he is exploring online platforms to showcase and promote local produce (Somchai, group discussion, August 2025).

Pravit takes a different stance, expressing less concern about competition from imports. Relying on his long experience, he adopts flexible strategies, such as adjusting planting schedules to avoid particular periods when Chinese imports tend to flood the market. If imports occur twice a year, for instance, he may plant three cycles annually or modify his calendar to ensure market access. He develops detailed annual production plans using computer software, along with seasonal activity charts that allow him to adjust crop growth and harvesting. For example, while oranges typically mature between January and April, during which prices drop to about 10 THB (US\$0.30) per kilogram due to oversupply, Pravit strategically delays planting so that his oranges mature between August and October, coinciding with high demand for Chinese New Year. In this way, he secures much higher prices—85 THB (US\$2.60) per kilogram in 2023 and 55 THB (US\$1.70) per kilogram in 2024. He applies similar strategies to his other crops, always balancing climate conditions with market fluctuations. Since shifting to tomato cultivation, he reports never having incurred losses. In his words, successful farming requires

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only “good seeds, a good plan, and a good market price,” all of which he has learned through hands-on experience (Pravit, pers. comm., August 2025).

In sum, the market connections of Pang Hin Fon villagers have grown stronger over time, not only through reliance on external goods but also through their increasing role as suppliers. Despite challenges such as low-priced imports, farmers demonstrate remarkable adaptability—whether through cooperative strategies, branding initiatives, or flexible production planning—to mitigate risks and sustain their livelihoods.

### *Land limitations and use*

Somchai (group discussion, August 2025) recalls the time when opium cultivation was widespread in the village: “At that time, the most important thing was simply how to live, how to survive. Because there were so many family members, there always had to be enough food [...] so corn and rice were the first and second priorities, then came opium.” This statement underscores how subsistence needs historically shaped household agricultural decisions, with staple foods taking precedence over cash crops in the past.

The introduction of new land use policies, however, raised fundamental questions about the viability of the traditional Hmong way of life as described above. As Bo Gua (1975, p. 74) observes, “The Hmong way of life is against the law.” With population growth, land scarcity in Pang Hin Fon became acute, and efforts to open new fields often conflicted with national forestry regulations, exposing villagers to the risks of illegality and even imprisonment. Under such pressures, opium emerged as an attractive crop option. It offered higher profits and temporarily masked the imbalance between population and natural resources. Unlike rice swiddens, which yield for only one or two years, opium fields can be productive for five to 10 years. Yet once depleted, the soil of an opium field is left permanently exhausted (Gua, 1975, p. 73).

To overcome the issues of limited land availability and degradation, villagers have sought alternative methods to sustain production. For example, the introduction of greenhouse cultivation has allowed crops to be grown in sturdy, above-ground bags of nutrient-enriched soil rather than in chemically-polluted or depleted fields (see Figure 5). This innovation has significantly

increased yields, improved land-use efficiency, and expanded the supply of produce available for market sale, thereby enhancing household incomes.

Pravit's farm provides a concrete example of greenhouse cultivation with all of his tomatoes now raised in above-ground bags rather than in the soil. This method addresses two challenges simultaneously—poor natural fertility and the heightened risk of plant disease in soil-based cultivation. Fertilizers are still used to support growth, but only in compliance with GAP standards. The fertilizers applied are subject to technical testing, composition regulation, and food safety requirements. At present, Pravit uses two types of fertilizer, both of which contain nitrogen, phosphorus, and potassium. After being diluted with water in precise proportions, the solution is delivered directly to each tomato seedling through thin irrigation tubes (see Figure 5). Under this system, soil fertility values have risen dramatically, demonstrating both the scale of productivity gains and the degree of technical adaptation achieved in the community (Pravit, pers. comm., August 2025).



Fig. 25: Greenhouse tomato plants in above-ground bags being fertilized with slim irrigation tubes (*photo by the authors*)

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### *Relationship between villagers and the national government*

According to Somchai (pers. comm., August 2025), villagers began to recognize the potential of cultivating cash crops as a source of income after the government launched a series of initiatives, including training and technical guidance, aimed not only at curbing opium cultivation but also at promoting the adoption of alternative crops in ethnic highland communities. Despite these efforts, many of the Royal Project's early interventions yielded limited results in Pang Hin Fon. This was largely due to the poor suitability of the introduced crops to local conditions—for instance, corn thrives in hot and dry environments, whereas the region is characteristically humid and rainy. Consequently, harvests were poor, sales were disappointing, and the distribution of free seeds and technical assistance brought little substantive improvement to villagers' livelihoods.

In response, villagers began to seek out more practical solutions on their own. They turned to nearby communities, where the same crops had been introduced but were growing far more successfully. Somchai, one of the first villagers to take initiative, observed farming practices in those villages and brought back improved varieties and techniques to Pang Hin Fon. A similar pattern can be seen in greenhouse cultivation: initially introduced through training programs organized by the HRDI, the technique was later adopted by villagers who combined official training with practical lessons learned from neighboring communities (Somchai, group discussion, August 2025).

From the history described above, it is clear that villagers themselves have played a decisive role in the successful adaptation of substitute cash crops and greenhouse farming. Reflecting on the early shortcomings of the Royal Project, Somchai (group discussion, August 2025) explains, "While some of the crops initially introduced by the Royal Project were not well-suited to the area, this was due to implementation issues rather than mistakes by the project itself." After all, "the transition period was relatively short, and villagers quickly adapted." Overall, villagers say they have maintained a positive attitude toward the Royal Project and "have never harbored resentment."

A more recent land use issue concerns the cultivation of coffee in designated forest protection zones, a matter that remains unresolved between

villagers and the Royal Project. Here, the perspectives of the former village head, Somchai, and the current head, Worawut Saeyang, diverge. Somchai (group discussion, August 2025) maintains that villagers' small-scale planting of coffee along forest boundaries is acceptable so long as it does not harm the forest or cause significant ecological damage. From the villagers' perspective, they respect government demarcations and clearly understand which areas are strictly protected and which are flexible enough to allow occasional planting. At a broader level, both villagers and the government share a common goal of forest preservation. As Somchai emphasizes, villagers are in fact the true guardians of the forest—in the event of a fire, they are the first responders who risk their lives to contain it. Moreover, planting coffee at the forest's edge, when done without disturbing its natural ecology, serves dual purposes: it provides villagers with modest economic gains while also creating a natural *kan chon* (buffer zone) that can help contain the spread of forest fires. Since coffee is environmentally friendly and already promoted by the local administrators of Pang Hin Fon, Somchai believes this practice should be tolerated.

In contrast, the current village head, Worawut (pers. comm., August 2025), holds a more cautious view. Due to limited arable land, some villagers have planted coffee 10 to 20 meters inside the forest boundary, using a scattered planting method that technically encroaches upon protected areas. Villagers have been negotiating with provincial authorities, suggesting that their contribution to forest fire prevention could serve as an exchange for planting rights. However, no formal resolution has yet been reached.

In a nutshell, the case of Pang Hin Fon illustrates a relationship between villagers and the state that is marked less by top-down control than by negotiation and adaptation according to the villagers. They not only compensated for the early shortcomings of the Royal Project's crop substitution programs but have also actively shaped their village's agricultural transition in ways that have sustained and improved their livelihoods. The current debate over coffee in forest zones underscores this dynamic where villagers frame themselves as custodians of the environment while pursuing economic

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opportunities, whereas the state balances tolerance with regulatory enforcement.

### **Conclusion**

To summarize the findings, Pang Hin Fon's agrarian transition from subsistence farming and opium cultivation to diversified, market-oriented agriculture has been driven by state regulations and interventions, the Royal Project and HRDI, and local initiative. Villagers now cultivate crops such as tomatoes, oranges, cucumbers, grapes, and coffee using diverse market strategies—sales through intermediaries, organizational channels with GAP and organic certification, direct merchant partnerships, and online platforms. Innovations like greenhouse farming have improved yields and land use, while adaptive practices, including flexible planting schedules, cooperative pricing, and branding, strengthen villagers' market positions.

These changes have raised incomes and living standards for villagers, enabling investments in vehicles, housing, and farm infrastructure. At the same time, they also bring rising costs, labor demands, and changes to daily routines. Pesticide use is managed within GAP standards, with varying attitudes among farmers. Market dependence has deepened, exposing villagers to risks such as competition from low-cost Chinese imports, yet they respond with creative strategies to sustain local livelihoods. Relations with the state remain fluid as villagers adapt official programs to local conditions and contest land-use restrictions, specifically in debates over coffee cultivation in forest zones.

## Reflections

*Lu Xinlei:* It was a challenge for me to participate in the field research project of the Sino-Thai Summer School program as a sophomore student of ethnology. Before we arrived at the field site, we were not clear about our research topic, so we had to not only determine the topic and specific content of our project, but also ensure that we could collect as much field data as we needed within the limited time, which was undoubtedly a very challenging and stressful task.

During our initial observations at the field site, we noticed that many villagers in Pang Hin Fon were growing cash crops such as tomatoes, cucumbers, and oranges, and their sales methods were not exactly the same. However, they were continually and actively seeking cash crops that could bring greater economic benefits and larger sales. The ways in which villagers' daily lives and routines are changing as a result of the agrarian transition aroused our interest: we wanted to understand how the villagers in Pang Hin Fon chose to grow certain cash crops and were able to successfully find markets to sell them, as well as the impact on their daily lives. So, guided by these questions, we conducted interviews and group discussions with many villagers and also observed a number of diverse farms on the ground, which greatly helped us to gather more relevant data to support our research. I am pleased that we have managed to gain a deeper and more detailed understanding of Pang Hin Fon's agricultural transformation during this research process.

What impressed me most during this fieldwork was the importance of building close relationships. Our early discussions not only brought team members closer but also strengthened our connection with our writing mentor. We became more comfortable with each other and more willing to share our thoughts and interests, which laid a solid foundation for our team.

Also, with the help of our translator, we were able to talk freely with the villagers despite the language barrier, which helped us understand each other better. We picked crops together, ate together, and rode together in the farm pickup truck to the valley farms. The villagers were very patient with us and shared everything they knew, while we showed great interest and curiosity

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about farming. Through these interactions, we didn't feel like outsiders but more like friends—people they were happy to share their lives with. This kind of closeness also made it much easier for us to collect various types of field data.

If I were to take part in a similar field study again, I would consider building a strong, trusting relationship with informants a key step.

*Zhang Yuelin:* I am a 21-year-old third-year undergraduate student majoring in ethnology at Yunnan University. It was a great honor to participate in this summer school program. This was my first time conducting research abroad and writing entirely in English, both of which posed significant challenges for me.

After gaining a preliminary understanding of the village, what intrigued me most was why the villagers have chosen to engage in organic vegetable cultivation and where their products are ultimately sold. Previously, I had assumed that organic vegetables were mainly targeted at customers in big cities and were typically grown in areas close to urban centers. However, the field interviews and observations we conducted during the investigation process revised my perspective. I learned that the village's unique cooperative mechanisms and favorable ecological environment are key advantages for the development of large-scale organic cultivation. Throughout the process, as I gathered more information, my understanding of organic agriculture continued to evolve. Sometimes, ideas I had one day were overturned by new information the next, requiring me to reconsider and refine my conclusions.

When we first entered the village, we did encounter some difficulties. The villagers could not understand the English we spoke, and some of them struggled to understand why we were interested in their village. To solve these problems, we first relied on the help of a translator. We are very grateful to our translator who was extremely patient and hardworking. During the several days of field research, we conducted multiple interviews with the relevant informants. Through repeated interactions with them, we gradually got to know each other better and became familiar. We also helped the villagers with their work and prepared dinners together.

During the fieldwork, we visited farms to observe different agricultural techniques and conducted interviews with ethnic villagers in Pang Hin Fon with the help of translators. This was a challenging yet rewarding and educational experience. I learned how to pose questions during interviews and how to follow-up on informants' responses. Although I am not yet a skilled interviewer, I now have a better sense of how to approach such tasks in the future.

Cultural shock was another important aspect of my time in Chiang Mai. Experiencing Thailand firsthand was very different from what I had learned through books and the internet. Being immersed in the local environment, I encountered different agricultural concepts and techniques, and learned about the village's distinctive culture. This broadened my horizons and allowed me to gain knowledge beyond the classroom.

Our field investigation was relatively short, lasting only one week. Some of the ideas for our research were still being developed. With more time and opportunities, we could further improve our study—for instance, by delving deeper into how the villagers collaborate with Ohkajhu and examining Ohkajhu's specific business strategies. Nevertheless, I consider this a valuable experience from which I gained a great deal. If I were to do the research again, I would first optimize my way of asking questions and the design of the questions. Secondly, I would spend more time early on interacting with the villagers to enhance mutual trust and understanding, and truly understand their lives. Finally, I would improve my English writing to make the language expression of the final paper more fluent.

*Tan Yumei:* I am a master's student in ethnology with an undergraduate background in English language and literature. Switching from English to ethnology has been both exciting and challenging for me, but my language training has been a real advantage for communicating and interviewing during fieldwork. Having had some field experiences before, I felt calmer and more prepared for this field trip, as well as very eager to learn. What impressed me most during the summer school were the meaningful conversations I was

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able to have with the villagers and the insightful lessons from my professors (*ajarns*) at Chiang Mai University.

I remember vividly when Somchai explained how the villagers eventually identified suitable cash crops and adopted greenhouse farming on their own after experiencing poor yields and sales from the Royal Project's initial introductions. Their journey was not easy—marked by uncertainty and challenges—but their persistence, optimism, and reliance on local wisdom enabled them to adapt and sustain their livelihoods while remaining in balance with the natural environment.

I was also struck by Chatuporn's response, translated by our field translator Davi, when asked whether he would take advice from his son who has studied agricultural pest control at university. He said, "When we learn in school, we read many papers, but in real life we need to learn about the weather and the soil, because the soil is different everywhere. In the village we need to learn and improve every day, but in school you only learn for four years." This exchange revised and refreshed my understanding of the local wisdom. The recognition of local wisdom was further reinforced in later discussions at Chiang Mai University, where the concept of "co-creation of knowledge" was emphasized. Regardless of whether one is a teacher, student, or farmer, everyone has a role in constructing knowledge, and each perspective deserves to be valued.

For me, this experience has also been a reminder of how easy it is, as university students, to assume a sense of superiority because of our education. Sitting in a classroom where open dialogue was encouraged, I realized the importance of humility in learning, that knowledge is not one-sided, but rather it grows through respect, dialogue, and the willingness to learn from every voice, and that is my biggest takeaway from this experience.

Looking back, I feel it was absolutely the right choice to have started discussions about our research interests and ideas with our writing mentor right from the beginning. Those early discussions helped us focus our topic, set clear goals, and make data collection much easier in the following days.

If given another opportunity to conduct this kind of fieldwork, I would do one thing differently: I would work to establish clearer teamwork structures

from the start. Since most students conduct research collaboratively, it would be better to specify each member's responsibilities early on—for example, who is in charge of collecting and recording information about specific interviewees or themes. Such clear task division would make the writing process later much smoother and more organized, whereas unclear roles can lead to confusion when trying to locate or verify information from various sets of field notes. These lessons I learned in planning and collaboration are equal in value to the fieldwork experience itself.

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### References

- Gongsakdi, C. (2022). *From poppy to coffee: How Thailand became a model for alternative development*. Royal Thai Consulate-General, Fukuoka. <https://fukuoka.thaiembassy.org/en/content/from-poppy-to-coffee-how-thailand-became-a-model-f?page=60c84cecf0c89d0bd2543b12&menu=60c84cd3a00566750a40ba73>
- Gua, B. (1975). Opium, bombs and trees: The future of the H'mong tribesman in Northern Thailand. *Journal of Contemporary Asia*, 5(1), 70-81. <https://doi.org/10.1080/00472337508566922>
- Rigg, J. (2000). *More than the soil: Rural change in Southeast Asia*. Prentice-Hall.

## The Role of Hmong Women in Pang Hin Fon's Agrarian Transition

*Ye Jiaying*

### **Abstract**

This study was conducted in Pang Hin Fon Village, Chiang Mai Province, northern Thailand, and explores changes in the roles of middle-aged and elderly Hmong women in the context of agricultural transformation through participatory observation and in-depth interviews. During a seven-day field study, the research team conducted in-depth interviews with several respondents, focusing on the experiences and perceptions of Hmong women aged 40 and above during the village's transition from opium cultivation to commercialized agriculture. The findings reveal that Hmong women exhibit complex role dynamics in the context of agricultural transformation. It was found that the role practices of Hmong women are situated within a tension between traditional cultural norms and the demands of modern agricultural production. On one hand, they have gained new decision-making authority in agricultural production; on the other hand, they still need to adhere to some traditional expectations. This tension is also reflected in intergenerational expectations. Additionally, the emerging women's textile groups within the community provide new spaces for women to engage beyond their roles within the household. This study contributes to a richer understanding of the local context of gender and development in rural highland Southeast Asian communities and offers new insights into the agency of ethnic minority women in the context of globalization.

**Keywords:** Hmong women, agrarian transition, gender roles, northern Thailand

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### Introduction

Pang Hin Fon, located in Mae Chaem District, Chiang Mai Province, is a multiethnic rural highland community. The layout of the village homes is linearly arranged along a five-kilometer-long road, surrounded by mountains on all sides, creating a beautiful environment. The village's elevation of 1,400 meters also makes the local climate quite cool. At present, the community is home to three distinct ethnic groups: the Hmong, the Karen, and the Northern Thai (*Khon Mueang*). Among these three groups, the population consists of 50 Hmong households, 35 Karen households, and 10 *Khon Mueang* households with 255 residents in total. The Hmong villagers make up the majority of the community's population. The community's basic service facilities are well-equipped, and the village currently has five local government-supported agencies. The primary agricultural activities in the community currently include greenhouse vegetable cultivation (such as organic vegetables, Chinese cabbage, and tomatoes), fruit cultivation (including oranges and avocados), and the cultivation of coffee plants.

People of the Hmong ethnicity have a very long history and are widely distributed around the world, including China, Vietnam, Laos, Thailand, Myanmar, and some European and North American countries (Shi Maomin, 2004). From a migration perspective, the movement of the Hmong people in northern Thailand is consistent with the cross-regional migration wave that began in the 18th century driven by the desire to escape political persecution and seek more fertile land (Sweeney, 2015). The majority of Hmong in Thailand today originated from southern China, gradually spread to neighboring countries in Southeast Asia, and eventually settled in the mountainous regions of Thailand. The Hmong people are predominantly found in northern regions such as Chiang Mai and Chiang Rai, living in higher-altitude mountainous areas, and are classified as one of the main "hill tribes," or ethnic minorities, in northern Thailand along with the Karen, Akha, Lisu, and Lahu.

Although these "hill tribes" originated from different cultural and linguistic groups, their shared habitat—mountainous regions at high altitude—has led to some common characteristics and issues. Based on these similarities, the Thai government has treated diverse ethnic minority populations as a singular

category for national affairs (Shi Maomin, 2004). The mountain-dwelling ethnic groups in northern Thailand primarily consist of the Miao-Yao group from the Han-Tibeto-Burman language family and the Yi-speaking groups, as well as the Kammu people from the South Asian language family. Most of these ethnic groups migrated to Thailand within the past few hundred years, and the Hmong people are one of the ethnic groups with significant influence (Shi Maomin, 2004).

The Hmong people have been present in Pang Hin Fon for approximately 90 to 100 years. In the 1920s, the Wa (or Lawa) people were the first to arrive, and as a result, the village began to take shape. Later, the Wa people left, and the Hmong people started to move in. The first group of Hmong people were the “Green Hmong” whose homeland is in the De’ang Mountains of southern China (Worawut Saeyang, group discussion, August 2025). There were four households, all with the surname Yang, who are also the ancestors of the current Hmong people living there. The second group that arrived were the “White Hmong” who came from a different area. In 1989, the village was officially renamed from Pang Ta to Pang Hin Fon and the first roads were constructed. “*Pang*” refers to a place where people live, and in the Northern Thai dialect, “*hin fon*” means a whetstone, which this village was traditionally known for. Locals no longer produce these, but people from other areas can still obtain them (Worawut Saeyang, group discussion, August 2025). In the early 1990s, the village also saw the construction of roads for the first time. In the late 1990s, the Pang Hin Fon community submitted a community development application to the national government, which led to the introduction of mountain spring water. Ten years later, electricity was brought to the village (Worawut Saeyang, group discussion, August 2025).

### *Traditional Hmong gender roles*

The concept of “patriarchy” was introduced by Millett (1970) in her book *Sexual Politics* and defined as a systematic mechanism of “male supremacy and female subordination.” In Hmong culture, traditional gender roles tend to be patriarchal, with men dominating family decisionmaking. While inheriting land and maintaining the family line, women remain in a

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subordinate position to fathers, husbands, and sons, and carry the primary responsibility for domestic work, farming, and child-rearing. Patriarchal traditions and patriarchal housing practices severely limit Hmong women's autonomy (Sweeney, 2015). Hmong women are often portrayed as passive victims of a patriarchal structure, portraying them as submissive. However, the perception of "traditional Hmong traits" in which females lack a voice, is inaccurate and biased, ignoring not only the dominant nature of Hmong women but also the complexity of gender relations in Hmong culture (Langill, 2025). In Pang Hin Fon's Hmong tradition, men are mostly responsible for household decisionmaking and serving as the leader of the family. One of the most important tasks for women is to give birth to male children so that family inheritance lines remain intact, as female children do not receive inheritance in traditional Hmong culture. Childbearing is seen as the most important task of a Hmong female's life, and the next primary tasks are helping her husband to do work or housework.

In the 1960s and '70s, a widespread belief was that the more members of a family, the more wealthy the family was. The "breadwinner" role of the family can be divided into two: one is the father and one is the mother. The father, acting as the "head of the household," is responsible for managing the household affairs. The primary tasks include finding places to live and work, overseeing the children's involvement in agricultural activities, earning money, and establishing one's position in society. The mother, on the other hand, is in charge of managing all the household finances, taking care of the children, doing household chores, and maintaining the household, creating a division-of-labor model that emphasizes "coordination between internal and external responsibilities" (Somchai Yangsantiwong, group discussion, August 2025). At the same time, in addition to the division of labor in the family, there is some traditional division of labor. For example, relating to cultural transmission, men are responsible for leading traditional rituals and paying respect to ancestor spirits, while women are responsible for customs and activities that serve to perpetuate Hmong culture among the younger generations (Somchai Yangsantiwong, group discussion, August 2025).

*Agricultural practices and transformation*

In the early days of the community's development, opium cultivation was a common agricultural practice among the local residents. This practice was not completely and formally banned by the Thai government until the late 1980s. Coinciding with the ban on opium cultivation, the Thai Royal Project was also launched and promoted in this area, which encourages and supports local villagers to shift their focus to growing licit cash crops such as cabbages and radishes (Worawut Saeyang, group discussion, August 2025). In present times, the main agricultural activities in the community have further evolved, and they primarily include the cultivation of greenhouse vegetables (such as organic cabbages, Chinese cabbages, and tomatoes), the planting of fruits (including oranges and avocados), and the cultivation of coffee plants. At the same time, in contrast to the village's previous production model, which was primarily self-sufficient, the community's current economic crops are becoming increasingly market-oriented, and villagers are not just engaged in farming; some can now directly connect and interact with the market.

According to Rigg (2000), in rural areas of developing countries, particularly in Southeast Asia where globalization has reached deep into the countryside and has had some impact on the lives and livelihoods of inhabitants, land issues have not disappeared, but have taken on new forms. Globalization has not eliminated the importance of rural areas, nor has it diminished the significance of locality. The process of agricultural transformation is inseparable from local political, social, and cultural relations and environmental contexts through which the forces of globalization operate (Rigg, 2000). The patterns of rural change in Southeast Asia are both similar to those of other regions and unique. The similarity is that the penetration of global capital into rural life is a universal phenomenon, while what is unique is that the process of penetration and its effects are locally specific. From this perspective, the agricultural transformation of Pang Hin Fon reflects the complex process of globalization and local culture interweaving.

The community's shift from opium cultivation to greenhouse cultivation of vegetables, fruits, and coffee has been the result of state policy interventions and global market forces, and was partly rooted in the sociocultural structures

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and gender relations that characterized the Hmong community. In particular, the role of Hmong women in agricultural transformation has evolved from being traditional agricultural production participants to being farm managers and market connectors. This confirms the interaction between global forces and local specific social and cultural context, and the process of opening up space for Pang Hin Fon community initiatives. This transformation reflects both the commoditization and marketization of agriculture in Southeast Asia and the unique paths and adaptation strategies adopted by ethnic highland communities in coping with the impacts of globalization.

In the context of Pang Hin Fon, the “background of agricultural transformation” mainly refers to the historical process of the community’s agricultural transition—specifically, the shift from the period when opium was the primary cash crop to the current stage where the villagers mainly grows various licit crops, such as greenhouse tomatoes, oranges, and cabbages.

### *Significance of this research*

The core focus of this research is twofold: on one hand, it aims to explore the role of Hmong women in Pang Hin Fon against the backdrop of the community’s agricultural transformation; on the other hand, it seeks to understand the perceptions and thoughts of older female villagers regarding the roles they themselves play within the community. The study of this topic is significant because the transformation journey of Pang Hin Fon not only reflects a path of agricultural development within the context of globalization for mountainous communities in northern Thailand, but also showcases the unique adaptation strategies employed by ethnic minority communities in their response to the forces of modernization. By conducting an in-depth analysis of this relatively illustrative case, it is possible to gain a better understanding of how national policies, market forces, and local cultural traditions interact and jointly shape the transformation trajectory of rural communities. It is particularly noteworthy that the role changes and agency demonstrated by the local Hmong women of Pang Hin Fon during this process provide valuable field data for understanding the complex relationship between gender and development.

There are several reasons why I have chosen to focus on the topic of women's roles and self-perception within the context of the agricultural transformation in Pang Hin Fon. Firstly, there is a scholarly interest in the development of ethnic minority communities and social gender dynamics, particularly with a focus on the older generation of women within these communities. Secondly, through field research, I aim to gain a deeper understanding of these women's actual circumstances and the ways in which they exercise agency within the context of community change. Thirdly, it is hoped that this research will not only enrich our understanding of rural transformations in Southeast Asia but also contribute localized knowledge from ethnic minority communities to the field of gender studies. By documenting and analyzing the life experiences and role perceptions of these older women in Pang Hin Fon, this micro-level study also aims to provide some practical insights for sociologists working in related fields.

### **Research Questions**

1. What role do Hmong women play in Pang Hin Fon in the context of the village's agrarian transition?
2. What do older Hmong female villagers in Pang Hin Fon think about their role in the village?

### **Methodology**

Under the guidance of Professor Putthida Kijdumnern, Professor Wang Xueying, and Teacher Garrett Kostin, four other social science students and I carried out a seven-day field survey in the Pang Hin Fon community of Chiang Mai Province, Thailand from August 9 to 15, 2025 as part of the Sino-Thai Summer School program organized by Chiang Mai University and Yunnan University. Another student and I originally planned to collaborate on the research topic for this paper, but when she became unable to continue, I modified one of our research questions and completed this research independently.

Qualitative research methods were adopted for this research, and the team collected first-hand data through two key approaches: participatory obser-

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vation and field interviews/group discussions. When it comes to the division of age groups for the research interviews, the team set 40 years old as the critical dividing line: Hmong women in the community who are over 40 were classified into the middle-aged and elderly group (“older women”), while those who are under 40 years old were categorized as the young group.



Fig. 26: Maithong Saeyang (Mae Luang, center) welcomes the research team to her greenhouse crop area. *(photo by Garrett Kostin)*

Among all the research methods employed, field interviews were the most important and primary. In total, 12 interviewees participated in this research. My partner and I selected eight female interviewees using the method of purposive sampling. Among these eight participants, two were from the middle-aged and elderly group, three were from the young group, and the remaining three were general members of the community’s female population. The interview formats were diverse, including both individual interviews and focus group discussions. Although the specific questions designed for each interviewee varied slightly according to their age, identity, and life experiences, all questions were centered around two core aspects. The first aspect was the role of Hmong women in the context of the community’s agricultural

transformation, which can be further divided into two sub-questions: what specific factors have shaped the role of Hmong women in this process, and in what concrete ways is this role manifested in their daily lives and agricultural activities? The second aspect was the self-perception of women from different age groups, specifically how women in the middle-aged and elderly group and those in the young group view their own roles in the community, including their understanding of the value of their roles and any challenges they may face while fulfilling these roles. This paper will exclusively focus on the perceptions and experiences of older female villagers.

In addition to the eight female interviewees mentioned above, I also included four male interviewees in this study. The inclusion of male interviewees was intended to enable the collection of more comprehensive and multi-dimensional field data so as to avoid one-sidedness in the research results caused by only focusing on the perspectives of women. These four male interviewees have different identities and roles in the community: one is the former village head of Pang Hin Fon Village, one is the current village head, another is a villager who has made significant achievements in developing greenhouse cultivation and coffee planting in the village, and the last one is the father of this enterprising farmer. By conducting interviews with these male interviewees, I aimed to gain insights into a wide range of information that is crucial for the study, such as the detailed history of the community (including key events in its agricultural transition), the specific agricultural planting techniques used in the community (especially techniques for greenhouse vegetable cultivation and coffee planting), the traditional and current division of labor between men and women in the community (including how this division has changed with the agricultural transformation), and some unique local cultural customs and traditions (especially those related to the Hmong ethnicity, as it is the majority group in Pang Hin Fon).

During the interview process, three languages were used for communication: Thai, English, and Chinese. Considering that most of the local villagers are fluent in Thai and have difficulties communicating in English or Chinese, the research team arranged for a professional Thai-Chinese interpreter to be part of the interview team. This interpreter played a vital role in ensuring that the

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villagers could express their thoughts and experiences freely and accurately during the interviews.

As noted above, there were originally two students collaborating in this research project, including one student from Thailand who is fluent in Thai, which allowed her to communicate with the local interviewees smoothly and easily establish rapport with them. I am from China and can not speak Thai, so I mainly communicated with other members of the research team (including the Thai student and the interpreter) in English. On some occasions, when there were complex topics or culture-specific expressions that required precise translation, I also relied on the assistance of the Chinese-Thai interpreter to ensure that I could fully and accurately understand the information shared by the interviewees.

All the information collected through observations and interviews was carefully and systematically organized in the form of field notes. These field notes included detailed records of the interviewees' statements, descriptions of the scenes observed during our participatory observation, and the researchers' own reflections and preliminary analyses. Besides relying on the first-hand data obtained from the field survey, this research also made use of some secondary data to enrich its theoretical foundation and analytical framework. Most of these secondary data were derived from existing academic studies and research papers that focus on the role of Hmong women in different social and cultural contexts. By reviewing and referencing these academic works, I have aimed to gain a deeper and more comprehensive understanding of Hmong culture, including the historical background, traditional values, and social structures that influence the roles of Hmong women.

Furthermore, this study draws upon social role theory (also known as gender role theory, Eagley & Wood, 2016), which focuses on the division of labor, expectations, and practices related to women's roles within the family and society, as well as how these roles create tensions and negotiations in various domains. The use of this theoretical framework aids in analyzing the role tensions faced by Hmong women between their family responsibilities and productive labor during the agricultural transformation, and how they demonstrate agency within these domains. This theory is employed to analyze

the data collected in the field, ensuring that the findings are grounded not only in empirical evidence but also in a robust theoretical foundation.

## Findings and Discussion

### **The role of Hmong women in Pang Hin Fon Village against the backdrop of the village's agricultural transformation**

The agricultural transformation the Pang Hin Fon community continues to go through can be characterized as a phased shift from illicit opium cultivation to the cultivation of licit cash crops and greenhouse-grown crops. Local Hmong women have consistently been involved in this process, always playing a direct role in the village's agricultural sector. Take Mae Shai, who is 53 years old, as an example. Before marriage, she previously grew upland rice, glutinous corn, and opium with her family. Every day, she would feed her family's poultry from 5am to 6am and then go to her family's fields to work; she also exchanged opium for daily necessities such as noodles. At the age of 15, Mae Shai married into the husband's family from an external village. She was formally married at the age of 18 and had already given birth to four children (three boys and one girl) by the age of 20.

After marriage, Mae Shai's farming activities expanded to include growing cabbages and tomatoes as part of her new community's transformation. Her daily routine remained busy: she would wake up early to prepare meals and handle household chores, followed by her involvement in agricultural work until late in the evening when she would return home. This intense work schedule left her little time to visit her natal family in her home village, despite a deep longing to spend time with her parents. Nowadays, she continues regularly participating in her family's agricultural activities in the orange orchard, such as picking and packing oranges.

Secondly, consider 41-year-old Maithong Saeyang, colloquially known as Mae Luang, as another example. She was not born in Pang Hin Fon; instead, she was brought into the local community through the Hmong "bride-stealing" or "bride capture" custom from the northern Thai village of Doi Pui. During her childhood, she performed heavy labor at her parents' home. At the age

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of 7 or 8, she started attending school and helping her mother with household chores. Due to family challenges, she dropped out of school when she was around 10 or 11 years old and took on the responsibility of caring for three younger siblings. At the age of 14, she was “bride-taken” to her husband’s home, and at 15, she was married.

Immediately after marriage, Mae Luang became responsible for managing the household chores for more than 20 people, including cooking, laundry, and taking care of her husband’s elderly family members. Currently, there are six members in her household: herself, her husband, her recently graduated 23-year-old daughter, her 20-year-old son, her 19-year-old daughter-in-law, and a granddaughter. After marriage, she systematically learned greenhouse cultivation techniques and Good Agricultural Practices (GAP) such as pesticide preparation and application techniques through the Highland Research and Development Institute (HRDI). After trying her hand at growing flowers and grapes, she finally decided to focus on greenhouse-grown tomatoes and Japanese cucumbers. With the assistance of her brother, she also learned to drive.

Nowadays, every early morning, Mae Luang needs to coordinate matters such as the work division of the migrant farm workers on her family’s fields. She also independently applies fertilizers, eliminates pests, and treats plants affected by diseases based on the growth status of her crops. In addition, as the community’s agricultural transformation advances toward marketization, Mae Luang also has considerable autonomous decision-making power and the ability to connect with markets. It can be said that there has been a shift from Mae Luang being a passive participant in agricultural labor to an active farm manager.

After her family’s division (when her extended family split into smaller nuclear families), she gradually took control of her nuclear family’s financial management and could adjust her planting strategies based on market trends (for instance, introducing the cultivation of Japanese cucumbers). She also expanded her sales channels by cooperating with freight companies and joining online tomato sales group chats. However, during our interviews, Mae Luang also mentioned that she would discuss with her husband before deciding

to grow tomatoes, and she would hand over the transportation link to her husband and son. This division of labor is not accidental. It reflects the continuation of the traditional Hmong cultural norm where men take charge of external affairs. Nevertheless, this situation is already different from the past. After the elder Mae Shai got married, for example, she was not involved in market-related matters such as the transportation or sales of her family's produce.

Through the above two examples, it can be seen that the shaping of women's roles in the community is not only restricted by certain Hmong marriage customs and family structure culture, but also demonstrates the women's significant agency amid social and economic changes. From the perspective of the marriage customs and cultural practices of the Hmong ethnic group, the shaping of gender roles is closely tied to the concept of soul ownership. In the early stages of community development, "bride-grabbing" (also known as "bride kidnapping" or "bride capture") remained a common form of marriage in which the male partner would either meet the female partner during a festive event or through other means and then take her directly to his home. The "soul-calling ceremony," held three days after the "bride abduction" and in which the woman's soul is called from her natal family to her husband's family, plays a crucial cultural role. This ceremony involves the summoning of the female partner's soul from her natal family to her husband's household, symbolizing the complete transfer of her identity and belonging (Chatuporn, pers. comm., August 2025).

The role of the soul-calling ceremony in the community's marriage customs not only incorporates the woman into her husband's family in a physical sense but also transfers the ownership of her soul to her husband's family in a cultural sense. Just as Sweeney (2015) documented the concept among Hmong women in Vietnam that "divorce would cause soul damage and early death," this kind of cultural concept also restricts the women in Pang Hin Fon to a certain extent. After her marriage, Mae Shai (pers. comm., 2025) says that she "missed her natal family very much but had no time to go back [to visit]." Likewise, when Mae Luang first married into her husband's family as the first daughter-in-law, she had to take full responsibility for the housework for more than 20

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new family members. Although she was very dissatisfied with the “bride abduction” custom, she still wanted to do well in her husband’s family and not cause her parents to lose face. After marriage, she dutifully fulfilled her responsibilities as a daughter-in-law, a wife, and a mother in the family. During the agricultural transformation, this kind of responsibility has been further extended.

From a perspective informed by gender role theory (Eagley & Wood, 2016), the division of labor among the female members of the Hmong ethnic group often exists in a state of continuous tension. This tension is manifested in the conflicts and negotiations between household responsibilities (housework, childcare, etc.) and productive labor (agricultural operations, market interactions, etc.). The cases of Mae Shai and Mae Luang also illustrate this tension: they are both participants in agricultural production and agricultural transformation, while also continuing to be the primary bearers of household responsibilities. Both have gained additional agency for decision-making during the period of the community’s agricultural transformation, yet they are not entirely free from the constraints of traditional Hmong cultural expectations.

The perspective of male villagers on women’s roles in the village provides an important reference point. Worawut (group discussion, August 2025), the former village head, believes that “the women of Pang Hin Fon are very strong, whether in agricultural tasks or within the household.” Although this statement was delivered with a smile, Worawut’s external evaluation contrasts with the women’s own perceptions, reflecting the complexity of gender role concepts within the community.

### **Older women in the Pang Hin Fon community and their perceptions of their own roles in the village**

Hmong women of different age groups have varied developmental backgrounds, have experienced different stages of the village’s agricultural transformation, and have been exposed to diverse external ideas, so their perceptions of their own roles reveal differences. The older women in the Pang Hin Fon community exhibit a blend of traditional continuity and personal

reflection in their understanding of their roles. These perceptions are influenced by the agricultural transformation they have experienced during their formative years and also reflect the gradual infiltration and adoption of external ideas.

Some older women take on housework (including cooking, cleaning, laundry, taking care of children, and raising livestock), and they believe that this is their inherent responsibility. During our interview, Mae Shai (pers. comm., August 2025) mentioned, “The things I did before and after my marriage are the same, whether it is housework or farmwork.” Even though she missed her “natal family very much but had no time to go back” due to busyness, she still did housework at home and participated in agricultural activities. She also recalls, “The happiest time of my life was when I was with my parents as a child because I didn’t have to do a lot of work” (pers. comm., August 2025). This statement indirectly reveals that she regards undertaking labor as an identity marker of adult women, particularly those who are married.

Mae Luang has gained more management and decision-making authority amid the village’s agricultural transformation. She not only determines the usage ratios and application times of pesticides, but has also played a leading role in introducing a new variety of Japanese cucumbers in her family’s plots and was responsible for negotiating the transportation terms with freight companies. In terms of finances, she maintains control over the allocation of funds for her family’s farm operations and is able to flexibly adjust the planting structure based on market conditions. However, despite all of her farming responsibilities, she still engages in daily housework as well. She mentioned (pers. comm., August 2025) that when she first married into her husband’s family, she was expected to be fully responsible for cooking and doing laundry for 20 family members; now, as a farm manager, she still “arranges everything at home first” before handling farm affairs. From the perspective of Hmong culture, this type of perception stems from the traditional family division of labor where “men take charge of external affairs while women handle internal household matters,” with the cultural logic being that “women’s tasks are childbearing plus auxiliary labor” (Somchai, pers. comm., August 2025).

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Therefore, older women generally regard housework as an unavoidable responsibility.

Regarding intergenerational expectations, the attitudes of older women exhibit some differences from those of the past. For example, Mae Shai (pers. comm., August 2025) allocated land to her daughter and son-in-law upon marriage, but the amount was less than what was given to her son, as she believed that “a daughter-in-law would have her own land after marriage, whereas a son would remain close by.” This more traditional approach to land distribution reflects a certain adherence to gender role norms.

In contrast, Mae Luang’s expectations for her daughter are more transformative (pers. comm., August 2025). She hopes that her daughter will seek further education and not repeat her own early experiences of dropping out of school and marrying young. She is pleased that her daughter has returned home after completing her studies to assist with farming and household chores, making her own life “easier.” However, she has encouraged her daughter to explore possibilities beyond agriculture.

It is also noteworthy that new forms of female connections are emerging within the community. Although the informal women’s textile association, comprising local women from various ethnic groups, is still in its early stages of production, it has already begun experimenting with transforming traditional crafts into economic resources. One of the association’s members, a Hmong woman (pers. comm., August 2025), stated, “For the first time, we are able to receive visitors as a group [of female friends], rather than just as members of our families.” This nascent sense of collective identity may open up new possibilities for older village women to continue redefining their roles.

### Conclusion

This study, which examines the roles played by middle-aged and elderly female members of the Hmong community in the context of Pang Hin Fon’s agricultural transformation, sheds some light on the dynamic interplay between local cultural traditions and the forces of globalization in shaping gender roles. The research findings indicate that Hmong women are not only active participants in agricultural production but also demonstrate significant



Fig. 27: Maithong Saeyang (Mae Luang, center) strolling towards her fields with her granddaughter (right) and another female villager (left)  
*(photo by Garrett Kostin)*

agency during the transformation process. They have gradually acquired new skills such as modern agricultural techniques, farm management, and market connections while still managing traditional household responsibilities. However, this expansion of roles has not fully disrupted traditional gender divisions, but rather has created a state of tension-laden negotiation in which women are expected to fulfill traditional family responsibilities such as housework and child-rearing while also gaining more decision-making agency over their family's income-generating activities. This tension is particularly evident in the self-perception of members of older generations of village women who adhere to the cultural logic of “men outside the home, women inside,” yet continually redefine the boundaries of their roles in practice.

This study also has limitations that should be considered. First, linguistic and cultural differences posed important challenges during the fieldwork period. Despite the assistance of professional translators, certain culturally-specific concepts and subtle emotional expressions may have been lost or

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misinterpreted during translation. Second, the seven-day fieldwork period was relatively limited. Although a wealth of first-hand information was gathered through intensive interviews, group discussions, and observations, the relatively brief stay may have limited a fuller understanding of the dynamics of community social relations and the long-term impact of agricultural transformation. In addition, as an outside researcher, differences in identity may also have had an impact on the depth and authenticity of the interview content.

Based on the findings and limitations of this study, I would like to make the following suggestions for future research: First, inquire further about the long-term trajectory of Hmong women's role changes over time, not just among middle-aged and elderly people. Secondly, comparative studies of the relationship between gender roles and agricultural transformation in different highland ethnic communities should be conducted in order to illuminate more general patterns. Finally, specialized research on emerging women's organizations in the Pang Hin Fon community, such as the women's textile association, should be conducted in order to provide new perspectives on women's group dynamics.

## Reflection

*Ye Jiaying:* Our team's field experience in Pang Hin Fon was the first official field research I have had the opportunity to be involved with. Seeking insight into the lives of our participants and understanding their dilemmas and choices in specific situations have given me a deeper understanding of academic research. Activities such as crouching in Mae Luang's tomato shed, listening to her talk about her marriage and family, helping to pick her cucumbers, listening to how she manages her family's crops, connects with the market, and so on, provided me with vivid insights into how the agricultural transition is reshaping the daily lives of local Hmong women in a small yet concrete way.

During the participatory observation phase of our field research, our team visited a number of agricultural activity areas in the community to gain a direct and in-depth understanding of local agricultural practices. These areas included tomato greenhouses where villagers grow tomatoes in a controlled environment, orange orchards filled with mature orange trees, and coffee plantations where coffee beans are cultivated. It is worth noting that most of these visits were guided by women from the community who were very willing to share their knowledge and experiences related to agricultural production with the research team.

One of the most memorable site visits was to the tomato farm owned by Mae Luang, one of our primary female research informants. During our time at her farm, we not only observed the entire process of tomato cultivation, but also actively participated in the agricultural work of sorting and packing cucumbers that were harvested from the farm. This hands-on participation allowed our team to gain a more intuitive understanding of the daily labor of Hmong women in agricultural activities. In addition, during our stay at the temporary accommodation arranged in the community, the research team also took the opportunity to participate in daily meal-preparation activities with local women. While cooking together, we conducted informal interviews and observations, which helped us gain insights into the daily activities, family roles, and social interactions of Hmong women beyond their agricultural work.

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On the morning of our departure from Pang Hin Fon, we took pictures with several of the residents of the village. The women in the community also showed us traditional ethnic costumes and a number of ethnic bags they had produced. This was a combination of tradition and modernity. The Pang Hin Fon women's textile association consists of members who still practice ancient embroidery techniques, as well as younger villagers who are able to field online orders and understand the nuances of certain markets. Every conversation and moment of interaction with the women of the Pang Hing Fon community became an important window into the world they live in, and these valuable field memories will continue to nourish my future academic endeavors.

## References

- Eagley, A.H., & Wood, W. (2016). Social role theory of sex differences. In A. Wong, M. Wickramasinghe, R. Hoogland, & N.A. Naples (Eds.), *The Wiley Blackwell encyclopedia of gender and sexuality studies*. <https://doi.org/10.1002/9781118663219.wbegss183>
- Langill, J. C. (2025). 'I shouldn't have to do this alone': Intersectional livelihoods and single Hmong women in Thailand. *Gender, Place & Culture*, 32(1), 34-53. <https://doi.org/10.1080/0966369X.2023.2171967>
- Millett, K. (1970). *Sexual politics*. Doubleday.
- Rigg, J. (2000). *More than the soil: Rural change in Southeast Asia*. Prentice-Hall.
- Shi Maomin. (2004). *Cross-border research on Hmong people*. Doctorate dissertation, Central University for Nationalities.
- Sweeney, W. (2015). *Victims of poverty and gender roles: The marriage practices, gender-based violence, and trafficking that Hmong women face in their daily lives*. Independent Study Project Collection, Paper 2098. School for International Training. [https://digitalcollections.sit.edu/isp\\_collection/2098](https://digitalcollections.sit.edu/isp_collection/2098)





# SINO-THAI EXPLORATIONS

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# AGRARIAN TRANSITIONS

## IN ETHNIC COMMUNITIES OF NORTHERN THAILAND

This publication presents a collection of collaborative research papers from social science students at Yunnan University and Chiang Mai University examining how ethnic communities of northern Thailand are navigating the transformation of their agricultural livelihoods. The articles compiled here are the product of a summer school program hosted by Chiang Mai University in August 2025 during which selected students from the two universities conducted fieldwork in multiple communities under the guidance of international academic mentors. The students have produced a series of illuminating case studies of villagers' struggles with infrastructure and the environment, the shift from illicit opium to licit crops, and the effects of changing livelihoods and economies on culture and community. This volume aims to contribute to critical engagement within the region informed by the unique perspective of Chinese social scientists-in-training.



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