Overseas Fieldwork Report 2025:

Battambang Province, Cambodia

Graduate School of International Development

Nagoya University

Overseas Fieldwork Report 2025

Battambang Province, Cambodia

March 2026

Graduate School of International Development

Nagoya University

Nagoya, Japan

Overseas Fieldwork Report 2025
Battambang Province, Cambodia

Graduate School of International Development, Nagoya University
Furo-cho, Chikusa-ku, Nagoya, Japan 464-8601
https://www.gsid.nagoya-u.ac.jp/index-en.html

Acknowledgments

The OFW 2025 Committee wishes to express our sincere appreciation to the individuals and institutions who have generously supported and contributed to the success of this year's program. First and foremost, we extend our heartfelt gratitude to the people of Battambang Province for their warm welcome and generous hospitality. We are incredibly grateful to the local authorities, including the representatives and other officials of the provincial government and Thmor Kol district office, for their generous assistance and cooperation during our field research. Our special appreciation goes to the people in Bansay Treng Commune and Tameoun Commune who shared their time, experiences, and invaluable information during interviews and discussions. We also gratefully acknowledge all others who kindly cooperated with our research and warmly encouraged us during our stay in Battambang. This fieldwork would not have been possible without the trust, openness, and support extended to us by local communities.

We also acknowledge with gratitude the Faculty of Development Studies (FDS) of the Royal University of Phnom Penh (RUPP) for co-organizing this program and serving as a key institutional partner. We extend our special thanks to Prof. Rath Sethik (Dean of FDS), Prof. Hoy Sereivathanak Reasey (Co-chair of OFW 2025), and Prof. Chhinh Nyda for their sustained academic guidance and mentorship to the students before, during, and after the field research. The successful implementation of OFW 2025 was further supported by the dedicated work of Ms. Met Joury, Mr. Eom Nakhem, and Ms. Vang Sivmey, who served as research assistants and contributed to the smooth conduct of fieldwork. We also gratefully acknowledge Prof. Chet Chealy, Chancellor of RUPP, for his invaluable support and encouragement for this collaborative program.

Finally, we wish to thank the experts who contributed their knowledge and experience to the preparatory seminars and field research activities. We are particularly grateful to Prof. Dork Vuthy and Prof. Chou Phanit of RUPP for their insightful lectures during the preparatory phase. Our sincere appreciation also goes to our teaching assistants, Mr. Hun Seyhakunthy, Ms. Winnie Onofre Tembe Papelo, and Mr. Sinhthavanh Chanthavong, for their dedication and active engagement in supporting students' learning process. Last but not least, we thank Prof. Thomas Kabara for his careful English proofreading of this volume.

Akemi ASHIDA
Associate Professor
Chair of OFW 2025 Committee
Graduate School of International Development
Nagoya University

Introduction

The 32nd Overseas Fieldwork (OFW 2025) of the Graduate School of International Development (GSID), Nagoya University, was conducted in the Battambang Province, Cambodia, from August 23 to September 6, 2025. As part of its annual education activities, GSID carries out OFW in a developing country in Asia in cooperation with a local partner university of GSID. In this context, GSID has conducted ten successful OFWs in Cambodia since 2005. Building on this history, GSID collaborated with the Faculty of Development Studies (FDS), Royal University of Phnom Penh (RUPP), to implement the eleventh OFW in Cambodia in 2025. Through this long-standing partnership, OFW 2025 provided an opportunity to further strengthen academic exchange and collaboration between GSID and RUPP.

The OFW 2025 program covered three central themes relating to development: agricultural economics, education, and gender. First, the agricultural economics working group investigated the issues of credit access, technology adoption, and farming diversification through two selected cases of agricultural cooperatives (ACs) in Battambang. Second, the education working group explored the role of school principals' leadership in shaping Teacher Professional Development (TPD) in Cambodia. Finally, the gender working group tried to identify prevailing gender norms in career pathways in two communes in Battambang. Across all three themes, students conducted field research in Bansay Treng Commune and Tameoun Commune, Thmor Kol District, Battambang, with the aim of understanding the uniqueness and developmental challenges of the target site from multiple perspectives.

Following the completion of fieldwork, the students presented their preliminary research findings on September 4 at the Classy Hotel in Battambang to local authorities and resource persons, who provided valuable feedback and suggestions. Subsequently, a second preliminary presentation was held at RUPP on September 5, and a final revised presentation was delivered at GSID on October 29. Through these opportunities, the three working groups carefully incorporated the insightful comments and advice received from faculty and students at both FDS and GSID into the preparation of this final report. We sincerely hope the results of the three research projects will be of practical value to our friends and collaborators in Battambang Province.

Last but not least, OFW 2025 represents a significant milestone in GSID's continuing relationship with RUPP. We remain deeply grateful for the strong and exceptional relationship we share with our partners in Cambodia and look forward to many more years of fruitful cooperation. On behalf of the students, faculty, and staff of GSID, I would like to reiterate our sincere appreciation to all those who made OFW 2025 possible and who contributed to the academic, personal, and professional growth of the participants.

Akemi ASHIDA
Associate Professor
Chair of OFW 2025 Committee
Graduate School of International Development
Nagoya University

Table of Contents

List of Participants

Advisors from GSID and RUPP(7)

Working Group	Advisors from GSID, Nagoya University	Advisors from RUPP
WG1: Agricultural Economics	Christian OTCHIA	Sethik RATH
WG2: Education	Akemi ASHIDA	Nyda CHHINH
WG3: Gender	Isamu OKADA	Hoy Sereivathanak REASEY
Coordination	Natsuki KONDO	

Assistants from RUPP (3)

Working Group	Name
WG1: Agricultural Economics	Nakhem EOM
WG2: Education	Joury MET
WG3: Gender	Sivmey VANG

GSID Students (16)

Working Group	Name	Country
WG1: Agricultural Economics	Amalie Upamalika Sanjeewanie GUNASEKARA	Sri Lanka
	Haruta TOBE *	Japan
	Pramodi Kawyanjani ATTYGALLE	Sri Lanka
WG2: Education	Chinatsu KAWAHARA	Japan
	Lubaba BASHARAT	Bangladesh
	Misato YAMAURA	Japan
	Sae TAKABE	Japan
	Syed Mohsin SHAH *	Pakistan
WG3: Gender	Daniella PEIXOTO PEREIRA*	Brazil
	Gina MOOMAW	USA
	Mio SATO	Japan
	Takeru HONSAKO	Japan
	Wenhuizi DOU	China

*group leader

Program of OFW 2025

Preparatory Seminar at GSID

Date	Time	Title of the Lecture	Lecturer(s)
Apr. 16 (Wed)	14:45-16:15	Introduction & Team-building	OFW Committee
Apr. 23 (Wed)	14:45-16:15	Cambodia 1: Introduction to Cambodia and the research site	Prof. HOY Sereivathanak Reasey, RUPP
Apr. 30 (Wed)	14:45-16:15	Cambodia 2: Cambodia Political System and governance	Prof. HOY Sereivathanak Reasey, RUPP
May. 7 (Wed)	14:45-16:15	Cambodia 3: Cambodian education & educational development	Prof. CHINH Nyda, RUPP
May. 14 (Wed)	14:45-16:15	Cambodia 4: Cambodian society and culture	Prof. DORK Vuthy, RUPP
May. 21 (Wed)	14:45-16:15	Cambodia 5: Cambodian agricultural cooperative and development	Pof. CHOU Phanit, RUPP
May 28 (Wed)	14:45-16:15	Group work	OFW Committee
Jun. 4 (Wed)	14:45-16:15	Group presentation to share research interests	OFW Committee
Jun. 11 (Wed)	14:45-16:15	[Joint] Introduction & Simulation (Role play)	Prof. Ashida, Prof. Peddie, Prof. Kondo
	16:30-18:00	[Joint] Qualitative data analysis	Prof. Peddie
Jun. 25 (Wed)	14:45-16:15	[Joint] Quantitative data analysis	Prof. Okada
	16:30-18:00	[Joint] Reflection of role play, interpretation and report writing	Prof. Ashida
Jul. 2 (Wed)	14:45-16:15	[Joint] Presentation and Discussion	OFW&DFW Committee
Jul. 9 (Wed)	14:45-16:15	Risk Management	Prof. Kondo
Jul. 16 (Wed)	14:45-16:15	Group presentation to share research proposal	OFW Committee
Jul.23	14:45-16:15	Khmer Language class	OFW TAs

Schedule of Fieldwork in Cambodia

Date	Schedule
8/23 (Sat)	Meet at Chubu International Airport（6:40AM）
	NAGOYA CHUBU CENTRAIR INTL（9:00）⇒ HO CHI MINH CITY（12:40） HO CHI MINH CITY（16:00）⇒PHNOM PENH INTL（16:55）
	Hotel Check -in
8/24 (Sun)	Phnom Penh →Battambang
	Hotel Check-in Group work (Planning of fieldwork schedule, checking research instrument, etc)
8/25 (Mon)	Possible visit to the Municipality
	Data collection (Day1)
8/26 (Tue)	Data collection (Day2)
8/27 (Wed)	Data collection (Day3)
8/28 (Thu)	Data collection (Day4)
8/29 (Fri)	Data collection (Day4)
8/30 (Sat)	Daytrip to Siem Reap
8/31 (Sun)	Free time/ Group work
9/1 (Mon)	Data collection (Day5)
9/2 (Tue)	Supplementary data collection if needed (Day 6) Preparation for preliminary research results presentation
9/3 (Wed)	Preparation for preliminary research results presentation
9/4 (Thu)	Presentation of preliminary findings for local stakeholders & Lunch with local stakeholders
	Battambang →Phnom Penh
9/5 (Fri)	Presentation of preliminary findings at RUPP
	Free time & Tuol Sleng Genocide Museum
	PHNOM PENH INTL（20:55）⇒ HANOI（22:44）
9/6 (Sat)	HANOI（00:20）⇒ NAGOYA CHUBU CENTRAIR INTL（06:55）

Interim Presentations of Research Findings

The first interim presentation of research findings was held at the conference room of Classy Hotel in Battambang on September 4. Each working group had 30 minutes for presentation including translation, 10 minutes for Q&A. The second interim presentation of research findings was held in RUPP on September 5, 2023. Each working group had 20 minutes for presentation, 20 minutes for Q&A.

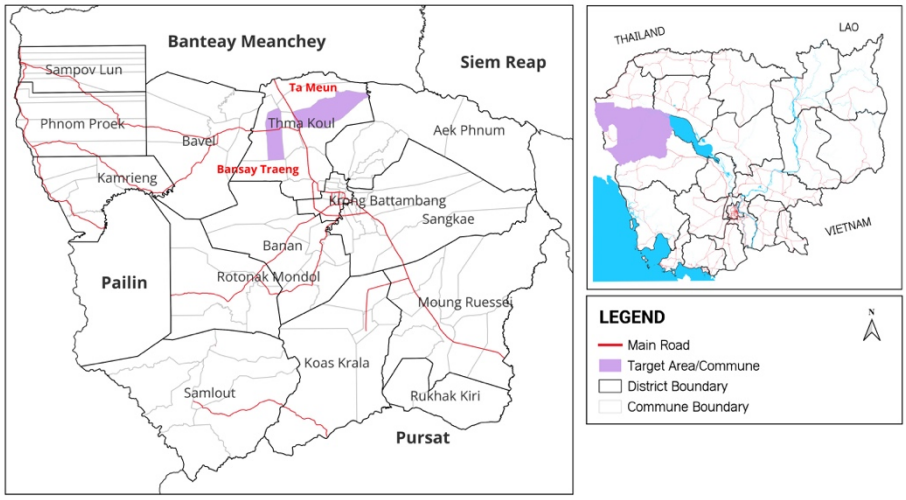
Presentation of Research Findings at GSID

The presentation of research findings was held at GSID by each working group to disseminate findings and collect feedback from colleagues on October 29. Each working group had 20 minutes for presentation, 25 minutes for Q&A.

Overview of Battambang Province, Cambodia

Hoy Sereivathanak Reasey
Faculty of Development Studies (FDS), Royal University of Phnom Penh (RUPP)

Battambang Province, located in northwest Cambodia, 291 km from Phnom Penh capital on national road No.5, is one of the country's largest and most fertile regions, often called the Rice Bowl of Cambodia due to its vast agricultural plains. It borders Thailand to the west and shares borders with provinces like Pursat, Pailin, Banteay Meanchey, and Siem Reap. Battambang Province has a total area of 11,631.21 square kilometres, divided into 1 municipality and 13 districts, 103 communes/sangkats, 842 Villages, 292,011 households in total population of 1,308,424 people of which 663,615 are women (50.71%) with annual growth rate 0.42%[1].



Geography and Climate

- Landscape: Dominated by the Tonle Sap basin lowlands, with fertile alluvial plains ideal for farming. The Cardamom Mountains rise in the southwest, and the Sangkae river flows through the province, supporting irrigation.

- Geographical administrative area: Includes Battambang municipality and 13 districts in rural areas like Banan, Thma Koul, Bavel, Aek Phnum, Moung Ruessei, Samlout, Rotonak Mondol, Sangkae, Sampov Lun, Phnom Proek, Kamrieng, Koas Krala and Rukhak Kiri.

- Climate: The climate is characterized by the tropical monsoon, which lasts from November to April with temperatures ranging from 25–35°C, and the rainy season from May to October. The province experiences occasional flooding but benefits from its rich soil. Floods and riverbank erosion are the primary hazards that are likely to be affected by climate change in Battambang[2].

History

[1] Battambang Provincial Department of Planning (2024) State of Economic and Social Affairs of Battambang province.

[2] Geoff Wright and team members (2020) Climate Vulnerability and Adaptation Assessment Project. Final Report, volume 1. Cities Development Initiative for Asia, and Ministry of Public Works and Transportation.

- Ancient Roots: Evidence of Angkorian-era settlements; Battambang's four main temples Wat Ek Phnom, Phnom Banan, Prasat Bassaet and Prasat Sneung were built between the 11th and 13th Century[3]. The temples illustrate the inseparable nature of Hinduism and Buddhism in Cambodia.

- Colonial Era: Under French rule (1907–1953), it became a prosperous trading post, leaving behind elegant colonial architecture like the Governor's Residence and train station.

- Modern History: Heavily impacted by the Khmer Rouge regime (1975–1979), with sites like Phnom Sampeau bearing scars of atrocities. Post-1990s, it has seen steady development and repatriation of refugees from Thailand.

Economic Sectors

- Agriculture: Bordered by the country's major freshwater resource, the Tonle Sap lake, the province contains fertile soil that is suitable for growing 'thirsty crops' and has historically been the main rice provider of the country. Main crops: rice, cassava, corn, banana, mango, mung beans[4].

- Industry and Trade: Promoting the growth of garment factories, food processing, and cross-border trade with Thailand through the Poipet border before the 2025 Cambodia-Thailand border conflict.

- Tourism: Emerging as a destination, it contributes to eco-tourism and cultural sites such as Phnom Sampeau, Wat Banon, Wat Ek Phnom, Colonial Battambang, and Countryside, and offers a laid-back alternative to the world heritage of Ankor archaeological sites in Siem Reap province.

Education and Vocational Training

General education system consists of preschool and kindergarten (ages 3-5); primary (grade 1 - 6), secondary (grade 7 - 9), high school (grade 10 - 12); and public and private universities, institutes, and colleges. Beside the general education and higher education, there is Technical and Vocational Education and Training (TVET), like many regions in Cambodia, face significant challenges including rural-urban disparity, socioeconomic barriers, gender disparities, teacher shortages and training, limited resources and infrastructure, lack of industry collaboration.

Gender Issues

Women make up 50.7 percent of the total province's population in Battambang. Women in education careers: 59.8 percent are teachers at primary schools, 47.7 percent at secondary schools. In local authority, women hold very low leadership positions. For instance, they comprise 12.9 percent of village chiefs, 29 percent of commune/sangkat councilors, and 23.8 percent of district/municipality councilors (BPDP[5], 2024). The gender barriers are characterized by constraints on social and cultural norms, gender discrimination in education, family duties, leadership work burdens, and economic barriers.

---

[3] MOT 2015 Tourism Statistics Report: June 2015, Kingdom of Cambodia, Ministry of Tourism (MOT) viewed 13 September 2015.

[4] Council for the Development of Cambodia, and Department of Foreign Affairs and Trade, Australia (2023) Handbook on investing in Cambodia. Phnom Penh, Cambodia.

[5] Battambang Provincial Department of Planning (BPDP).

Working Group 1 (Agricultural Economics)

Credit Access, Technology Adoption, and Farming Diversification: The Case of Agricultural Cooperatives in Battambang

Group Members:

Haruta TOBE *

Pramodi ATTYGALLE

Amalie GUNASEKARA

Research Assistant:

Sinhthavanh CHANTHAVONG (GSID)

Nakhem EOM (RUPP)

Advisors:

Christian OTCHIA (GSID)

Sethik RATH (RUPP)

* Group Leader

Table of Contents

1. Introduction and Rationale

Agricultural cooperatives play an increasingly important role in supporting rural livelihoods in Cambodia by providing members with access to savings and loan services, market linkages, and production support. Credit provision is the most prominent service offered by agricultural cooperatives. Nearly 90% of cooperatives engage in credit services, and 63% identify credit as their most important business activity (Ngo et al., 2023). The expansion of cooperative-based rural finance aligns with broader development efforts by the Cambodian government to formalise and strengthen cooperatives as rural economic actors.

The cooperative movement in Cambodia remains at an early stage of development compared to neighbouring countries. Cambodian cooperatives mainly focus on savings and credit functions and providing farm inputs, whereas cooperatives in Vietnam and Thailand are involved in more complex supply chain design and export management (DGRV, 2020). One explanation offered for this difference is historical disapproval of the concept of sahakor which denotes unwanted collective labour, which transitioned the government's position toward selecting the word samakum to refer to cooperatives (Keosothea, 2006). Since cooperatives first appeared in the 1950s and 60s, turned into Krom Samaki and then reestablished after the civil war as the Farmer's Association (FA), agricultural cooperatives in Cambodia are developing at an incremental speed. As the 2013 AC law legislated a new concept of the "Modern Agricultural Cooperatives," the Royal Government of Cambodia is seeking to have better forms of more effective and equitable cooperatives which supports local development, connecting bottom-up logic and administrative and political top-down strategies.

The passage of the Law on Agricultural Cooperatives in 2013, which was formulated with the support of the German Cooperative and Raiffeisen Confederation (DGRV), laid a solid foundation for a modern, market-oriented cooperative sector. According to a study by the Ministry of Agriculture, Forestry and Fisheries (MAFF, 2020), by the end of 2020, more than 1,200 agricultural cooperatives had been registered in Cambodia. Most of these focus on savings and credit services, as well as the provision of farm inputs such as seeds and fertilisers (Chhinh et al., 2022). Legally, Article 26 of the Law requires cooperatives to set a statute clause which articulates procedures of financing and its purposes. Many ACs comply with the law and provide loans for both productive agricultural investments and urgent household needs. This dual-purpose lending framework reflects a pragmatic understanding of rural realities, where financial demands for health, education, food security, and social obligations are just as pressing as investments in seeds, fertilisers, or equipment. Notably, while some sixty per cent (60%) of cooperative members are women (Asian Development Bank, 2021), only around 40% of women hold chairmanships and board memberships (Chhinh et al., 2022). Joint marketing initiatives, particularly at the national or international level, remain limited due to inexperience and inadequate financial resources (German Cooperative and Raiffeisen Confederation (DGRV), n.d.)

Agriculture remains a central component of rural livelihoods and national development in Cambodia. According to the National Report on Census of Agriculture Cambodia 2023 (CAC2023), approximately 54.2% of households were engaged in agricultural production. Primarily, smallholder cultivation of crops such as rice, cassava, and other staples, and most of these households rely on farming as their main source of food and income (FAO, 2023). At the macroeconomic level, agriculture continued to contribute about 22%-23% of national GDP in 2024. Agriculture also remained a major source of employment, with roughly 36% of the labour force employed in agricultural activities in 2023, and even higher levels of dependence in rural areas

where farming underpins local livelihood (World Bank, 2024; Ministry of Economy and Finance, 2024). Despite overall economic expansion, rural areas continue to face structural vulnerabilities, including high exposure to climate risks, volatile agricultural markets, limited irrigation coverage, chronic indebtedness, and uneven access to agricultural technologies. These persistent challenges raise important questions about how rural households can strengthen resilience, improve productivity, and secure stable income sources in an increasingly unpredictable environment. Against this backdrop, two interrelated processes, agricultural diversification and technology adoption, have become focal points in development policy discussions and academic research.

Diversification is widely recognised as a strategy for improving income stability, reducing production risks, and enhancing adaptive capacity in smallholder agriculture. Where geographical conditions and high climatic uncertainty play a decisive role in Southeast Asian agriculture, diversification allows households to hedge against crop failure by distributing labour, capital, and land across multiple productive activities. While rice remains Cambodia's dominant agricultural commodity, an increasing number of farmers have begun adopting diversified systems that include vegetables, fruit, poultry, aquaculture, and commercial horticulture. These systems, supported by technologies such as net-houses, drip irrigation, deepened ponds, and improved seeds, create more reliable cash flows and increase the frequency of harvests, thereby reducing vulnerability to single-crop failure. Evidence from Battambang Province shows that households adopting diversified farming practices experience higher and more stable incomes and improved labour productivity compared with households dependent on rice monoculture, as documented in the JICA ex-post evaluation of the Battambang Agriculture Productivity Enhancement Project in the Kamping Puoy area (JICA, 2019).

However, diversification requires enabling conditions, most notably, access to credit. High-value agricultural technologies, such as net-houses, irrigation systems, and improved seeds, often require substantial upfront investment, which exceeds the liquidity available to many smallholder households. Small farmers who depend on seasonal income from rice often lack the savings needed to finance technologies. As a result, credit emerges as a critical input for agricultural transformation. Access to credit allows farmers to purchase inputs, invest in capital equipment, adopt irrigation technologies, and diversify crop portfolios. Conversely, credit constraints, arising from restrictive lending procedures, collateral requirements, limited financial literacy, or risk aversion, prevent households from adopting high-return technologies, thereby reinforcing dependence on low-productivity and high-risk farming systems.

From a theoretical standpoint, the behaviour of cooperative members in accessing loans to enhance productivity is consistent with the fungibility of money and livelihood diversification theories in rural economics. According to Ellis (2000), rural households pursue mixed livelihood strategies to manage risk and smooth consumption amid income volatility. Agricultural credit, therefore, serves not only as an investment input but also as a buffer stock in coping with shocks or seasonal fluctuations. In low-income, agrarian contexts, strict separation between consumption and production is often impractical (Banerjee et. al., 2015).

The present study examines how members of two agricultural cooperatives in Battambang Province allocate loans and perceive their impacts on technology adoption and livelihood outcomes. This research focuses on net-houses, which are enclosed vegetable cultivation structures that reduce pest damage, extend growing seasons, and enable year-round production. Net-houses represent a high-return but capital-intensive

technology that is accessible only through credit. By comparing farmers who adopt net-houses with those who remain in rice monoculture, we identify the mechanisms through which credit access, technology adoption, and diversification interact to shape agricultural livelihoods. By drawing on rare access to cooperative members, staff, and local officials, as well as the middlemen alongside the national road managing intermediary transportation between rice-millers and local producers, it examines how technology adoptions are made possible with cooperatives and financial institutions' loans and the outcomes experienced.

Battambang provides an ideal setting to analyse these dynamics. First, it is Cambodia's leading rice-producing region, accounting for approximately 11% of national rice output (United States Department of Agriculture Foreign Agricultural Service, 2025). Second, the province has a relatively mature cooperative sector, with around 23 agricultural cooperatives collectively engaging approximately 11,000 farming households (Alliance of Bioversity International & CIAT, 2023). Third, the province exhibits substantial variation in farming systems, with some farmers practising rice monoculture and others adopting diversified systems that include vegetables, livestock, and aquaculture. This variation allows for comparative analysis of the factors that enable or constrain diversification.

1.1 Significance of the Research

This study holds significance for both academic scholarship and policy development in the fields of rural finance, cooperative economics, and agricultural development. Academically, it contributes to a nuanced understanding of how cooperative financial services function in low-income agrarian contexts, particularly in Cambodia, where empirical research remains limited. By investigating loan use patterns within cooperatives, this study enriches theoretical discussions around the fungibility of credit, livelihood diversification, and the practical trade-offs rural households face between consumption and investment. It also advances knowledge on how institutional and governance variations at the cooperative level affect financial service delivery and its impact on rural livelihoods.

The findings hold significant policy relevance. As the Cambodian government pursues agricultural modernisation and climate resilience, understanding the mechanisms that constrain or enable diversification is essential. As appeared in the Pentagonal Strategy (Phase I) and the National Strategic Development Plan (2024-2028), the MAFF aims to modernise Cambodian agriculture by shifting toward value-added agro-processing and climate-resilient agriculture by strengthening ACs as well as introducing more AgriTech platforms to promote smart farming. Government agencies, development partners, and cooperative networks can use these insights to strengthen credit systems, improve loan literacy, support irrigation expansion, and tailor extension programs toward technology adoption. Such interventions have the potential to reduce rural poverty, enhance resilience, and promote more inclusive forms of agricultural growth.

1.2 Research Objectives and Questions

The objective of this research is to determine how members of two agricultural cooperatives in Battambang Province access loans provided by the cooperatives, microfinance banks and the agricultural development bank, and how they utilise the technology adoption to attain better farming regarding welfare, livelihood, and resilience.

This leads us to one main research question with four sub-questions. The main question for this study is what are the returns to diversified farming systems versus monoculture in smallholder agriculture, and how do Agricultural Cooperatives mediate credit access to facilitate technology adoption? This raises four sub-questions:

a. How do the income, labour returns, and risk-adjusted outcomes of diversified farmers compare to those of rice monoculture farmers?
b. What formal and informal credit constraints prevent farmers from adopting technologies that enable diversification?
c. What institutional mechanisms, including cooperative governance, loan literacy programs, and social capital, mediate credit access and technology adoption?
d. How do social capital, household characteristics, and risk preferences influence credit behaviour and farming decisions?

2. Review of the Related Literature

2.1 Dual Mandate and Credit Use in Agricultural Cooperatives

Agricultural cooperatives occupy a unique space in rural financial ecosystems. They are shaped by a dual institutional mandate: maintaining financial sustainability while fulfilling developmental and welfare objectives for their members (Birchall, 2004; Cuevas & Fischer, 2006). This dual role introduces persistent tensions in designing and implementing financial services, particularly loans. Cooperatives must determine whether to restrict credit use for productive investment or allow flexibility that responds to members' diverse and immediate needs, including food, education, and health. The idea of “dual-purpose” loan use, which combines consumption smoothing with investment, is especially salient in low-income agricultural settings where household finances are integrated and interdependent. In Cambodia, the 2013 Law on Agricultural Cooperatives provides the legal framework for cooperatives to mobilise and lend capital to members, while acknowledging their dual role as economic and social organisations in rural areas. Given that rural households must flexibly respond to emergencies and contingencies, cooperative lending practices in Cambodia often accommodate both productive and consumption-smoothing purposes, thereby reducing reliance on informal finance, even if this dual use is not explicitly codified in the law. Recent reports suggest that Cambodia’s microloan portfolio reached about 18 billion USD in 2024, giving the country one of the highest levels of microcredit debt per capita globally and raising concerns about over-indebtedness. In this context, cooperative finance is increasingly framed as a more member-oriented alternative that may reduce reliance on external microfinance institutions. Cooperative financing mechanisms are therefore often designed not only to expand access to affordable credit but also to mitigate poverty and debt stress among rural borrowers (Human Rights Watch, 2024).

2.2 Credit Constraints and Their Impact on Farm Decisions

Access to credit is one of the most critical determinants of agricultural productivity and modernisation. Feder, Lau, Lin, and Luo (1985) outline the central role of credit in enabling farmers to purchase inputs, invest in capital equipment, and adopt new technologies. Credit constraints, however, are pervasive in rural economies, especially where formal lending institutions require collateral or impose stringent lending criteria. Boucher,

Carter, and Guirkinger (2008) identify three types of credit rationing, which are quantity, risk and transaction-cost rationing. Farmers are denied or voluntarily avoid borrowing, even though they are willing to repay. Sometimes fear of defaulting, and high processing fees or complicated procedures deter borrowers from considering borrowing. In Cambodia, all three forms are present. Farmers often avoid Microfinance Institutions (MFIs) due to fear of debt, or they lack collateral for formal bank lending. Transaction costs, including travel time, document requirements, and guarantor rules, also deter borrowing. Formal and informal constraints for an AC member to credit access exist. Major formal constraints are fear and the burden of buying an AC share, participating in the general assembly and community-based agricultural training. Informal constraint is also salient where farmers cannot join an intact society of farmers. A farmer's community is usually bonded by trust, and geographical remoteness gives a disadvantage for farmers to join the AC.

Credit constraints influence farming decisions in several ways:

1. Limit the ability to invest in high-cost technologies (irrigation, net-houses).
2. Restrict crop choices to low-capital, low-risk, but low-return crops such as rice.
3. Reduce capacity to respond to market opportunities.
4. Increase reliance on informal lenders, who may charge higher interest rates.
5. This leads to cycles of low productivity and poverty.

Empirical studies in Cambodia (Bylander, 2015) show that many households take loans to cope with emergencies rather than invest in productive activities. Those who do invest productively often belong to better-organised cooperatives or have higher social capital. This highlights the importance of institutional mechanisms such as agricultural cooperatives, which can reduce borrowing constraints by lowering transaction costs, building trust, and offering group guarantees.

2.3 Technology Adoption and Agricultural Innovation

The adoption of agricultural technologies—irrigation systems, improved seeds, fertilisers, machinery, greenhouses, and net-houses—is central to increasing farm productivity and enabling diversification. Feder et al. (1985) argue that technology adoption is influenced by profitability, affordability, access to information, and risk perceptions.

Key factors influencing adoption include:

1. Credit access: enables the purchase of capital-intensive technologies.
2. Extension and training: increases knowledge and reduces perceived risks.
3. Institutional support: cooperatives and NGOs often supply technologies.
4. Risk tolerance: more risk-averse farmers avoid high-cost investments.
5. Water availability: Irrigation is a prerequisite for many high-value crops.
6. Market access: Technology adoption is more attractive when markets are reliable.

In Cambodia, irrigation pumps, ponds, and net-houses have enabled farmers to shift from rice monoculture toward year-round vegetable production. However, adoption remains uneven. Farmers in well-governed cooperatives often adopt technologies earlier and more successfully than those in weaker institutions.

2.4 Social Capital and Informal Governance

Social capital theory complements this perspective by highlighting the importance of interpersonal trust, social cohesion, and shared norms in enabling cooperative effectiveness (Putnam, 1993; Woolcock & Narayan, 2000). Trust among members reduces reliance on formal enforcement and encourages responsible loan use and repayment. Using randomised evaluations in India, Feigenberg, Field, and Pande (2013) showed that frequent interaction among borrowers improved loan repayment and social accountability. Baland, Guirkinger, and Mali (2011) and Wossen, Berger, and Di Falco (2015) similarly found that strong social ties shaped borrowing behaviour and encouraged sustainable resource use, especially under uncertainty. These findings are relevant for understanding how members of Cambodian cooperatives may internalise informal norms when allocating and managing loans.

2.5 Credit Impact on Livelihoods and Welfare

The relationship between loan use and welfare outcomes reflects both institutional design and member behaviour. Wang (2024) observed that repeat borrowers who consistently used loans for productive investment achieved higher agricultural efficiency, while one-time or consumption-oriented borrowers experienced limited long-term benefits. This pattern suggests that the impact of credit depends not only on access but also on the pattern and purpose of use. Repeat borrowing enables farmers to experiment with new techniques, learn from mistakes and gradually build productive capacity. Moreover, a financing body, an AC, can reinforce a stronger community sense by providing technical and financial training and promoting more borrowing. Conversely, one-time borrowing may reflect urgent and emergency consumption needs rather than long-term benefits. This distinction underscores the importance of understanding how cooperative members allocate loans and why some farmers adopt productive investment while others do not. Similarly, Duflo et al. (2013) found that microcredit access increased small business investment and profits but had limited effects on household consumption, health, and education, highlighting the complexity of how borrowers allocate funds between productive investment and immediate household needs. Complementing these findings, Banerjee et al. (2015) demonstrated that a multifaceted program combining productive asset transfers, consumption support, training, and savings encouragement can lead to sustained improvements in consumption and self-employment income among the very poor, illustrating that integrated support services can enhance the welfare impact of financial interventions. Nosratabadi et al. (2020), reviewing evidence on social capital and food security, concluded that strong community ties enhance food availability and reduce vulnerability, reinforcing the notion that cooperatives, as social and financial institutions, can foster resilience through informal support mechanisms.

2.6 Market Integration and Value Chain Participation

Market access is a crucial enabler of diversification. Farmers diversify when they can reliably sell high-value crops. Birthal et al. (2015) show that market integration enhances profitability and encourages technology adoption. Conversely, rice monoculture persists in areas where farmers lack market linkages, rely on a single buyer, or face volatile prices.

In Cambodia, vegetable markets are expanding, driven by demand from Thailand and urban centres. However, market participation is uneven due to:

1. Distance to markets
2. Dependence on middlemen
3. Weak storage facilities
4. Price instability
5. Limited bargaining power

Diversified farmers often maintain multiple buyer relationships, enabling them to negotiate better prices, whereas monoculture farmers remain dependent on one middleman and face lower returns.

2.7 From the Cambodian Context

Evidence from Cambodia highlights that the impact of cooperative loans depends not only on access but also on how members allocate credit and how institutions structure and monitor loan use. Hun et al. (2018) found that cooperatives improved livestock and farm revenues when targeted services such as training and price support were provided, although paddy yields remained unaffected due to weak institutional support. Institutional capacity is an important aspect of economic development. Even though farming improvement was made by cooperatives, public and private sector stakeholders must create an internationally competitive value-chain which can export rice and let farmers earn income from the overseas market with higher value-added processing. Similarly, Ofori, Sampson, and Vipham (2019) emphasised that cooperative membership enhances access to credit, training, and technology rather than directly increasing incomes, highlighting the importance of service delivery in fostering resilience. Chea, Keo, and Yoeun (2024) further demonstrated that cooperatives promote crop diversification and risk-sharing, reinforcing their role as platforms for learning and adaptive capacity. Complementing these findings, Roth et al. (2017) showed that flexible microcredit access significantly increased paddy income and input use among poorer households, aligning with credit fungibility theory. Men et al. (2024) identified family labour and land size as facilitators of credit access, while high interest rates and complex procedures remain barriers, factors that are critical in designing cooperative loans.

However, institutional challenges constrain cooperative effectiveness. Chhinh et al. (2022) revealed that weak governance and poor management reduce member participation and access to credit. Green (2019, 2020) highlighted how microfinance practices and local enforcement mechanisms may exacerbate debt stress, situating cooperative operations within a broader governance environment that shapes outcomes. Adding to this, Siv and Sanguanwongse (2024) identified structural weaknesses in capital, participation, and business management within a Battambang cooperative, illustrating the practical challenges influencing loan allocation and use. Bunnika, Khan, and Xiangyu (2019) found that cooperative profitability in Battambang relates more strongly to sales performance than to technical efficiency, emphasising the need to understand how institutional strategies and resource use at the cooperative level affect member outcomes. Finally, Chhinh et al. (2023) showed that agricultural cooperatives in drought-affected provinces improve smallholders' access to key livelihood assets, though their impact is limited by governance issues and waning post-project support, underscoring the complex interplay of institutional capacity and environmental risk in shaping cooperative contributions to rural livelihoods.

Together, these theoretical and empirical insights frame this study's inquiry into how Cambodian cooperative members allocate loans and perceive their effects. They support a holistic approach that considers

household-level decision-making, institutional design, and community dynamics within the broader rural development context.

3. Research Gap

Despite a growing body of literature on the roles of agricultural cooperatives and microfinance in rural development, there remains a significant gap in understanding how cooperative members in low-income agricultural contexts actually allocate loans between farm investment and household needs, and how they interpret the outcomes of these financial decisions. While theoretical frameworks on credit fungibility (Bitros, 1977; Ellis, 2000) and empirical studies from South and Southeast Asia (e.g., Tundui & Tundui, 2024; Wang, 2024; Duflo et al., 2013) suggest that credit is commonly reallocated across competing household priorities, very little research directly captures the lived experiences, motivations, and decision-making processes of cooperative members themselves, particularly within the Cambodian setting.

In Cambodia, recent studies (e.g., Hun et al., 2018; Ofori et al., 2019; Chea et al., 2024) have explored the impact of cooperatives on productivity and diversification, but the nuanced patterns of loan use, especially the balance between livelihood consumption and productive investment, remain understudied. Moreover, the institutional dimensions of loan delivery, such as how cooperatives structure loan products and monitor usage, are mentioned (Siv & Sanguanwongse, 2024; Bunnika et al., 2019) but not examined in detail. Similarly, while concerns around loan over-indebtedness, informal regulation, and institutional capacity have been raised (Green, 2019; Green, 2020; Chhinh et al., 2022), no existing study connects these institutional dynamics with member-level credit behaviour and perceptions in a systematic way.

This study seeks to address these gaps by offering qualitative, case-based evidence on how cooperative members in Battambang Province allocate loans, the motivations behind these allocations, the challenges they face, and how they perceive the welfare and resilience outcomes of loan use. It also examines how institutional structures shape member behaviour and how broader local governance and development policies influence cooperative performance. In doing so, this research contributes original empirical insight to a body of literature that often assumes, but rarely documents, the complex trade-offs that rural borrowers navigate. It thus aims to enrich both the theoretical discourse on credit allocation and the policy discussions around agricultural finance and cooperative development in Cambodia and comparable settings.

4. Methodology

4.1 Research Design

This research addresses questions through an in-depth qualitative investigation of farming households, cooperatives, financial institutions, and government actors in Battambang Province. This study utilises a combination of semi-structured interviews, deviant-case analysis, cross-case comparison, and process tracing to uncover the causal mechanisms that link credit access, technology adoption, and farming system choice. This study adopts a qualitative approach, which seeks to identify decision-making mechanisms, institutional dynamics and deviant cases. A case study approach is appropriate given the study's aim to explore complex, context-dependent social phenomena where the boundaries between the phenomenon and the context are not clearly defined (Yin, 2018).

Central to this investigation is the recognition that farming systems evolve through dynamic interactions between economic incentives, institutional conditions, and social structures. Economic incentives include potential income gains, labour productivity, and return-on-investment considerations. Institutional conditions include the governance capacity of cooperatives, the availability and design of credit products, and the presence of training and extension support. Social structures—family norms, gender roles, trust networks, and reputation—mediate both credit access and risk attitudes. The intersection of these domains explains the heterogeneous adoption of agricultural technologies and diversification strategies.

This study adopted a multiple-case embedded design as outlined by Yin (2018), combining both descriptive and exploratory aims. It seeks to investigate how members of agricultural cooperatives in Battambang Province, Cambodia access farming loans and allocate them between farm investments and other emergency needs, as well as how they perceive the resulting impacts of technological adoption on their livelihoods. Two agricultural cooperatives are selected as case studies, with multiple levels of analysis embedded within each case: (1) the individual cooperative members, (2) the cooperative institutions, and (3) the local development actors, such as government officials and development bank personnel.

4.2 Case Selection

Two agricultural cooperatives in Battambang Province were selected using a combination of purposive and convenience sampling, based on three criteria: (1) cooperative maturity (both cooperatives have been operating for more than 9 years), (2) active lending operations (both cooperatives provide credit to members for agricultural and household purposes), and (3) relevance to the local agricultural economy. The two cooperatives selected differ in size, governance, farming styles, and loan policies, offering valuable insights into how such factors influence the balance between meeting immediate household needs and promoting long-term agricultural productivity.

Purposive sampling is justified in this context because the research seeks to gain in-depth insight into specific institutional characteristics and local development outcomes, not to produce statistically generalisable findings. This approach allows the researcher to deliberately select cases that are information-rich, ensuring that selected cooperatives can meaningfully address the research questions related to agricultural finance and performance in the local context (Palinkas et al., 2015). A mixture of snowball and purposive sampling was adopted strategically in this study in order to analyse patterns comparatively, which involves case selection based on ease of access or feasibility, may introduce limitations such as selection bias or reduced external validity. However, in qualitative case study research aimed at exploratory or theory-building goals, such limitations are acceptable when the sampling rationale is clearly articulated and tied to research feasibility (Andrade, 2021; Edgar & Manz, 2017). In resource-constrained or fieldwork-dependent settings such as rural Cambodia, logistical access, willingness of participants, and existing relationships with local institutions often shape what is realistically possible, without compromising the depth or relevance of inquiry (Jager et al., 2017).

Two agricultural cooperatives were selected to be studied:

1. Tasey Samaki Agricultural Cooperative (TSAC), characterised by its successful development and contribution to rural development, strong leadership and government, high technology adoption and successful Integrated Pest Management (IPM) project, and widespread diversification.

2. Bonsay Treng Agricultural Cooperative, characterised by representative features of which Cambodian agricultural cooperatives normally have, succeeds in supporting farmers' livelihood by implementing finances and coordinating NGO projects in technological adoption.

For the member-level and policy-level units of analysis, the same sampling techniques as above will be utilised.

Figure 1: Geographical map indicating locations of the agricultural cooperatives and Stakeholders

Note. The map details the geographical locations of Morodok Bonsay Treng AC and Tasey Samaki AC, alongside affiliated farming households and middlemen in the Thmar Koul commune. Adapted from Open Development Cambodia, licensed under CC BY-SA 4.0.

Geographical locations of farming households located in relation to the cooperative headquarters where elections, training and transactions are held are identified as an important factor for farmers, especially in terms of technological adoption. Locations of agricultural cooperatives in relation to the resilient infrastructure also determine whether individual farmers can produce products in their farms and put them in the value chain most effectively.

4.3 Units of Analysis

Following Yin's (2018) qualitative study structure, this study involved an embedded case design with three primary units of analysis:

1. Individual-level: Examining individual borrowers' motivations, allocation decisions, and perceived welfare outcomes.
2. Institutional-level: Analysing loan structures, monitoring mechanisms, and internal challenges in managing loan allocation.
3. Policy-level: Exploring perspectives of local government officials and identifying external

constraints affecting cooperative lending.

This structure allows for nuanced insights into how individual behaviours intersect with institutional practices and broader development policies.

4.4 Data Collection

Data is collected through semi-structured interviews, document analysis, and direct observations. At the member level, interviews explore borrowers' decision-making processes and livelihood perceptions. At the institutional level, interviews with cooperative staff and managers seek to understand loan product design, disbursement processes, and institutional monitoring practices. Middlemen, local government officials and bank personnel are interviewed to provide contextual perspectives on policy and institutional support. Data are cross-validated and triangulated to improve the validity and richness of the findings (Yin, 2018).

A total of 11 farmers were selected from Tasey Samaki and Bonsay Treng cooperatives to capture maximum variation in:

1. Farming systems (diversified vs monoculture)
2. Technology adoption (high vs low)
3. Credit access (AC, ARDB, MFIs, informal lenders, none)
4. Gender of household decision-makers
5. Landholding size and tenure status

For each farmer, the Khmer teaching assistant took appointments for an interview via the intervention of two ACs. The premise of each farmer's farming was visited in person to conduct a semi-structured interview. Over two to three days, different areas in the Thmar Koul commune had been visited, and we interviewed farmers with various incomes and affiliations after confirmation of informed consent in Khmer. For informed consents, Khmer written forms were used, as well as oral confirmation, which was often used for farmers. We informed participants that their personal information would not be publicly disclosed, and in cases where it would be shared, it would be anonymised, and usage would be restricted to internal presentation of findings. This research was conducted in accordance with established ethical standards and principles of academic integrity.

This sampling strategy enables comparison of farming systems and identification of causal pathways.

Three unusual cases were intentionally included to uncover any hidden mechanisms:

1. A small-land Tasey member with unusually high credit access (revealing social capital effects).
2. A Bonsay member with high credit but persistent monoculture (revealing risk aversion and irrigation constraints).
3. A Tasey member who voluntarily avoids credit (revealing psychological, cultural, and reputational influences).

Deviant-case analysis (outlier analysis) enables stronger causal inference by examining exceptions to expected patterns.

Key participants from institutions central to rural credit and agricultural development were also interviewed:

1. Agricultural Cooperative Leaders (Tasey & Bonsay)

2. Board of Directors Members in Agricultural Cooperatives
3. ARDB Loan Officers
4. District Agriculture Office (Water Resource, Agriculture, Environment officer and AC Development officer)
5. PDAFF officials (Deputy Director of the Provincial Department of Agriculture)

These institutional interviews provide critical context, clarify credit processes, and validate (or challenge) farmer-level claims.

Interviews lasting 45-120 minutes were conducted. The interview guide, a preliminarily prepared procedural guideline, covered the following topics:

- Household profile
- Land size, tenure, labour availability
- Choice of farming system
- Crop portfolio and seasonal calendar
- Credit history and borrowing behaviour
- Experience with AC loans, ARDB, MFIs, and informal loans
- Technology adoption history
- Market access and price negotiation
- Risk management strategies
- Gender roles in decision-making

Institutional interviews are conducted to triangulate farmer narratives. Topics included:

1. Cooperative leaders describe governance structures, loan literacy activities, savings groups, and training programs.
2. ARDB officers explain loan procedures, collateral policies, repayment schedules, and challenges in reaching smallholders.
3. District Agriculture Office staff provide insights on technology dissemination, irrigation issues, climate risks, and extension constraints.

These perspectives help distinguish structural constraints from farmer-specific preferences.

We conducted field observations of:

- Net-house structures
- Irrigation ponds and wells
- Water-pump systems
- Vegetable beds and nursery practices
- Rice fields and drainage infrastructure
- Livestock sheds and feed systems
- Storage spaces and household-level technology

In addition, available documents such as AC membership lists and loan records are reviewed in the agricultural cooperatives. Policy documents such as National Strategic Development Plan, the Pentagonal Strategy (phase I), Agriculture Sector Master Plan 2030, Battambang provincial agricultural outlook document, and the legal documents such as 2003 Sub-decree of the agricultural cooperatives and the 2013 agricultural

cooperative law are revied to intend additional validation and reveal structural factors shaping farmer outcomes (RGC, 2020; RGC, 2023).

Evidence was triangulated across interviews with different farmers and stakeholders to identify representative mechanisms. Process tracing strengthens causal inference in qualitative research by identifying temporal sequences, decision-making pathways, and trigger events that lead to observed outcomes.

4.5 Data Analysis

All interviews were audio-recorded with participant consent, transcribed verbatim, cleaned, and polished for clarity. Transcripts were saved in encrypted storage. Each interview was assigned a pseudonym and coded using the standardised coding framework developed for this study. Collected data is analysed thematically using a combination of deductive (based on research questions) and inductive (emerging from the data) coding strategies. This study also explores trickle-down explanations and contextual factors that might influence loan access and livelihood outcomes, namely, Tasey net-house business's impact on the whole of the local development context in Thmar Koul commune, consistent with analytic techniques recommended for case studies (Yin, 2018).

4.6 Validity and Reliability

Three forms of triangulation were used. Data triangulation: farmers, AC leaders, government officials, banks; method triangulation: interviews, observations, documents; theory triangulation: diversification theory, credit theory, institutional economics to strengthen logical validity. Reliability measures, such as a standardised semi-structured interview guide, a consistent coding framework, cross-checking of coded transcripts, and documentation of researcher reflexivity, were ensured. Other validity measures included thick descriptions, member-checking when possible, inclusion of contradictory cases, and transparent reporting of decision pathways.

4.7 Ethical Considerations

Participation is voluntary, and informed consent will be obtained from all participants. Confidentiality and anonymity will be strictly maintained throughout the research process, and data will be securely stored and used solely for academic purposes inside the department. Farmer identities remain confidential; references such as "a diversified Tasey member," "a risk-averse Bonsay rice farmer," or "a small-land Tasey farmer with high credit access" replace actual names.

5. Findings

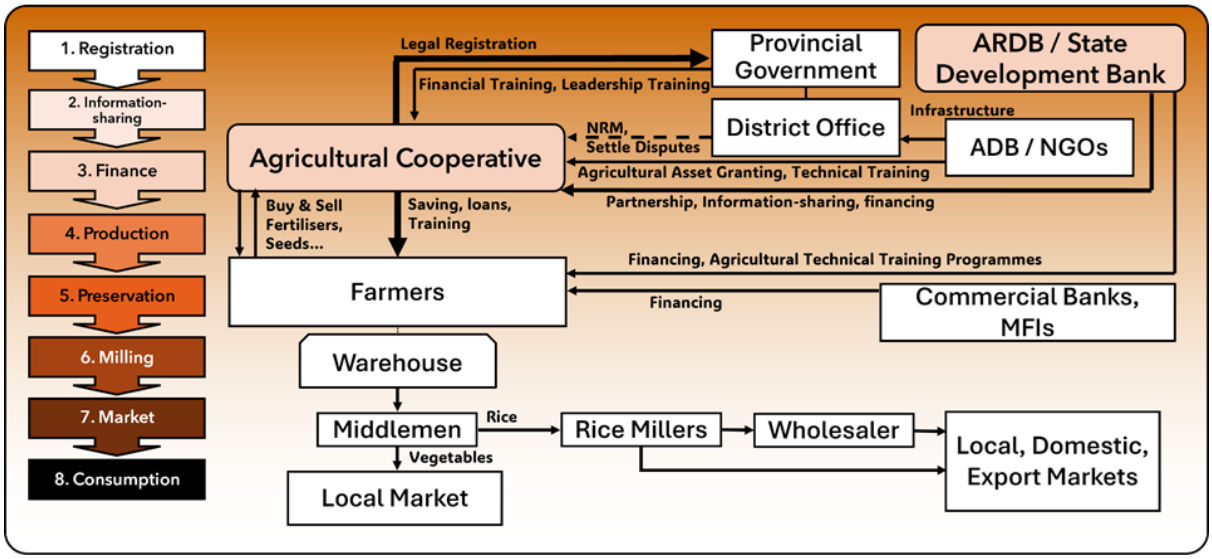
This study seeks to add to the understanding of how members of Agricultural Cooperatives in Battambang Province, Cambodia, utilise loans and perceive their impacts on agricultural techniques to improve livelihoods, obtain stronger resilience to seasonal produce fluctuations and climate change. By examining both individual behaviours and institutional dynamics, the research aims to shed light on the complex realities of cooperative credit use and its broader implications for rural development.

5.1 Structure and Organisation of Agricultural Cooperatives

Agricultural cooperatives provide different benefits to their members. Despite differences in functionalities, all cooperatives in Cambodia shared a structure mandated under the 2003 Royal Sub-decree and the 2013 Law on Agricultural Cooperatives. It must have a leader (often founder) and the Board of Directors, as well as an annual General Assembly, and directors need to be elected regularly. Farmers in the commune are eligible to become members. However, anyone who wishes to contribute to the cooperative can buy a share of an AC to attend the general assembly and vote. It is registered at the provincial government and based on legal registration at the provincial office and regular liaison, cooperatives can bridge the district office and farmers. Often, farmers are members of other groups like water resource management groups, but the district office can offer services more smoothly via an agricultural cooperative as a one-stop institution.

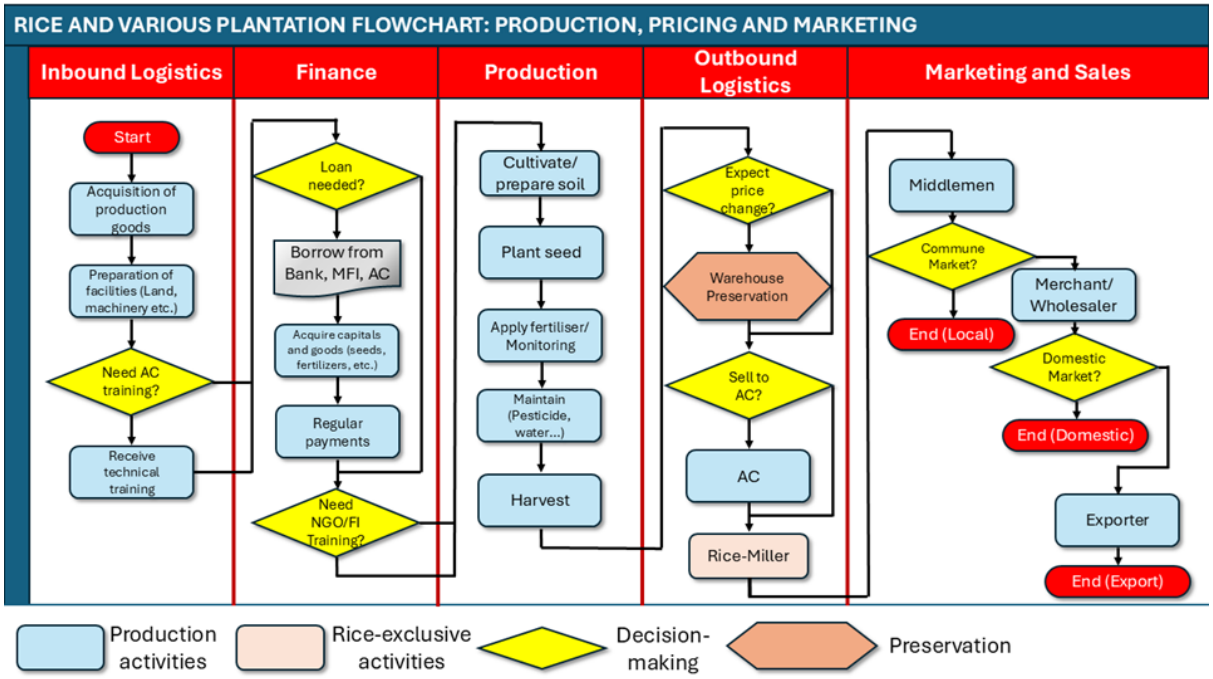
Farmers gained different returns from the cooperative loans meant for purchasing new technology. Figure 2 illustrates interrelated stakeholders in producing rice, where agricultural cooperatives and farmers are taking central importance in producing rice, vegetables, herbs and other products in the province. A cooperative also coordinates the economic relationships of farmers with NGOs, markets and financial institutions as it has stronger bargaining power and capabilities to collect information as they are formal representative of farmers. Farmers are the most important part of production, mainly buying capital and intermediate inputs to produce and store rice and vegetables, to sell them to the middlemen, contractors or other parties, sometimes to cooperatives.

Figure 2: Stakeholder map in rice production in Thmar Koul, Battambang



(Source: Authors)

Figure 3: Flowchart of rice production in Thmar Koul



(Source: Authors)

Figure 3 illustrates the process of producing rice. It also shows how farmers are dependent on loans to purchase new technologies and move on to more sophisticated designs of crops and vegetable production. An investment into new equipment, testing new farming method, taking technical training courses usually costs a household an unexpected amount of expense that can only be covered with microloans. Flexibly conditioned loans in terms of collateral, grace periods, interest rates, and identification are enabled in agricultural cooperative by-laws and microfinance institution business models, which generally function as an enabler for farmers not just to borrow in emergencies but also to introduce net-houses, trying new products and techniques, and participate in trainings.

5.2 Loan Usage and Technological Adoption

This study reveals systematic patterns in how agricultural cooperative members allocate loans for farm investment and household spending. Three key findings emerge: (1) Loan use is dual-purpose, (2) loan sizes and terms are uneven, (3) technology adoption is credit-dependent.

Firstly, cooperative members can use loans for both productive investments such as the purchase of net-houses, irrigation pumps and other input goods, and urgent household needs such as hospital bills, make-up for floods or droughts, fixing motorbikes for commute, school tuition fees, and so on. Farmers' investment in farming and emergency household needs is strictly inseparable, as their subsistence is usually unstable and vulnerable to unexpected risks. For example, one Tasey Samaki member explained:

"I borrowed 8 million riels. I used 5 million to build a net-house and 3 million for my daughter's school fees. Both are necessary" (Participant C).

Secondly, loan allocation is unevenly distributed. Many cooperative loans are small; farmers have access to loans ranging from 2 to 30 million riels. Farmers with stronger social capital, land and income holdings

and active participation in cooperative governance have easier access to finance. Conversely, smallholder farmers, women, and remote farmers from the cooperative headquarters face greater barriers. For example, a Bonsay Treng member noted:

"I wanted to borrow for a pump, but the cooperative asked for a guarantor. I don't have one" (Participant H).

An interest rate is set a few per cent lower than banks or microfinance institutions, with flexible conditions on a guarantor or collateral. Because cooperative finance is based on collective trust, grace periods tend to be longer than other formal mechanisms. The monitoring process is completely informal; however, members or directors with more social capital tend to benefit from flexible finance regulations. Some trusted members can apply for an extension while others have no opportunity for extensions to be offered.

Thirdly, technology adoption is enabled by cooperative and bank finances. Net-houses, individual irrigations, fertilisers and seeds are unaffordable for farmers without relying on loans. Without credit, farmers are confined to rice monoculture and challenges make it difficult for farmers to experiment with new technologies and respond to vulnerability.

Based on the primary data collected, two characteristic traits were recognised among farmer groups. The first group is characterised by diversified farming techniques and products, as well as a relatively diversified income portfolio to build resilience against unexpected risks, and the second group has been identified as a group which has fewer products (e.g. rice for subsistence, vegetables in gardens to supplement vitamins), smaller farmlands and fewer income-earning methods. There are a few atypical cases recognised such as an entrepreneur who trained farmers in the AC, a farmer living in a remote area and reluctant to join in the AC but still holds a stable income with conventional farming methods. This juxtaposition of two groups is categorised by income difference, size of the owned land, access to commercial and AC credit, technology adoption, market participation, climatic vulnerability and institutional support.

The classification of the 11 farmers into two categories allowed us to systematically identify the differences between farming systems. Diversified farmers, particularly those using net-houses, irrigated vegetable beds, fishponds, and poultry systems, reported continuous income throughout the year. In nearly all cases, revenue inflows occurred weekly or biweekly, allowing farmers to maintain liquid cash, meet household expenses without borrowing, reinforce savings practices, reinvest in inputs and technologies, and smooth income over seasons.

Many diversified farmers expressed strong confidence in vegetable production because vegetables produce:

1. Short production cycles (25–45 days)
2. Multiple harvests per season
3. High market demand in Battambang and Thailand
4. Frequent buying by traders

This aligns with theoretical arguments that diversification enhances economic stability by enabling multiple revenue points across the year. Diversified farmers emphasised that cash crops, particularly morning glory, long bean, eggplant, chilis, and leafy vegetables, provide predictable returns even under fluctuating market prices. Prices vary, but income never fully ceases, unlike rice monoculture.

In contrast, rice monoculture farmers receive income only once or twice per year. Their annual revenue is tied to:

- Single harvest
- Market prices are determined by middlemen
- Weather conditions
- Floods or droughts
- Debt obligations to MFIs or input dealers

Rice farmers frequently reported income instability due to:

- Lodging and crop loss during storms
- Water shortages during dry seasons
- Price suppression during harvest season
- Limited bargaining power during sales
- Debts are accumulating during the off-season

One Bonsay rice farmer summarised this challenge:

"For six months, we earn nothing. Everything depends on the rice. If the price is low, the whole year is lost" (Participant F).

Thus, monoculture amplifies vulnerability because households lack alternative revenue streams. Monoculture often meant a single source of farming, not just having one agricultural product plantation. A diversified farming system is strategically better for farmers as it diversifies not just farming, but also community, income, job and other portfolios. Participation in an agricultural cooperative is, in that sense, meaningful, as it opens opportunities for farmers especially finding better and diversified market access through paths that cooperative institutions can only offer. Monoculture farmers, non-members of agricultural cooperatives, and non-participants in any agricultural technical and financial trainings frequently operate under conditions of liquidity stress. Unexpected household expenses often trigger borrowing, which can lead to a pattern of debt-dependence rather than capital accumulation.

Across all cases, diversified farmers earn more because they have more frequent harvests, more diversified income streams, better market integration, reduced climate risk, higher returns to technology, and more efficient labour allocation, meanwhile, rice farmers remain vulnerable due to seasonal income dependence, climate-exposure with no technological buffers, single-market dependence, limited access to credit, and high input costs.

Labour is a central variable in farming system choice. The findings show clear differences between diversified and monoculture farmers regarding labour productivity, seasonal time allocation, household workload, and labour market participation. Diversified systems—particularly vegetable cultivation and integrated livestock—require more frequent labour but distribute labour more evenly throughout the year. Rice monoculture, by contrast, requires intensive labour during planting and harvesting but leaves long periods of underemployment.

5.3 Process Tracing of Causal Mechanisms

To understand how diversification actually occurs in practice, this study used process tracing to follow the

sequence of events connecting credit, institutions, technology, and farmer decision-making. The analysis revealed three main causal mechanisms that explain why some farmers diversify while others remain in rice monoculture.

5.3.1 Credit enables technology, and technology enables diversification

The first mechanism operates through access to affordable credit. When farmers receive loans, they are able to invest in technologies such as net-houses, irrigation pumps, improved seeds, or fishponds. These technologies reduce risk, increase production cycles, and make diversification feasible. If this mechanism holds, we should expect to see that farmers with credit adopt new technologies and diversify, while farmers without credit remain dependent on rice. This pattern appears consistently in the cases. Diversified farmers repeatedly explained that they used cooperative or ARDB loans to finance technology investments. Net-house farmers emphasised year-round harvests, higher prices during rainy seasons, and faster returns.

By contrast, rice farmers without credit or with a high fear of borrowing reported limited technological upgrading and remained exposed to seasonal shocks. Rice monoculture farmers face rising input prices (fertiliser, pesticides, diesel), falling market prices due to oversupply, inflexibility in adjusting cropping plans, lower yields in drought years, high borrowing needs during planting and harvest seasons, and they often cannot utilise agricultural micro-loans for other purposes (namely, integration of net-house and other technological adoption). Monoculture farmers sometimes just expand their farming lands or pay for agricultural machinery, but their farming style is highly specific. Some contract farmers and middlemen also fall under this category; their income pattern is supported by their single-handed farming and selling. This often leads to negative profit margins, especially for farmers who do not own pumping systems or who rent machinery at high cost. This observation supports the argument that a diversified farming community is more resilient, so that it is profitable through involvement in different production and value-chains, while a monoculture or horticulture specific farmers' community fails to access different ways profit is produced in the value-chain. A district agricultural officer explained,

"Rice is not stable in income. Many farmers make only a small return, sometimes none after expenses" (Deputy Head of Battambang Provincial Department of Agriculture).

Especially in a context where the traditional value chain remains and the middlemen intervene in the trade of rice, the margin a farmer can earn can be small. One farmer also noted:

"Before, I only grew rice. After borrowing to build the net-house, I started growing vegetables. Now we have income every few weeks" (Participant D).

The above process tracing result suggests that diversification does not occur spontaneously; it becomes possible only once farmers overcome financial barriers and can afford the necessary technology. And in this breakthrough, a cooperative role is essential. As shown in the TSAC net-house case, collective development of the Integrated Pest Management (IPM) technique benefits all the members in the cooperative. In terms of the local development context, in the Cambodian farming and fishery context, Tasey Samaki's successful farming diversification strategy yields trickle-down effects to the neighbouring regions, covering more than the full Thmar Koul commune. Some farmers in Bonsay Treng introduced Tasey Samaki's net-houses in order to adopt technology not via one's own cooperative options but from a neighbouring cooperative. Due to

strategic diversification promoted by an AC, an upbrought commune can have a spillover effect on the neighbouring communes. Evidently, in the Battambang context, training and finances provided by an AC are necessary in gaining social capital to promote rural development. Economically and agriculturally, the farming method adopted in many farming households in Tasey Samaki is applicable to the model of Cambodian monoculture farming households.

5.3.2 Cooperative membership builds confidence and capacity to borrow productively

The second mechanism concerns the role of agricultural cooperatives as learning institutions, not only lenders. Participation in cooperative meetings and trainings increases farmers' understanding of loan procedures, repayment schedules, technology management, and market opportunities. This reduces fear of debt and supports more productive borrowing decisions. Where cooperatives offer regular training, farmers report greater confidence in borrowing and clearer awareness of risks and benefits. This was particularly evident in Tasey Samaki, where members described learning how to calculate profit, plan repayments, and choose appropriate investment sizes.

In contrast, Bonsay Treng offers fewer trainings, and several members expressed confusion about interest rates or strong anxiety about debt. As a result, many avoided borrowing altogether, even when technologies were available. This indicates that institutional capacity within cooperatives is a critical determinant of whether credit translates into real technological upgrading. Receiving agricultural technical and financial training is a crucial part of gaining human capital and diversifying agriculture. Enhanced technology can be adopted through participation in AC workshop and training, because an AC should hold centrality in farming technique and financial training in a commune.

5.3.3 Social capital quietly shapes who accesses credit

The third mechanism involves informal relationships and trust. Even when formal rules exist, credit allocation is influenced by reputation, leadership roles, and social networks. Farmers with strong ties to cooperative leaders, long membership histories, or guarantor support are more likely to access loans even with limited collateral.

Access to technology adoption eventually leads farmers to more resilient, efficient and diversified agriculture. Diversification is a strategic choice as it involves enhanced financial literacy, and it leads to the gain of social and human capital in a community. Farmers with higher agricultural and financial literacy can adopt technology in a better way. Evidence from Tasey Samaki illustrates this clearly. A farmer with very limited land successfully obtained a large loan due to long-term membership and active involvement in cooperative governance. Conversely, another farmer in Bonsay Treng, despite owning more land, struggled to secure credit because he lacked guarantors and had weaker relationships. These cases demonstrate that informal trust networks operate alongside formal lending criteria, shaping who ultimately adopts new technologies. Taken together, the findings show that diversification does not depend only on farmer motivation or economic opportunity. Instead, it emerges from the interaction of financial access, organisational learning, and social relationships.

5.4 Labour Bottlenecks and Technology Use

Diversified farmers face labour bottlenecks during land preparation, pest outbreaks and expansion of vegetable area. However, these bottlenecks are often addressed through measures such as irrigation pumps (reducing watering labour), net-houses (reducing time spent managing pests), mulching and drip systems (reducing weeding) and family cooperation during peak periods. Findings generally support that technology adoption enhances labour efficiency.

5.5 Risk Management

In managing risks, diversification of the portfolio is a useful concept as well. Risk emerged as one of the most influential factors shaping farming system choices. Diversified farmers enjoy smoother income flows and better resilience during climate events. Rice-based monoculture farmers remain highly exposed to risk, requiring borrowing to cope with shocks.

Diversified farmers benefit from irrigation pumps and ponds that ensure water supply during drought, net-houses that protect vegetables from storms and heavy rain, and crop diversity that offsets loss in one crop with gains in others. Several farmers emphasised that vegetables grown in net-houses:

"Do not drown in rain, and do not burn in heat" (Participant D).

One farmer noted:

"If the rain is late, everything is delayed. If the rain is too much, everything is lost" (Participant F).

Climate risk directly translates into income risk for monoculture households. In terms of market risks, Diversified farmers can adjust crop types, harvest timing and sales channels. When prices fall, they shift to crops with stable demand. When prices rise, they expand production. This flexibility reduces market risk and makes farming livelihoods more resilient. Because diversified farmers earn weekly, income smoothing is inherent in their farming package. If vegetables fail, chickens or fish generate revenue, if rains destroy some crops, net-house crops survive, and if market prices collapse, household consumption needs are still met. This aligns with portfolio theory—diverse income streams reduce variance.

In Battambang, rice monoculture plantations, or subsistence farmers, remain trapped because irrigation systems are expensive, net-houses require capital, pumps require initial investment and ongoing fuel costs, no access to training reduces confidence, and weak cooperative governance limits loan literacy. Even farmers with large landholdings cannot diversify without technology. Dependency is heightened in monoculture farmers, remote farming plantations, and non-members of agricultural cooperatives. Thus, it is strategic for farmers to belong to the agricultural cooperatives and get into the circle of trust, receive training, borrow loans easily based on trust, communicate with leaders and boards, learn how cooperatives offer programs and how loans function. Credit emerged as one of the most powerful determinants of why some households diversify, and others remain in rice monoculture. Across both cooperatives, farmers repeatedly emphasised that diversification into vegetables, livestock, or integrated systems is not possible without credit, as required technologies exceed household savings. The findings reveal substantial differences across credit sources, credit literacy, borrowing behaviour, and repayment capacity.

6. Conclusion

This study demonstrates that agricultural transformation in Cambodia is shaped not only by economic incentives but by institutional structures, social capital, risk perceptions, and access to enabling technologies. Diversification yields significantly higher economic and risk-adjusted returns than rice monoculture, but only when supported by credit, strong cooperatives, and market integration.

In summary, the findings reveal a coherent causal chain:

Credit → Technology → Diversification → Income Stability → Resilience and Mobility

This chain provides a roadmap for policymakers, development practitioners, and cooperative leaders seeking to enhance agricultural livelihoods in Cambodia. By addressing credit constraints, strengthening institutions, promoting technology adoption, and supporting diversified production systems, Cambodia can foster more resilient, equitable, and prosperous rural communities.

The findings confirm that technology, not diversification alone, drives improved returns. Technologies such as irrigation pumps, net-houses, and improved seeds fundamentally change farming possibilities. Farmers who accessed credit—through ACs, ARDB, or MFIs—invested in technologies that enabled diversification in net-houses, irrigation pumps, livestock management, improved vegetable seeds, and by-products such as oil for machines. These technologies increase yield, reduce risk, enable year-round production, reduce labour intensity, and improve quality for market buyers. The combination of technology and diversification creates a high-return farming model. This research found that graduation from monoculture farming is a key leap forward for economic growth, and it also found that the AC is taking a key role in diversifying farming.

In terms of technological adoption, attempting new technologies in individual farming plantations is important because it applies to typical rice farming plantations run by agricultural cooperative members. However, there are various types of farming observed in the fieldwork other than the simple monoculture and diversified agriculture dichotomy. Contract farming is a very popular alternative for farmers to choose rather than improving the productivity and profitability of their farming on their own. But contract farming can be integrated into choices of farming methodology as well as working for agricultural cooperatives, training young farmers and agricultural students, etc., so it can be seen as one job portfolio diversification strategy. Another salient pattern of farming is horticultural smallholder farming only for subsistence. This is mostly a small-scale farming rather than a normal rice plantation. This style of farming was observed in the most rural areas in Thmar Koul, which are geographically and societally remote from the centre of communities. They faced hardships in adopting new technologies, as cooperatives are a collective trust-based community which requires adherence to the community in geographical terms as well.

We found two categories of atypical cases in our field research. A small-land Tasey member with unusually high credit access had a strong social capital in the commune as he belonged to the farmer's group for a long time, had high trust from the cooperative, leadership involvement and demonstrated responsibility. This case shows credit access is not solely determined by land or assets. Instead, he reached the more developed stage of income portfolio diversification by lending and borrowing lands, having different side businesses, as well as managing TSAC. A Bonsay member with high credit but persistent rice monoculture had suffered from poor irrigation infrastructure, high risk aversion, low confidence in vegetable markets, limited technical training and household labour shortages. This case shows that credit alone is insufficient for diversification. A Tasey

member who avoids credit despite opportunities had a psychological fear of debt, concern about losing reputation, cultural preference for "living within means," and lack of familiarity with loan processes. This case highlights the importance of financial literacy training alongside agricultural technical training, and how cultural norms shape economic decisions. It could be argued that especially for some elderly or middle-aged farmers, a sense of fear of belonging to cooperatives could be persistent, as some of the interviewees and their parents experienced the catastrophic civil conflict, so that they are not interested in expanding their livelihood; instead, they just prefer to sustain their subsistence.

7. Discussion

This discussion interprets the empirical findings through the lenses of agricultural diversification theory, credit constraint literature, technology adoption models, portfolio theory, and institutional economics. The findings from Battambang illustrate how farming system choices are shaped by the intersecting influences of credit access, technological capacity, risk preferences, cooperative governance, and social capital. The discussion synthesises these mechanisms and positions the empirical evidence within broader debates on agricultural transformation in developing countries.

Consistent with Ellis (2000), Joshi et al. (2004), and Pingali and Rosegrant (1995), this study confirms that diversification enhances income stability, spreads risk and supports livelihood resilience. The empirical evidence demonstrates that diversified farmers experience more predictable, frequent, and stable income flows compared to rice monoculture farmers. Vegetables, poultry, fish, and integrated systems provide multiple harvesting cycles and frequent market engagements, creating a continuous stream of revenue. This contrasts sharply with the seasonal, volatile, and uncertain income patterns observed among monoculture farmers. Last but not least, diversification of the income portfolio helps farmers gain earnings by cutting transaction costs. Middlemen′s graduation from reliance on a single income should help improv rural development by cutting unnecessary value chain complexity.

Diversification insures farmers against shocks. When one crop fails, another generates income. When prices fall, farmers shift to alternative markets. This aligns with portfolio theory (Markowitz, 1952), where returns on different "assets" (crops) are combined to reduce overall variance. Farmers in Tasey Samaki AC exemplify this principle: by cultivating multiple crops in parallel, they spread climatic, price, and yield risks. Conversely, farmers in Bonsay Treng AC—largely dependent on rice—face high exposure to climatic shocks and yield variability. The findings thus reaffirm the importance of diversification not only as a pathway to higher income but also as a mechanism for smoothing risk in environments characterised by climatic unpredictability and market fluctuations.

The evidence shows that credit enables households to shift from monoculture to diversification. Feder et al. (1985) identify credit as a primary enabler of technology adoption, and the empirical evidence strongly supports this. Farmers with access to credit—especially through ACs and ARDB—successfully adopt technologies such as net-houses, pumps, ponds, and improved seeds. These technologies are high-cost but crucial for producing high-value crops, enabling year-round production, and managing climatic and market risks.

This study reveals that without credit, farmers cannot spur the technological investments necessary for

diversification. Even when farmers express interest in vegetable farming or livestock integration, they often lack savings and fear borrowing from high-interest MFIs. The result is a persistent dependency on low-return rice monoculture. This aligns with the concept of "risk-rationed" farmers presented by Boucher et al. (2008): farmers may have viable opportunities to invest but choose not to borrow due to fear of default, mistrust of lenders, or uncertainty about returns. Therefore, access to credit is not merely a financial variable—it is a determinant of future livelihood pathways. Farmers with credit access enter a trajectory of increasing productivity and resilience, while those without credit remain trapped in low-return, high-risk systems.

This study reinforces North's (1990) institutional economics argument: institutions shape economic behaviour and outcomes. The comparison between Tasey Samaki AC and Bonsay Treng AC provides a clear example of how cooperative governance, training systems, communication quality, and member trust influence agricultural transformation. For example, Tasey demonstrates strong leadership, transparent loan procedures, high loan literacy, active savings groups, trust among members and effective linkages with ARDB, PDAFF, and NGOs. These institutional features significantly lower transaction costs for credit and technology adoption. Members understand loan procedures, participate in trainings, and feel confident investing in new systems. On contrary, Bonsay Treng AC faced limitation in social capital and training capabilities, potentially missing opportunities for farmers' products to be delivered to broader market chains. These institutional gaps raise transaction costs and reduce member incentives to borrow or invest. Many Bonsay farmers remain unaware of AC loan offerings or lack confidence in applying, and it is necessary for farmers to know what loans are and how they work, in order for farmers to enhance their profitability further, as the Cambodian agricultural sector aims for more commercialised farming in different sectoral and national strategies.

7.1 Limitations

Several limitations would have affected the findings of the study in scope and interpretation. Qualitative sampling had not been statistically representative. Field time constraints would have restricted the potential to witness the full range of experiences of individual members and seasonal trends in loan usage. Conducting interviews and surveys through translation runs the risk of misunderstanding or loss of information due to linguistic and cultural barriers, potentially reducing the validity of data. There may be a limited number of respondents since the time-consuming nature of the members of the cooperatives may make it hard to arrange interviews. Additionally, unfavourable weather conditions and environmental aspects disrupted the research schedule and the physical comfort of the researchers. Seasonal timing influences income and labour assessments, especially considering observations were only made for the first round of harvesting period at the end of the rainy season, where typical rice farmers harvest rice twice in the year. Lastly, institutional data access (e.g., individual loan records) was limited.

7.2 Implications

Despite such challenges, the comparative and multi-level study design of this research had the capacity to contribute positively to cooperative leaders, policymakers, and development practitioners. This study can shape the development of more context-sensitive and adaptive financial services and governance norms responsive to rural household conditions. It also aims to help contribute to rural welfare, agricultural

productivity, and rural resilience-enhancing strategies in Cambodia and neighbouring countries despite the unique post-conflict cooperative context. The findings have significant implications for agricultural development policy in Cambodia. Firstly, coordination of institutions is needed in better governance terms. The Royal Government of Cambodia and the Ministry of Agriculture policies are not necessarily aligned with rural contexts. Information asymmetry is exacerbating the situation, where policies are only made top-down, despite the agricultural cooperative itself functioning successfully to a different extent in different communes. However, the Cambodian government can enhance the effectiveness of AC operation and function by offering them more information and opportunities for collaborative workshops with other cooperatives. In that sense, a project initiated by TSAC which is disseminating the net-house model throughout the country can be evaluated as a highly successful practice of the Integrated Pest Management (IPM) business. In achieving Cambodia's Vision 2030, a stronger agri-business sector is needed and more of these attempts will be indispensable.

Strengthening agricultural cooperatives requires targeted institutional reforms rather than simply expanding their number. First, governance structures need to be improved by strengthening board accountability, financial transparency, and regular member participation. Second, cooperatives require greater technical support in business planning, value-chain integration, and market negotiation, so that they move beyond simple savings-and-credit functions. Third, loan literacy and financial management training should be institutionalised, as fear of debt, misunderstandings about repayment, and weak monitoring currently limit productive borrowing. Finally, partnerships between cooperatives, ARDB, MFIs, NGOs, and local governments should be better coordinated so that credit provision is linked to technology training, irrigation investment, and guaranteed market access rather than isolated interventions. In 2030, Cambodian agricultural supply-chain management and diversified export of highly value-added agricultural products should be accountably and transparently managed by the government with continuous involvement of local cooperatives.

Agricultural transformation in Cambodia depends not only on economic incentives but also on institutions, social capital, risk perceptions and farmers' ability to adopt new technologies. Diversification increases income and reduces exposure to climatic and price shocks, but only when farmers can access credit, participate in strong cooperatives, and connect to reliable markets.

Acknowledgement

The authors wish to acknowledge the meaningful contributions of a former member of this research group during its initial stages. This research would not have been possible without Joram Deogracias, a fellow GSID student who was regrettably unable to participate in the field data collection phase. We gratefully recognise his substantial contributions to the theoretical arguments, the literature review, and the formulation of the research questions during the early stages of this project. His efforts are reflected in the theoretical foundations of this report, and we extend our sincere appreciation for his dedication and intellectual input.

References

ADB (Asian Development Bank). (2021). Cambodia agriculture, natural resources, and rural development sec tor assessment, strategy, and roadmap. https://www.adb.org/sites/default/files/publication/718806/camb odia-agriculture-rural-development-road-map.pdf

Alliance of Bioversity International & CIAT. (2023). An estimated 11,000 rice and cassava farmers from 23 agri-cooperatives in Battambang and Kampong Speu provinces use agro-climatic advisories. https://al liancebioversityciat.org/publications-data/estimated-11000-rice-and-cassava-farmers-cambodia-are-using-agricultural

Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian Journal of Psy chological Medicine, 43*(1), 86–88. https://doi.org/10.1177/0253717620977000

Baland, J.-M., Guirkinger, C., & Mali, C. (2011). Pretending to be poor: Borrowing to escape forced solidari ty in Cameroon. *Economic Development and Cultural Change, 60*(1), 1–16. https://doi.org/10.1086/6 62576

Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Pariente, W., Shapiro, J., Thuysbaert, B., & Udr y, C. (2015). A multifaceted program causes lasting progress for the very poor: Evidence from six c ountries. *Science, 348*(6236), 1260799. https://doi.org/10.1126/science.1260799

Banerjee, T., Roy, M., & Raychaudhuri, A. (2015). What drives households to divert loans? A village level study. *Asia-Pacific Social Science Review, 15*(2), 33–55.

Birchall, J. (2004). *Cooperatives and the Millennium Development Goals*. International Labour Organization. https://www.ilo.org/sites/default/files/2025-02/104B09_281_engl.pdf

Bitros, G. C. (1984). The fungibility factor in credit: Reply [The fungibility factor in credit and the question of the efficacy of selective controls]. *Oxford Economic Papers, 36*(3), 494–498.

Braverman, A., & Huppi, M. (1991). Improving rural finance in developing countries. *Finance & Developme nt, 28*(1), 56. https://doi.org/10.5089/9781451953046.022

Bunnika, P., Khan, K., & Xiangyu, G. (2019). An empirical analysis of Battambang agricultural cooperatives efficiency in Cambodia. *Sarhad Journal of Agriculture*, *35*(4), 1094–1098. https://doi.org/10.17582/j ournal.sja/2019/35.4.1094.1098

Chea, V., Keo, S., & Yoeun, S. (2024). Impact of farmer associations on sales and crop diversification. *Pert anika Journal of Social Sciences & Humanities*, *32*(S4), 93–119.

Chhinh, N., Sok, S., Sou, V., & Nguonphan, P. (2022). Local engagement in the agricultural cooperatives (A Cs) operation in Cambodia. *Sustainability*, *14*(24), 16515. https://doi.org/10.3390/su142416515

Chhinh, N., Sok, S., Sou, V., & Nguonphan, P. (2023). Roles of agricultural cooperatives (ACs) in drought r isk management among smallholder farmers in Pursat and Kampong Speu provinces, Cambodia. *Wat er, 15*(8), 1447. https://doi.org/10.3390/w15081447

Cook, M. L. (1995). The future of U.S. agricultural cooperatives: A neo-institutional approach. *American Jo urnal of Agricultural Economics, 77*(5), 1153–1159. https://doi.org/10.2307/1243338

Cuevas, C. E., & Fischer, K. P. (2006). *Cooperative financial institutions: Issues in governance, regulation, and supervision* (World Bank Working Paper No. 82). World Bank. http://hdl.handle.net/10986/7107

Duflo, E., Banerjee, A., Glennerster, R., & Kinnan, C. G. (2013). The miracle of microfinance? Evidence fr

om a randomized evaluation. *NBER Working Paper Series*. https://www.nber.org/papers/w18950

Edgar, T. W., & Manz, D. O. (2017). Exploratory study. In *Research methods for cyber security* (pp. 95–130). Elsevier. https://doi.org/10.1016/B978-0-12-805349-2.00004-2

Feigenberg, B., Field, E., & Pande, R. (2013). The economic returns to social interaction: Experimental evidence from microfinance. *Review of Economic Studies, 80*(4), 1459–1483. https://doi.org/10.1093/restud/rdt016

German Cooperative and Raiffeisen Confederation (DGRV). (n.d.). The potential of cooperatives in agricultural supply chains in Cambodia. https://www.dgrv.coop/publications/the-potential-of-cooperatives-in-agricultural-supply-chains-in-cambodia/

Green, W. N. (2019). From rice fields to financial assets: Valuing land for microfinance in Cambodia. *Transactions of the Institute of British Geographers*, *44*(4), 749–762. https://doi.org/10.1111/tran.12310

Green, W. N. (2020). Regulating over-indebtedness: Local state power in Cambodia's microfinance market. *Development and Change*, *51*(6), 1429–1453. https://doi.org/10.1111/dech.12620

Hun, S., Ito, S., Isoda, H., & Amekawa, Y. (2018). Impacts of agricultural cooperatives on farmers' revenues in Cambodia: A case study of Tram Kak District, Takeo Province. *Journal of Agricultural Science*, *10*(2), 82–97. https://doi.org/10.5539/jas.v10n2p82

Hussain, A., & Thapa, G. (2016). Fungibility of smallholder agricultural credit: Empirical evidence from Pakistan. *The European Journal of Development Research, 28*(5), 826–846. https://doi.org/10.1057/ejdr.2015.55

Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). II. More than just convenient: The scientific merits of homogeneous convenience samples. *Monographs of the Society for Research in Child Development, 82*(2), 13–30. https://doi.org/10.1111/mono.12296

Japan International Cooperation Agency (JICA). (2019). *Ex-post evaluation: Battambang Agricultural Productivity Enhancement Project (Kamping Puoy area),* Cambodia. Tokyo: JICA.

Jiang, M., Li, J., & Mi, Y. (2024). Farmers' cooperatives and smallholder farmers' access to credit: Evidence from China. *Journal of Asian Economics, 92*, 101746. https://doi.org/10.1016/j.asieco.2024.101746

Keosothea, S. (2006). Emerging Structures of Agricultural Cooperatives in Cambodia. *Cambodia Development Review*, 10(1), 9-13.

Men, P., Hok, L., Seeniang, P., Middendorf, B. J., & Dokmaithes, R. (2024). Identifying credit accessibility mechanisms for conservation agriculture farmers in Cambodia. *Agriculture*, *14*(6), 917. https://doi.org/10.3390/agriculture14060917

National Institute of Statistics, Ministry of Planning; Ministry of Agriculture, Forestry and Fisheries; & Food and Agriculture Organization of the United Nations. (2025). Census of Agriculture Cambodia 2023: National report on final census results. Royal Government of Cambodia.

Ngo, S., Khon, L., Ngin, C., & Lorn, B. (2023). *Assessment of the agricultural cooperatives for developing policy on public, private and producer partnership (PPPP) in Cambodia*. Phnom Penh: Centre for Policy Studies.

Nosratabadi, S., Khazami, N., Abdallah, M. B., Lackner, Z., Band, S. S., Mosavi, A., & Mako, C. (2020). Social capital contributions to food security: A comprehensive literature review. *Foods, 9*(11), 1650. h

ttps://doi.org/10.3390/foods9111650

Ofori, E., Sampson, G. S., & Vipham, J. (2019). The effects of agricultural cooperatives on smallholder livel ihoods and agricultural performance in Cambodia. *Natural Resources Forum*, *43*(4), 210–223. https:// doi.org/10.1111/1477-8947.12180

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposefu l sampling for qualitative data collection and analysis in mixed method implementation research. *Ad ministration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533–544. htt ps://doi.org/10.1007/s10488-013-0528-y

Pearson, E. (2025). Cambodia's Microloan 'debt Traps' Test the World Bank*, Human Rights Watch*. https://w ww.hrw.org/news/2025/10/13/cambodias-microloan-debt-traps-test-the-world-bank

Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton University Press.

Ribašauskienė, E., Šumylė, D., Volkov, A., Baležentis, T., Streimikiene, D., & Morkunas, M. (2019). Evaluat ing public policy support for agricultural cooperatives. *Sustainability, 11*(14), 3769. https://doi.org/10. 3390/su11143769

Roth, T. M. S., Vathana, A., Sry, B., & Phann, D. (2017). The dynamics of microcredit borrowings in Camb odia (Partnership for Economic Policy Working Paper No. 2017-17). https://doi.org/10.2139/ssrn.3163 570

Romer, P. M. (1990). "Endogenous Technological Change," Journal of Political Economy, 98(5), Endogenous Technological Change on JSTOR

Royal Government of Cambodia. (2013). *Law on Agricultural Cooperatives (Unofficial English Translation)*. Phnom Penh: Ministry of Agriculture, Forestry and Fisheries (MAFF). https://extwprlegs1.fao.org/doc s/pdf/cam144511.pdf

Royal Government of Cambodia. (2015). *Sub-Decree No. 136 ANKr.BK on the Implementation of the Law o n Agricultural Cooperatives*. Phnom Penh: MAFF.

Royal Government of Cambodia. (2020). *Cambodia Agriculture Survey 2020 (CAS2020) Final Report*. Natio nal Institute of Statistics, Ministry of Planning in Collaboration with Ministry of Agriculture, Forestr y and Fisheries. https://nis.gov.kh/nis/Agriculture/CAS2020/CAS2020_Final_Report_EN.pdf

Royal Government of Cambodia. (2022). *National Agricultural Development Policy 2022-2030: Transformin g Cambodian Agriculture into a Modern, Competitive, Inclusive, Climate-resilient, and Sustainable S ector*, The Royal Government of Cambodia.

Royal Government of Cambodia. (2023). *Pentagonal Strategy - Phase I for Growth, Employment, Equity, Eff iciency and Sustainability: Building the Foundation Towards Realizing the Cambodia Vision 2050*, T he Royal Government of Cambodia.

Siv, T., & Sanguanwongse, V. (2024). Agricultural cooperatives movement in Cambodia: A case study of Ta sey Samaki Agricultural Cooperative, Battambang Province. *Journal of Multidisciplinary in Humaniti es and Social Sciences*, *7*(2), 878–889. https://so04.tci-thaijo.org/index.php/jmhs1_s/article/view/26967 2

Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Ec onomic Review, 71*(3), 393–410. http://links.jstor.org/sici?sici=0002-8282%28198106%2971%3A3%3C

393%3ACRIMWI%3E2.0.CO%3B2-0

Tundui, C. S., & Tundui, H. P. (2024). Microcredit fungibility and effect on business performance among w omen entrepreneurs in Tanzania. *Journal of Global Entrepreneurship Research, 14*, 38. https://doi.org /10.1007/s40497-024-00407-2

United States Department of Agriculture Foreign Agricultural Service. (2025). Cambodia rice — Commodity intelligence report (USDA/IPAD Commodity Intelligence). Battambang Province accounts for approxi mately 11 percent of national rice production in recent seasons. https://ipad.fas.usda.gov/highlights/20 25/07/Cambodia/index.pdf

Wang, H. (2024). The impact of farmers' borrowing behavior on agricultural production technical efficiency [Preprint]. *arXiv*. https://doi.org/10.48550/arXiv.2411.00500

Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and poli cy. *The World Bank Research Observer, 15*(2), 225–249. https://doi.org/10.1093/wbro/15.2.225

World Bank. (2024). *World Development Indicators: Employment in agriculture (% of total employment), Ca mbodia* (ILO modelled estimates). World Bank Group. https://data.worldbank.org/indicator/SL.AGR.E MPL.ZS

Wossen, T., Berger, T., & Di Falco, S. (2015). Social capital, risk preference, and adoption of improved far m land management practices in Ethiopia. *Agricultural Economics, 46*(1), 81–97. https://doi.org/10.11 11/agec.12142

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications, I nc

Working Group 2 (Education)

The Role of School Principals' Leadership in Shaping Teacher Professional Development (TPD) in Cambodia: A Case Study of Secondary Schools in Ta Meun and Bansay Treng Communes

Group Members:

Lubaba BASHARAT

Chinatsu KAWAHARA

Syed Mohsin SHAH *

Sae TAKABE

Misato YAMAURA

Research Assistants:

Seyhakunthy HUN (GSID)

Joury MET (RUPP)

Advisors:

Akemi ASHIDA (GSID)

Nyda CHHINH (RUPP)

* Group Leader

Table of Contents

1. Introduction

1.1 Background

The Cambodian educational system suffered catastrophic destruction during the Khmer Rouge Years (1975-1979), which marked the formal abolition of schooling, and teachers and professors were systematically executed, resulting in the elimination of human capital (Clayton, 1998). Since this near-total destruction of its educational system, Cambodia has made significant strides in rebuilding education infrastructure. Following the principles of the Sustainable Development Goals (SDGs), improving teacher quality is the primary mechanism for achieving SDG 4, which mandates inclusive and equitable quality education. In the Cambodian context, this goal provides a vital framework for reconstructing the pedagogical expertise destroyed during the Khmer Rouge era. By prioritizing teacher professionalization, the education system can transition from mere enrollment toward ensuring that all students, regardless of location, achieve meaningful learning outcomes.,. Progress has been driven by a combination of national policy reforms and international development partnerships aimed at expanding access and enhancing teaching quality. National strategies have increasingly prioritized human capital development through education (Ministry of Education, Youth and Sport (MoEYS), 2024a).

Teacher Professional Development (TPD) has been part of Cambodia's education policy since the early 2000s (MoEYS, 2004), though its scope and delivery have evolved. The 2013 Teacher Policy marked a shift toward formalization, prioritizing regular in-service training (MoEYS, 2013). This was followed by the 2015-2020 Teacher Policy Action Plan (TPAP), which emphasized lifelong learning and school-based support (MoEYS, 2015). Building on these foundations, the Education Strategic Plan 2024-2028 made enhancing teacher quality, particularly through TPD, a central goal for improving learning outcomes and system equity (MoEYS, 2024a).

1.1.1 Key Initiatives and Systems in Cambodia

Current TPD Efforts

Recognizing these historical needs, Cambodia has recently launched several initiatives to strengthen TPD. MoEYS has formulated a Master Plan for Teacher Capacity Development 2021–2025 to upgrade teacher qualifications and establish a more systematic Continuous Professional Development (CPD) framework. This plan notably emphasizes motivating and retaining teachers by linking professional development to career progression and improving living standards (MoEYS, 2024). This indicates a move toward making TPD an integral part of a teacher's career path, requiring ongoing learning for promotion and rewarding those efforts.

Concurrently, MoEYS's CPD framework seeks to professionalize teaching through credit-based training, including improving teacher confidence, expanding CPD offerings, and encouraging participation from over 1,200 teachers. The MoEYS has also established a Continuous Professional Development Management Office (CPDMO) to oversee a high-quality, school-based professional development system (UNESCO, Global Partnership for Education, & MoEYS, 2024).

STEPCam

UNESCO's Strengthening Teacher Education Programmes in Cambodia (STEPCam) (2024–2027) represents a significant undertaking to reform teacher education by scaling up reforms and integrating digital tools. By 2022, Cambodia had established a centralized CPD platform capable of delivering and tracking training for over 130,000 teachers and education staff nationwide. This system features an online database (Human Resource Management Information System) that records each teacher's training profile (UNESCO, 2024). Through this, MoEYS can ensure that teachers receive a minimum amount of professional training each year and identify discrepancies, such as cases where teachers have not yet been trained on the new curriculum.

International Support and Mentoring

Several large-scale training programs have been implemented recently, often with international support, to address key gaps in teaching skills. Initiatives like the World Bank-financed Cambodia Secondary Education Improvement Project have trained nearly 600 school principals to improve school-based management and teacher qualifications, demonstrating a commitment to enhancing principals' leadership capacities (World Bank, 2023). A news report from Khmer Times (Sreylin, 2022) noted that 605 principals were trained in 2021–2022, focusing on general management, teaching, and staff management, addressing concerns about inadequate management skills, particularly in rural areas. Additionally, teacher mentoring pilots have been introduced. In 2017, UNICEF and MoEYS piloted a model with full-time teacher mentors at core schools in select provinces, providing on-the-job coaching to classroom teachers (USAID, 2017). Likewise, under a new Global Partnership for Education grant (2024–2026), MoEYS is expanding in-school mentoring and professional learning communities as part of Component 2 of the STEPCam Phase II (UNESCO, 2024).

Standard School Model System

Cambodia's education sector has been exploring comprehensive reform models to elevate the quality of teaching and learning, with the Standard School Model System, introduced in 2023, as a prominent example, spanning from early childhood education to secondary education. This initiative, driven by MoEYS, aims to transform public schools into model institutions through a structured framework of five core standards, emphasizing student outcomes, innovative pedagogy, community engagement, efficient administration, and accountability. A key feature is the integration of TPD, including mandatory training programs (7-8 sessions annually for school directors) and over 60% teacher participation in study visits, as well as the adoption of student-centered teaching methods, such as project-based learning and early-grade reading packages. Schools are evaluated against 26 key indicators, requiring at least 70% compliance to achieve "model" status, fostering a culture of continuous improvement and community-driven education (MoEYS, 2024a).

Challenges to Sustained Improvement

Despite these efforts, rural schools in Cambodia continue to face considerable inequities. Inadequate infrastructure, logistical difficulties, and underdeveloped school leadership frameworks hinder rural teachers' access to substantial professional development opportunities (MoEYS, 2024b). MoEYS acknowledges that these disparities impede the achievement of national educational quality objectives (MoEYS, 2024a).

To mitigate these challenges, MoEYS has underscored the necessity of localized leadership by advocating the empowerment of school leaders to oversee school-based professional development (MoEYS, 2019a). In line with this policy direction, school principals are expected to play an active role in fostering teacher growth by understanding teachers' professional backgrounds, facilitating opportunities for further study and research, promoting effective pedagogical practices, motivating staff, recognizing performance, and fostering a culture of collaborative knowledge sharing (UNESCO, 2019).

This approach aligns with broader decentralized efforts in the education sector. MoEYS decentralized education by directly funding schools and delegating staff management to provincial administrators. District Offices of Education oversee school operations, including ensuring that budgets are spent correctly. To improve service quality, the MoEYS adopted a School-Based Management (SBM) approach, empowering schools through inclusive committees and granting them greater autonomy in administration, finance, and teaching. This reform is supported by a policy framework, an action plan, and a capacity development strategy (MoEYS, 2019a).

1.2 Problem Statement

Although national policies promote enhanced school leadership, implementation remains concentrated in urban areas due to greater access to infrastructure, digital connectivity, and government support. In contrast, rural schools face persistent barriers, including limited internet access, inadequate ICT resources, and fewer professional development opportunities. These disparities are particularly severe in remote regions, where school principals often lack the necessary tools, training, and institutional support to lead effectively. Without targeted interventions, such gaps pose significant risks to equity, teacher retention, and student learning outcomes. Furthermore, these challenges are exacerbated by systemic recruitment practices. Many rural principals lack formal leadership and management training, as they are frequently recruited based on teaching experience rather than leadership qualifications (MoEYS, 2024b). This fundamental gap in preparedness raises questions about their capacity to effectively implement and promote national TPD policy within rural settings.

1.3 Research Objectives and Questions

1.3.1 Objectives

This study aims to understand how school principals' instructional leadership, facilitates TPD in rural secondary schools in Battambang Province, Cambodia. It explores how school principals support teachers in developing their skills and how teachers perceive the support they receive.

This study will:

1. Identify the specific strategies and practices school principals use to support TPD and the challenges the principals face when implementing those strategies.
2. Relay? how teachers perceive their principal's leadership support for their own professional development.

The final objective is to develop a comprehensive understanding of the contextual factors influencing TPD. To this end we conducted semi-structured interviews with key stakeholders. These include representatives from the Provincial and District Offices of Education, Youth and Sports, faculty members at Battambang

Teacher Education College, and school-level actors such as principals and teachers. Furthermore, to incorporate a holistic view of school conditions, we engaged with students and parents through targeted interviews. This multi-level approach allows for the triangulation of institutional, practitioner, and community insights, informing context-sensitive strategies for TPD.

1.3.2 Research Questions

This research aims to answer the following questions:

1. How do principals' instructional leadership facilitate TPD at the school level?
2. How do teachers perceive the principals' instructional leadership on TPD?

1.4 Significance

Previous research has discovered that the implementation of TPD reveals challenges in urban Cambodia, including limited resources and low student engagement (SAN Soeurn et al., 2025). Bo et al. (2023) argue that effective TPD in Cambodian primary schools necessitates a shift toward school-based, context-sensitive models, supported by strong leadership and continuous peer learning. However, a significant gap remains in understanding how these dynamics unfold in rural secondary school settings.

This study, therefore, addresses this gap by investigating how school principals' instructional leadership facilitates TPD in rural Cambodian secondary schools. Specifically, it examines the leadership practices of principals and teachers' perceptions of such leadership, with a focus on how these interactions influence professional development outcomes. The research responds to the disconnect between national policy visions and the realities faced by rural schools, where structural constraints and limited support often hinder effective implementation.

Key areas in this research include:

- The role of school principals in promoting and sustaining TPD in rural settings.
- Instructional leadership strategies employed at the school level and barriers to their implementation.
- The perceptions and experiences of teachers regarding leadership support in their professional development journey.

By generating localized data, this study contributes to a deeper understanding of how school principals' leadership influences teacher learning in resource-constrained environments. It aims to support initiatives that reduce urban-rural disparities and strengthen teacher development in underserved communities.

1.5 Theoretical Framework

This study employs a framework that combines Instructional Leadership and Sociocultural Theory to examine the role of principals in shaping TPD in rural Cambodia.

The focus on instructional leadership serves as the primary framework for examining the specific strategies principals use to improve teaching quality (Hallinger & Murphy, 1985). This framework allows the study to assess how leadership enhances professional development through practices such as evaluating teacher needs, providing feedback, and coordinating training to overcome pedagogical difficulties (Blase & Blase, 1999).

Sociocultural Theory (Vygotsky, 1978) complements this by providing a lens to analyze how the rural context impacts leadership. As learning is an inherent social process, this theory acknowledges that the gap between policy and practice is shaped by the social and material contexts of rural schools, including limited facilities and principal training (Wertsch, 1991).

This comprehensive framework enables this research to pinpoint instructional leadership practices while assessing their effectiveness within the distinct social and material contexts of rural Cambodian schools.

2. Literature Review

Education research has consistently established that Teacher Professional Developm is pivotal to improving instructional quality, student outcomes, and overall school effectiveness. Teacher Professional Development (TPD) refers to the continuous process of enhancing teachers' pedagogical skills, subject knowledge, and classroom practices throughout their careers, encompassing both pre-service preparation and in-service learning opportunities. Instructional leadership, particularly as exercised by school principals, involves guiding and supporting teachers' professional growth through mentoring, creating collaborative learning environments, and aligning development activities with educational goals. These two concepts are intrinsically connected. Effective instructional leadership serves as the critical mechanism through which TPD is facilitated, sustained, and translated into improved teaching practices at the school level. As countries worldwide invest in upgrading teacher training systems, school principals have emerged as key catalysts for ensuring that professional development opportunities are accessible, relevant, and impactful. The following literature review, through a comparative lens, explains teacher training systems, including pre-service and in-service, the principal's role as instructional leader in facilitating TPD, and implementation challenges, constantly interleaving global/developing-region patterns with Cambodia's specific experience.

2.1 Teacher Training Systems in Cambodia

2.1.1 Pre-Service Teacher Training

Globally, nations are investing in comprehensive teacher training frameworks to increase the pool of qualified educators and align standards with regional and international expectations. Most countries now require extensive pre-service education, and bachelor's degrees are emerging as a baseline qualification for secondary education teachers. Initiatives such as the Southeast Asia Teachers Competency Framework (SEA TCF) facilitate regional collaboration and standards alignment across Southeast Asian nations (Southeast Asian Ministers of Education Organization, 2018).

In this regional context, Lao PDR requires 11 years of schooling plus 3 years of training for secondary-level teachers but faces rural access barriers (Sengsoulintha, 2025); Vietnam's centralized system under the Ministry of Education and Training involves 12 years of education and 3 or4 years of training system and this system helped to achieve 70–82% qualified teachers, yet remains challenged by uneven quality in rural areas (Ha et al., 2021; HOAN, 2006); Indonesia, governed by the 2005 Teacher Law, requires bachelor's degrees and certification via programs like the Professional Preparatory Program (PPG), aligning with national standards amid rapid Teacher Education Institute (TEI) proliferation (World Bank, 2015; World Bank, 2018).

Cambodia's trajectory has been particularly dramatic because the Khmer Rouge era decimated the educated population and knowledge base (Em et al., 2022). Post-conflict reconstruction, therefore, prioritized rebuilding the education system, with emergency teacher training programs serving as the foundation for this effort. Since the launch of the national Teacher Policy in 2013 and the Teacher Policy Action Plan (TPAP) 2015–2020, the Ministry of Education, Youth and Sport (MoEYS) has systematically expanded and upgraded teacher education programs (Ly, 2020; USAID, 2017). Provincial Teacher Training Colleges (for primary education) and Regional Teacher Training Centers (for lower secondary education) have been strengthened to produce more qualified new teachers. Projections indicated a need for 2,500–5,000 new teachers annually by 2018 (USAID, 2017). This has driven a sharp increase in enrollment and the progressive upgrading of qualifications, with the Bachelor of Education now becoming the standard for new teachers (MoEYS, 2024).

Cambodia currently operates multiple pathways that are gradually converging toward higher standards: pre-school teachers are trained in the 12+2 system; primary teachers may follow either 12+2 or the more comprehensive 12+4 system; lower secondary (junior high) teachers can qualify via 12+2, 12+4, or Bachelor's degree +1 year routes, reflecting different levels of prior academic achievement; several institutions, including Phnom Penh Teacher Education College (PTEC) and Battambang Teacher Education College (BTEC), have already fully adopted the 12+4 programs; and the country is now in complete transition toward the 12+4 model as the norm for primary and lower secondary teachers (MoEYS, 2024; MoEYS, 2025). Upper secondary teacher education is handled separately by the National Institute of Education (NIE), which recruits graduates with bachelor's degrees and provides one-year postgraduate teacher training (MoEYS, 2025). Thus, Cambodia has transitioned from emergency post-conflict measures to a structured, increasingly degree-based system that now closely mirrors the regional neighbors in terms of speed of implementation.

2.1.2 In-Service Teacher Professional Development

In-service professional development is now internationally recognized as an essential, ongoing process; however, models and effectiveness vary widely. Vietnam uses a cascade structure that often results in information loss and uneven quality as training moves down levels (Nguyen, 2020); Laos has recently prioritized targeted training for rural educators on classroom management and inclusion of non-Lao-speaking students (Chanlivong, 2025); Myanmar faces severe accessibility problems, with around 60% of newly recruited teachers receiving no professional development at all due to poor infrastructure and internet connectivity (Thinzarkyaw, 2019; Marlar & Zreik, 2024).

Cambodia's in-service TPD was, until relatively recently, closer to Myanmar's constrained end of the spectrum. Throughout the 2000s and early 2010s, most practicing teachers, especially in rural areas, had few or no continuous development opportunities. Some had never received any formal pedagogical training and even some only graduated from primary or lower-secondary themselves (Phin, 2014). Opportunities were limited to short workshops, periodic technical meetings at the school or cluster level, and occasional NGO-run sessions (Bo et al., 2019). Like several other systems, Cambodia organized virtually all primary schools into clusters (with core and satellite schools). It established District Training and Monitoring Teams (DTMTs) to bridge schools, clusters, and teacher training institutions, identify needs, deliver training, and align it with national initiatives (USAID, 2017). These localized, collaborative structures are now the main vehicle for in-

service TPD and represent Cambodia's alignment with international good practice in school-based professional learning.

2.1.3 The Role of School Principals

Globally, principals are increasingly recognized as the pivotal instructional leaders who turn in-service TPD from events into sustained school improvement. Strong pedagogical competence and consistent support from Vietnamese principals significantly enhance teachers' professional learning (Nguyễn et al., 2023; Tran et al., 2018); Indonesia's Guru Penggerak Program (2020) builds instructional leadership through online learning, workshops, and mentoring (Khairina et al., 2024); Philippine principals guide novice teachers via classroom observation and collaborative reflection (Sindhvad, 2009).

Over the past decade Cambodia has explicitly adopted this global paradigm shift: reforms now require principals to move beyond traditional managerial roles toward instructional and visionary leadership such as, mentoring teachers, promoting collaboration, motivating further improvement, guiding teachers through change, using data for decision-making, and creating a school climate focused on continuous learning (Sam et al., 2025; UNESCO, 2019; Ly, 2020). Principals chair school-based Continuous Professional Development (CPD) committees (with the Technical Group Leader as coordinator) that assess needs, prepare annual plans, manage funds, oversee implementation, and liaise with district offices, adjust timetables and resources, foster open communication, encourage knowledge sharing, and ensure new techniques from workshops are applied in classrooms (MoEYS, 2019; Grissom et al., 2021; USAID, 2017). This leadership-driven model positions Cambodian principals as the key facilitators of TPD in the same way as their counterparts in Vietnam, Indonesia, and elsewhere.

2.1.4 Challenges in Implementing Teacher Professional Development

Despite widespread policy advances, virtually identical systemic barriers persist across developing regions such as, inadequate rural infrastructure, unreliable electricity and internet, limited digital access, travel costs, time constraints, funding shortages, uneven delivery, and crucial gaps in leadership capacity.Many principals are appointed primarily on teaching experience rather than formal instructional leadership preparation. These same issues can be found in remote areas of Indonesia and Myanmar (Thinzarkyaw, 2019; Baharuddin & Burhan, 2025), sub-Saharan Africa (Du Plessis, 2017; VVOB, 2022), Tanzania, where 80% of teachers had received no training in the five years before the 2020 MEWAKA framework (World Bank, 2023), multimillion-dollar funding gaps across sub-Saharan Africa (UNESCO, 2021).

Cambodia faces these same challenges; rural schools often lack basic infrastructure, reliable electricity, and digital technologies (Fukao, 2016); travel costs and time barriers restrict participation; limited funding causes uneven program delivery; and many principals tasked with leading TPD still lack formal leadership training, which limits their ability to organize and sustain effective CPD activities (UNESCO, 2019). These obstacles, shared across developing contexts, underscore the urgent need for coordinated solutions, infrastructure investment, targeted leadership development programs, and sustainable financing, if TPD policies are to translate into genuine, widespread classroom improvement.

3. Methodology

3.1 Research Design

This study uses a qualitative case study design guided by an interpretive research paradigm. A case study approach was suitable for this research, as it enabled an in-depth examination of school principals' instructional leadership and teacher professional development (TPD) within specific rural Cambodian contexts (Yin, 2018). The research employed a hybrid thematic analysis (Braun & Clarke, 2006), combining deductive codes derived from theoretical frameworks (Instructional Leadership Theory and Sociocultural Theory) with inductive codes that emerged directly from the participant data. This approach struck a balance between theoretical rigor and openness to context-specific patterns and unexpected findings.

The research was conducted across four rural secondary schools in two communes, Bansay Treng and Ta Meun of Battambang Province, Cambodia:

- Ang Secondary School
- Bansay Treng Secondary School
- Ta Moeun Secondary School
- Thmor Kol High School

A, B, and C are lower secondary schools and D is upper secondary..

3.2 Theoretical Framework

The research is based on two frameworks, as discussed in detail in the introduction section:

Instructional Leadership Theory (Hallinger & Murphy, 1985) was used to investigate how principals supervise classes, identify teachers' needs, and support their professional growth. This approach focuses on an investigation of principals' specific practices in facilitating TPD.

Sociocultural Theory (Vygotsky, 1978; Wertsch, 1991) proposes that social and cultural contexts influence learning and leadership. This theory highlights how rural factors, such as infrastructure, financing, and leadership training, can either limit or enhance principals' leadership and teachers' perspectives.

These frameworks made it possible to investigate both what principals do (instructional practices) and what the context allows (structural restrictions).

3.3 Population and Study Sample

3.3.1 Participant Groups

The study involved a total of 40 participants, as outlined in Table 1 below, across five stakeholder categories, enabling a thorough triangulation and a multi-perspective understanding. School principals and teachers are the primary focus of the study, while the interview data from other stakeholders provided support for the analysis.

Table 1: Population of Study

Population	Number of people
School principals/officials	7
Teachers	22
Provincial Office of Education, Youth, and Sports (PoEYS)	5
District Office of Education, Youth, and Sports (DoEYS)	4
Battambang Teacher Education College (BTEC)	2
Total	**40**

3.3.2 Sampling Strategy

This study employs a purposive sampling strategy, where participants are selected based on various factors. To capture mixed perspectives and avoid bias, for this study, we?? selected participants based on age, gender, teaching qualifications, experience, and role diversity, including principals, heads of subjects, classroom teachers, technical leaders, and administrative staff. This sampling approach ensured a balanced and diverse participant group representative of rural secondary school contexts, while remaining feasible within the constraints of fieldwork.

3.4 Data Collection Methods

3.4.1 Semi-Structured Interviews

The primary data collection method involved conducting interviews tailored to each stakeholder group. Semi-structured interviews were conducted in Khmer (local language) with simultaneous interpretation and translation into English. Each interview lasted between 60 and 90 minutes. The interviews were also audio recorded with participant consent, while simultaneous notes were taken in English to avoid missing important detailsany issues.

Interview guides were developed specifically for each of the five stakeholders. For school principals, the questions addressed leadership preparation, responsibilities, TPD strategies, challenges, and support needs. For teachers, questions were related to TPD opportunities, principal support, peer collaboration, challenges, and desired professional development. For PoEYS officials, questions pertained to policy design, school funding, TPD support, and various challenges. For DOEYS officials, questions pertained to policy implementation, school support, TPD priorities, and systemic barriers. Lastly, for BTEC officials, the interviews focused on their institutional role, training provision, challenges in rural schools, and capacity constraints.

3.4.2 Group Interviews

Due to time constraints and the availability of teachers, group interviews were conducted, during which the same questions were asked, and participants responded one by one. This helped facilitate peer validation and

collaborative reflection on everyday experiences, document group dynamics and consensus viewpoints, and effectively collect data from numerous teachers simultaneously. The group interview parameters included conducting interviews in school settings at times convenient for participants, facilitated by experienced research assistants. These interviews followed similar question domains to individual interviews but encouraged discussion and interaction.

Limitation: Although focus groups facilitated efficiency and peer validation, they may have constrained certain teachers from expressing sensitive or critical opinions freely due to hierarchical dynamics. This was addressed by conducting individual teacher interviews, which yielded almost identical themes to those found in the group interviews.

3.4.3 School Observation Notes

Structured observation sheets recorded school infrastructure, instructional resources, physical conditions, and community context, offering crucial information for identifying structural limitations on TPD. These observations provided a contextual understanding of structural barriers affecting school operations and TPD implementation.

3.5 Data Analysis

The analysis adhered to Braun and Clarke's (2006) six-phase theme analysis, integrating both deductive (theory-driven) and inductive (data-driven) coding methodologies.

In Phase 1, familiarity with the data was achieved by reading all 40 transcripts multiple times, which allowed for noting initial thoughts and recurring patterns, while also documenting the researcher's reflexivity to identify interpretive lenses.

This was followed by Phase 2, coding. First, deductive coding helped identify predetermined codes derived from the theoretical frameworks employed. The instructional leadership theory identified that the principals oversee instruction, evaluate needs, coordinate training, and provide feedback. On the other hand, sociocultural theory helped identify how the context influences leadership, including obstacles such as infrastructure and funding issues, while also highlighting teachers' perceptions. The inductive coding helped researchers identify additional codes that emerged from data, which were not predicted by theory, for instance, "Technical leaders as de facto instructional coaches," "Cascade training model failures," "External funding dependency," "Student engagement crisis," and "Self-funded professional development." This systematic line-by-line coding was employed for all interviews, resulting in the identification of about 45 substantive codes.

The next phase was Phase 3, theme search, where codes were grouped into candidate themes based on conceptual clarity, the frequency across interviews and stakeholders, the relevance to research questions, and theoretical coherence. This helped in refining the initial ~60 codes into ~45 substantive codes, which were further grouped into seven initial candidate themes.

The following step was Phase 4, which involved reviewing and refining themes. In this phase, themes were evaluated for internal homogeneity: Do all codes within the theme cohere meaningfully? External heterogeneity: Are themes distinct from each other? Data support: Is evidence abundant from multiple sources? Moreover, the Theoretical/conceptual coherence: Does the theme relate to frameworks and

RQs? This process allowed for the merging of weak themes, helping to emerge coherent themes: "Minimal TPD" and "Top-Down Control" became "Survival-Mode TPD," "Resource Barriers" and "Rural Context" became "Structural Barriers." In contrast, the "Policy-Practice Disconnect" components evolved into the "Implementation Gap."

Later, in Phase 5, defining and naming themes, each theme received a precise definition, scope, and sub-themes. This helped to emerge five final themes: Constrained Leadership, Survival-Mode TPD, The Implementation Gap, Informal Support Mechanisms, and Structural Barriers.

Lastly, in Phase 6, reporting, five major themes with sub-themes were finalized, where representative quotes were selected and contextualized, and findings were organized thematically, considering the research questions.

3.5.1 Data Saturation

Data saturation was achieved, indicating the stage at which subsequent interviews yielded no new themes or patterns. By final interviews, researchers were able to anticipate emergent themes, suggesting that the sample was adequate to encapsulate relevant phenomena in rural TPD situations. This saturation was apparent throughout all four schools (consistent patterns despite variation in size and level), multiple stakeholder groups (triangulation validated findings), and 40 total interviews (themes recurred consistently).

3.6 Ethical Considerations and Confidentiality

Ethical considerations were rigorously upheld throughout the research process. All participants provided informed consent after receiving a clear explanation of the study's aims, procedures, potential benefits, and any associated risks. They were also informed of their right to participate voluntarily, refuse to answer specific questions, or withdraw from the study at any time without consequence.

To protect participant identities, each individual was assigned a unique code, which is used consistently throughout this report to reference their contributions. The complete list of participant codes, including their roles, positions, institutional affiliations, years of experience, age, and gender, is provided in the appendix. This coding system ensures participant anonymity while allowing for a transparent and systematic analysis of the data. All interview data were stored securely and accessed only by the researchers, further safeguarding confidentiality and privacy in accordance with ethical research standards. The first group comprises school principals (SASP–SDSP) from the four schools. These individuals include school principals, vice-principals, the secretary, and the scholarship management official, all of whom were interviewed at their offices on August 26 and August 27, 2025. Their insights are crucial for understanding policy decisions, government initiatives, and their leadership efforts, as well as their contributions to teachers' professional development. The second group includes the teachers at the schools (SAT1–SDT9). These interviews were conducted on August 26, 27, and 28, 2025, at the four schools, providing insight into the experiences of their school principals' leadership in relation to their professional development. The third group focuses on the Government officials (GOA1–GOC9), including the Deputy Director, along with the Head of HR, and another senior officer of PoEYS, the Chief of Education Office, Deputy Chief, 2nd Deputy Chief, Officer of the office of DoEYS and Deputy Director of the faculty of social science and science education, and the Head of Internal

Quality Assurance (IQA) of BTEC. Interviews with this group were conducted at their respective offices on August 25, September 1, and September 2, 2025, to explore policy and the system.

4. Findings and Discussion

This chapter discloses and analyzes findings derived from 40 interviews conducted in four rural secondary schools in Battambang Province, Cambodia. The results are examined using Instructional Leadership Theory (Hallinger & Murphy, 1985) and Sociocultural Theory (Vygotsky, 1978; Wertsch, 1991) and situated within the regional and worldwide context of TPD as outlined in the literature review. Five key themes emerged, highlighting substantial discrepancies between Cambodia's ambitious policy reforms and their implementation in rural areas, while also recognizing a significant achievement: the effective implementation of the Technical Group Leader system by principals as CPD coordinators. Before presenting the themes, the triangulation results across stakeholders will be discussed briefly.

Data triangulation among five stakeholder groups (principals, teachers, and education officials) showed significant alignment on fundamental findings. Principals, educators, and administrators frequently identified shortcomings in principal leadership training, limited external professional development opportunities, and significant resource constraints. The Technical Leader system underwent independent validation in all schools; principals reported its implementation, teachers affirmed their reliance on it, and administrators recognized it as a formal policy. Structural barriers, including teacher shortages, infrastructure deficits, and student disengagement, were validated from various viewpoints: principals recognized them as limitations on leadership, and teachers perceived them as pedagogical challenges. Officials' acknowledgement that the DoEYS "does not engage with this type of TPD" (GOB4) confirmed the accounts of administrators and teachers on implementation issues. This alignment among many stakeholder perspectives enhances assurance that the conclusions represent systemic truths rather than individual viewpoints.

4.1 Constrained Leadership: The Preconditions Dilemma

The primary theme suggests that rural principals primarily function as administrators rather than instructional leaders across various dimensions, hindered by a lack of leadership training, excessive administrative duties, and the requirement to teach due to staffing shortages. These circumstances fundamentally undermine the instructional leadership role anticipated in Cambodia's recent reforms.

4.1.1 Lack of Leadership Preparation

A key factor constraining principals' ability to act as instructional leaders is the absence of any pre-service leadership preparation. All principals were promoted to positions based on their classroom teaching experience, rather than their leadership capabilities. As the principal SASP explained, *"I did not have any leadership experience. I was recruited based on high years of teaching experience"*. GOB4 confirmed: *"principals lack leadership training... they only know how to teach, but they do not know about leadership."* In addition, another official, GOC8, confirmed that *"we do not have training for principals,"* indicating that no formal preparation exists within the system.

This contradicts Cambodia's policy shift, which positions principals as instructional leaders who facilitate

TPD (Sam et al., 2025; MoEYS, 2019). In contrast to Indonesia's Guru Penggerak Program and the principal CPD frameworks of Rwanda and Tanzania (Khairina et al., 2024; UNESCO, 2023), Cambodia lacks a systematic approach to principal preparation. This illustrates policy implementation devoid of supporting infrastructure: Cambodia aspires for principals to act as instructional leaders yet struggles to offer training to cultivate these skills.

Hallinger and Murphy's (1985) framework suggests that leadership preparation occurs prior to appointment; however, this assumption does not hold true in rural Cambodia. The framework's dimensions, which define mission, manage instruction, and promote professional development, assume that principals possess the understanding and capability to implement these functions. Nevertheless, without training, principals are unable to fulfill the roles envisioned by policy.

4.1.2 Principal as Teacher, Not a Leader

A defining constraint on school leadership in rural Cambodia is that principals are often required to teach due to teacher shortages, leaving them with little room to function as instructional leaders. SASP described how his teaching duties directly limit his ability to observe classrooms or support teachers, mentioning that classroom observation is "o*nce in a while, because I also teach students, other than being a principal. I teach extra activities when there is no teacher. I teach like normal teachers, but different subjects based on the availability of other teachers, because we have a shortage of teachers*." SBT3: "*Our principal teaches more than that (18 hours)*." These accounts make clear that teaching is not an occasional responsibility, but a regular necessity driven by teacher shortages.

Instructional leadership demands time for classroom observation, feedback, and coordination. When principals undertake full teaching schedules while overseeing *"student and teacher management, budgeting, and communication with all stakeholders"* (SASP), effective instructional leadership becomes structurally unfeasible. This illustrates how the environment dictates possibilities: teacher shortages are not transient issues but persistent structural factors that fundamentally limit forms of leadership (Vygotsky, 1978).

4.2 Survival-mode TPD: Policy-Reality Gap

Through iterative review, similar themes of 'Minimal TPD' and 'Top-Down Control' were created to create 'Survival-Mode TPD'. Survival mode TPD implies that, rather than systematic, school-based TPD programs, professional development in rural schools operates in "survival mode," which means it is reactive, opportunistic, and entirely dependent on external resources. Formal TPD opportunities are rare, brief, and externally controlled, while principals have limited agency to create or sustain ongoing development activities.

4.2.1 TPD Opportunities are Rare and Brief

Across all schools, teachers consistently reported minimal access to formal TPD, with many receiving no training at all in the current year. Teacher SBT2 mentioned, "*We did not have any training this year*," and that more opportunities are needed. They also emphasized structural barriers, "*there was no opportunity this year... Decisions whether the training will be held depend on the PoEYS*". Even when training does occur, it is typically short and insufficient. A teacher SDT7, who participated in GEIP training, described it as "*a very*

short-term training... only for 2 days and a lot of content," reflecting that the training is limited not only in frequency but also in duration and depth.

This contradicts Cambodia's recorded pre-service progress, which includes enhanced qualifications, a 12+4 transition, and reinforced teacher colleges (MoEYS, 2024; Ly, 2020). Although pre-service reform has achieved success through infrastructure investment, in-service teachers' professional development remains inconsistent in rural areas. This illustrates policy prioritization: one-time systemic improvements (degree requirements) have been successful, but ongoing in-service support lacks a delivery infrastructure.

4.2.2 Top-Down Control

Teachers and principals have no agency. SAT1: "*It depends on PoEYS... they send permission letters to DoEYS... then to principals*." SBSP: "*Only 30% of funds can be spent on TPD*." SCSP: "*We do not have enough funding, we cannot send teachers*." Principals are passive coordinators: SBSP: "*I oversee and explore whether we have any opportunities... and ask them to join*."

This is inconsistent with the MoEYS (2019) policy, which envisions principals leading CPD committees, performing needs assessments, and managing funds. Empirical evidence suggests that principals often lack sufficient funds, authority, and capacity, functioning primarily as conduits for external opportunities. This reflects the cascade failures observed in Vietnam, characterized by information loss and inconsistent quality (Nguyen, 2020), but is exacerbated in rural Cambodia, where numerous schools are entirely bypassed.

4.2.3 Financial Barriers

SCT6 (GEIP teacher): One teacher applied and got GEIP training, but he said, *"The biggest challenges were money and distance... They supported $14 per week, but this was just enough for bus fare."* Teachers self-fund through multiple jobs: SBT4: *"I teach private kids... My husband is also a teacher, and we bought land for agricultural purposes (to earn extra income)."* SCT5: *"8 teachers are doing private tutoring."*

This illustrates poverty as a structural obstacle to TPD. Teachers receive inadequate compensation while being required to finance their own professional development, resulting in disparities in access that limit opportunities for further learning to only those with financial means. International best practices advocate for institutional funding for TPD (UNESCO, 2025); however, in Cambodia, these expenses are transferred to individual educators.

4.3 The Implementation Gap

Progressive national TPD policies are ineffective in rural areas due to structural fragmentation, highlighting a disconnection between policy frameworks and their implementation in rural schools.

4.3.1 National Policy is not Known or Enacted

Teachers demonstrated an understanding of national programs, yet they indicated a systematic exclusion from participating in them. Across all schools and offices, awareness of national TPD policy was strikingly limited. SAT1: *"We know about GEIP training, but we did not attend, because it depends on the school."*SCT5: *"Since 2019, they have not received anything."*

Officials acknowledged institutional limitations:

GOB4: *"Our office does not do anything with this kind of TPD; we are more of a financial and administrative body."*

GOC9 described CPD as voluntary: *"CPD is not given by the MoE, but teachers have to apply... it is based on a volunteer basis."*

No participant mentioned the CPD Framework or the idea that continuous professional development is a teacher's right and responsibility. Instead, teachers suggested that professional learning is viewed as an external opportunity rather than a system-wide policy mandate.

Cambodia implemented the CPD Framework in 2019, along with school-based CPD committees, District Training and Monitoring Teams (DTMTs), and cluster systems, specifically to enhance teacher support and training delivery (USAID, 2017). These structures are documented theoretically but are absent in rural practice. The recognition by GOB4 that DoEYS *"does not do anything"* despite its proximity to schools highlights gaps in institutional mandates; structures are present but lack the necessary resources or authority to operate effectively. A critical distinction exists between establishing policy and operationalizing it.

4.3.2 Technical Meetings Support Basic Coordination but Offer Limited Pedagogical Development

Schools hold monthly "technical meetings" as mandated, although the topic primarily emphasizes administrative coordination and exam preparation rather than meaningful professional development.

SDT8: *"Every month, there is a principal-teacher meeting... After that, we have a one-hour meeting with the technical leaders of each subject... we mainly discuss how to prepare a lesson plan and how to prepare exams."*

SCT5: *"Nothing at schools, but we have monthly meetings based on technical discussions on subjects taught."*

SBT2: *"We check whether the syllabus or the lessons we prepared for the exam are enough or not."*

This finding demonstrates the existence and functionality of formal structures, which serve bureaucratic purposes rather than developmental ones. The policy outlines the establishment of professional learning communities that focus on collaborative inquiry, lesson study, and pedagogical enhancement (MoEYS, 2019). Meetings, in reality, are centered on making sure exams are covered and verifying compliance.

This demonstrates rational adaptation, as principals emphasize exam coverage rather than pedagogical innovation in the context of limited resources. Meetings facilitate essential coordination among teachers, enabling alignment on curriculum, resource sharing, and preventing isolation. Policy "recontextualization" is explained in sociocultural theory (Wertsch, 1991). When resources are scarce, high-stakes examinations are used, and teachers are in short supply. Developmentally oriented policies focus on survival. The meeting framework is practical, but operational needs often overshadow professional development goals.

4.3.3 GEIP Implementation: Uneven and Superficial

Participants criticized the Global Education Innovation Program (GEIP) for its brevity, decontextualized content, and superficial implementation in areas where it reached teachers. SCT6: *"It was useful, but we need to adjust the skills to fit the actual classroom needs. For example, we learned how to manage students and improve classroom quality. In BTEC, the training was conducted in English, but here, many students do not understand English."* SDT7: *"I think it is not enough because the training was a very short-term training. It*

was only for 2 days and a lot of content." SBT2 described a cascade attempt: *"In 2024, the principal joined the GEIP project... After he came back from GEIP training, he transferred the information to the teachers."* SCT6 also expressed frustration about unkept systemic promises: *"I was satisfied with some of it, but not with some. I was happy with the training itself, but the salary is still low. Since I finished my bachelor's course by attending the training, I should have the salary scale A, but it is still B."*

The results show various implementation errors. First, the two-day course reflects Laos's recent "targeted in-service training" and Myanmar's infrastructural issues (Chanlivong, 2025; Thinzarkyaw, 2019). Cambodia's GEIP, despite World Bank support and national importance, perpetuates these issues. Second, content decontextualization highlights the challenges in localizing externally developed pedagogical models. Teaching approaches introduced through GEIP often assume linguistic and classroom conditions that differ substantially from those in many rural Khmer-medium schools, where class sizes are large, and material resources are limited. The literature assessment similarly identifies friction between regional and international expectations and local educational realities in Laos, Vietnam, and Indonesia. Third, chronic failures to fulfill promises, such as salary upgrades, damage trust. This shows a failure to apply teacher career pathway regulations beyond TPD content; even effective involvement does not yield advantages, discouraging further engagement. The literature review above highlighted GEIP as a nationwide TPD program. Due to its irregular reach, many schools are unable to access it. Access is limited to two days, and the content often lacks context, which can lead to a mismatch with reality. Thus, it fails due to cascading failures and unmet expectations. The implementation gap is a strong policy framework with little impact in rural areas.

4.4 Principals Effectively Implementing the Technical Leader System: A Noteworthy Achievement

Despite significant constraints outlined in Themes 1-3, principals have effectively implemented the formal Technical Group Leader system as CPD coordinators, illustrating successful distributed instructional leadership that aligns policy with capacity and context.

4.4.1 Teachers Rely on Peer Support, Not Principals, for TPD

All schools utilize Technical Group Leaders (subject heads) who function as CPD coordinators, precisely in accordance with the MoEYS policy (2019). SBSP explained: *"I can help the teachers through technical leaders. In teaching and learning, our school has science and social science; each stream has its own technical leaders."* SCT5 described Ta Moeun's system: *"4 teachers are heads of Math, English, Khmer, and Physics. The Head of Subjects (HOS) is chosen by voting, and they are responsible for helping... They are very helpful, according to most of the teachers."*

SCSP articulated how he leverages this structure: *"We have a teacher who went to training in GEIP in Phnom Penh under a scholarship. Whenever teachers face any kind of problems regarding their teaching styles, they go to that teacher to discuss."* He further explained the coordination role: *"As the leader of the technical group knows which teacher is not performing well and what their weaknesses are, they should inform the principals."*

This highlights that the policy implementation was successful. The literature review stated that MoEYS (2019) formed principal-led CPD committees "with the Technical Group Leader serving as the CPD

coordinator." Technical leaders are Cambodia's institutional mechanism for school-based professional learning, not a policy failure adaptation. Principals implemented this approach despite limited resources for other policy obligations.

This suggests that principals can lead instruction when policies match their capacity and situation. Instructional leadership encompasses "coordinating the curriculum" and "promoting professional development," as noted by Hallinger and Murphy (1985). Technical leaders utilize subject specialists to provide instructional direction that principals cannot offer due to time and subject matter expertise constraints.

This achievement contrasts with the shortcomings of Themes 1-3. While other policies presume that principals lack sufficient training, time, funding, and access to external TPD, the Technical Leader approach works because it does not require additional external funding, relying instead on peer selection and teachers' prior teaching experience. It builds on existing school-based subject expertise among teachers, while principals organize rather than teach or provide specialized instruction. Moreover, the approach aligns well with Cambodian culture by promoting peer respect and collaborative problem-solving.

4.4.2 Collaborative Engagement: The Operation of Distributed Leadership

Principals rely on technical leaders to support instructional quality, especially in specialized subjects. As Principal SBSP explained: *"When I can observe weak points, I help teachers through technical leaders... each stream has its own technical leaders, and in case of challenges, I can bring them into the meeting to resolve the situation."* Teachers confirmed that pedagogical issues are addressed with peer leaders rather than principals. Teacher SBT3 noted: *"When I face a problem in teaching... I ask my team of math teachers to discuss it ... Since it is a specialized subject, we usually do not discuss it with the principal*." This exemplifies effective distributed leadership, rather than a failure on the part of the principal. Teachers direct instructional inquiries to specialists (Technical Leaders) and administrative matters to principals, precisely as the CPD Framework intended. This division aligns completely with the intentions of the CPD Framework (MoEYS, 2019): Technical leaders serve as CPD coordinators overseeing subject-specific professional development, while principals offer overarching leadership and coordination.

Although this is a previous case from Kenya, it can be observed as a reflection of cluster-oriented Communities of Practice in Cambodia, similar to those in Kenya (Jepkemei, 2017; Godwin et al., 2023).

According to sociocultural theory, principals promote Vygotskian "mediated learning" by implementing culturally relevant frameworks, where peer knowledge serves as the "cultural tool" (Vygotsky, 1978) that facilitates development.

4.4.3 Cons: Inadequate Resources for Achievement

This technical leader system operates effectively but lacks formal recognition and resources. SCT5 observed: *"They are very helpful, according to most of the teachers. They have limited knowledge but try their best."* They possess limited knowledge yet make earnest efforts. Technical Leaders lack training for their coaching and coordination responsibilities, do not receive compensation for these additional duties, and lack release time from their full teaching loads. The system relies fundamentally on the goodwill and voluntary efforts of individual teachers.

Moreover, although technical leaders offer important subject-specific peer support, they cannot replace systematic, comprehensive, expert-led professional development. SBT2 articulated teachers acknowledge this gap: *"To improve her teaching skills, she wants training in subject teaching and lesson planning. She thinks it would be helpful to identify the parts of the subject that students find difficult to understand and receive advice from BTEC teachers on those areas."* SBT4 indicated: *"I just need a proper lesson plan... For the English subject, the government should make more efforts—arrange workshops to help us learn how to make strong/good lesson plans."*

Educators value peer support, acknowledging its constraints. Technical leaders, regardless of their experience and commitment, encounter similar limitations as rural teachers: restricted access to current pedagogical research, lack of specialized training for coaching positions, and the same resource and infrastructure challenges. Their "limited knowledge" indicates not individual shortcomings but a systemic failure to invest in the sole effective professional learning mechanism.

4.5 Structural Barriers

Chronic structural conditions inherently limit all endeavors, establishing context as the decisive factor in determining what is achievable.

4.5.1 No Materials or Facilities

Educational institutions often lack the fundamental infrastructure and instructional resources necessary for effective teaching and learning. SAT1: *"We do not have good school infrastructure, and we lack learning materials. For example, as I am a geography teacher, I need Maps, Pictures, and Projectors. However, the school does not have this, which makes the teaching process complicated."* SASP added: *"The challenge is about reference books, like guidebooks for teachers to teach some subjects. Some subjects do not have a guidebook for teachers."*

SBT3 explained technology limitations: *"Since we are still developing, the teaching materials and approaches require better technology. For example, if we want to give a presentation using slides, we do not have a screen, so we cannot show it to the students easily."* SBT4 identified capacity constraints: *"There are not enough classrooms for students—if we had more classrooms, then we could reduce the number of students in each class to teach better."*

These infrastructure issues prevent the execution of TPD, regardless of the quality of training. Professional development teaches teaching methods that require materials, technology, and infrastructure not available in their schools. Professional development is ineffective when teachers return from training unable to apply what they have learnt. Evidence suggests that TPD content developed for well-resourced areas cannot be directly translated to rural contexts without adaptation.

4.5.2 Funding and Travel Barriers

Rural schools face persistent financial constraints that limit investment in TPD. School budgets cover multiple priorities, leaving only a small portion for TPD. As Principal SBSP explained, *"Based on the allocated budget... only 30% of funds can be spent on TPD."* Basic teaching needs are met, but infrastructure and school

improvement require external support from donors or NGOs.

Geographic isolation further restricts access to TPD. Teacher SAT1 mentioned travel costs and family responsibilities: *"The problem is the travel cost and the living cost... The Daily Subsistence Allowance (DSA) provided is too low,"* and *"I have a son, he is little, so it is difficult to leave him behind and go to another city."*

Even when external training is available, costs often prevent individuals from participating in it. SCT6 (GEIP teacher): *"The biggest challenges were the money and the distance from here to the training place. They supported me with $14 per week, but this was just enough for the bus fare. Other things were my personal expenses."* SAT1 recalled similar barriers: *"The problem is the travel cost and the living cost...The Daily Subsistence Allowance (DSA) provided is too less for him to support his living and expenses."*

This illustrates how poverty operates as a structural obstacle to TPD. Teachers receive inadequate compensation (SBT4: *"Every teacher thinks it is not enough"*) while being required to finance their own professional development, resulting in disparities in access to resources. International best practices advocate for institutional funding of TPD; nevertheless, Cambodia's system allocates expenses to individual teachers, rendering professional development a privilege rather than an entitlement.

GOC8 recognized systemic challenges: *"I believe financial support is the primary issue...We receive funding from the Ministry of Education; nevertheless, it is insufficient, necessitating additional project financing, such as from JICA."* Geographic isolation exacerbates expenses: *"An additional challenge is the considerable distance between the schools, necessitating substantial time and effort for travel...it is challenging to coordinate our schedule and arrive promptly at each institution."*

4.5.3 Student Dropout and Behavior

High absenteeism and dropout rates, driven by poverty, parental migration, behavioral issues, and transportation difficulties, consume teacher energy and hinder instruction. As Principal SASP noted, *"Teacher absenteeism and student dropout are particularly high. In terms of dropout, we also have barriers; the student may drop out or leave for a short while to help the family with finances."* Disruptive student behavior further challenges teachers. Teacher SDT9 explained, *"In my class, we have 4 or 5 students who are gangsters; they interrupt us, and we feel uncomfortable."*

Teachers spend more time regulating behavior and teaching core skills than advancing curriculum, which discourages them and disengages students. Sociocultural theory shows intergenerational educational disadvantage (Vygotsky, 1978). Students lack fundamental literacy because their caretakers (grandparents in parental absence due to work migration) are illiterate and cannot support schooling. Work conflicts with schooling, so they withdraw from it. Better teaching cannot fix these fundamental inequities.

This highlights the intrinsic limitations of TPD-focused therapies. Instructional leadership and TPD improve teaching quality and student outcomes (Nguyễn et al., 2023; Tran et al., 2018). This causal chain breaks down when students arrive lacking core skills and encounter significant socioeconomic barriers to participation. Pedagogical development alone is insufficient to overcome poverty, parental migration, and intergenerational illiteracy.

4.6 Answer to Research Questions

RQ1: How does the principal's instructional leadership facilitate TPD?

Due to insurmountable restrictions, the principals facilitate TPD primarily through external opportunities. On the other hand, they effectively facilitate TPD through the Technical Group Leader system, which enables efficient distributed leadership that aligns policy with capacity.

What principals cannot do:

The principals cannot secure, design, or finance external TPD. They do not have any concrete training opportunities to address this issue because only a portion of the budget is allocated to TPD. In addition, the official bodies do not regulate access, which makes it more challenging for the principals to do their job effectively.

What principals effectively accomplish:

The principals successfully established a formal Technical Leader system. They assign technical leaders to help teachers with their teaching. Additionally, demonstration classes are organized to help teachers overcome classroom difficulties. Lastly, the principals promote peer collaboration, designate meeting time with staff, and establish opportunities for peer learning by pooling the experiences of all teachers.

Interpretation:

Principals exercise instructional leadership when policies provide suitable frameworks for effective instruction. Technical leaders achieve success through distributed leadership by utilizing existing resources, aligning with the coordinating capabilities of principals, and enhancing cultural collaborative norms. This corroborates Hallinger and Murphy (1985) while demonstrating that the coordination of effective peer systems satisfies instructional leadership when direct delivery is unfeasible. Nonetheless, limitations persist: peer assistance cannot replace extensive, well-funded, lifelong professional development.

RQ2: How do teachers perceive the principal's instructional leadership on TPD?

Teachers perceive principals as helpful administrators who effectively promote peer-based learning, while acknowledging that principals are unable to deliver external professional development or direct subject-specific instruction.

Almost all the teachers appreciate their principal. From their perspective, the principal is a source of motivation who does everything possible, such as caring for the overall school environment, from maintaining the school facilities, including the garden/playground, to ensuring that visual learning materials are available in classrooms. All the teachers specifically value the principals' facilitation of the technical leader system, which helps them tackle day-to-day challenges.

However, the teachers also realistically acknowledge limitations by pointing out issues, such as the fact that principals do not comment on their teaching skills. While this sounds serious, it is noteworthy that principals are not empowered with the right leadership skills to tackle this effectively. Moreover, the teachers also mentioned that principals are unable to support external training due to a low or no budget, which, interestingly, is not the principals' fault but a systemic barrier over which principals have little control.

Interpretation:

A constructive comprehension and assessment of the principal's capabilities and limitations can be observed . The division of labor, Technical Leaders for instruction and principals for coordination, demonstrates the effective implementation of distributed leadership. Teachers effectively utilize peer support systems established by principals, exhibiting agency within limitations (Wenger, 1998). Nonetheless, this should not mask real requirements.

5. Conclusion

This study investigated the role of school principals' instructional leadership in facilitating TPD in rural secondary schools in Battambang Province, Cambodia. Forty interviews conducted across four schools, supplemented by triangulation with educational officials, identified five main themes that illustrate a multifaceted reality: although principals encounter significant limitations hindering most forms of instructional leadership, they have effectively executed one pivotal policy mechanism, the Technical Group Leader system, indicating that successful leadership is practicable when policy is in line with capacity and context.

5.1 Key Findings

School principals in rural Cambodia are mostly restricted to administrative roles, rather than instructional leadership. Due to teacher shortages, all were promoted without leadership training, teach 18+ hours per week, and have minimal control over external TPD access, funds, or resources. Despite national rules requiring principals to chair CPD committees and encourage school-based professional development (MoEYS, 2019), rural principals often act as passive coordinators, transmitting external possibilities over which they have little control.

The "survival mode" of teacher professional development in rural Cambodia is rare, brief, externally managed, and donor dependent. All teachers reported receiving little to no formal training, with some having received none since 2019. Training, such as GEIP, is often brief, typically lasting 2 days, and decontextualized (English for Khmer-medium situations with 75+ students and limited resources), often failing due to cascade implementation. Teachers must self-fund professional development through various jobs (tutoring, agriculture), generating access inequities where only the wealthy learn.

Although Cambodia has developed an impressive policy infrastructure, such as, the CPD Framework (2019), school-based committees, DTMTs, and cluster systems, its implementation differs between urban and rural realities. These structures exist on paper but not in actuality. One of the educational offices *"do not do anything with this kind of TPD,"* being closest to schools, which indicates institutional mandate gaps when institutions lack resources or authority. Monthly technical meetings primarily focus on exam preparation and compliance, rather than professional development.

As per the MoEYS (2019) policy, principals have successfully implemented the formal Technical Group Leader system as CPD coordinators. All schools employ peer-elected subject heads who provide instructional supervision. Teachers are expected to ask Technical Leaders about pedagogy and principals about administration, as per the distributed leadership paradigm. This approach is practical because it requires no external funding, leverages teacher expertise, aligns with principals' coordination capabilities, and follows

Cambodian peer collaborative practices.

Finally, all of these efforts are limited by teacher shortages (75-84:1 ratios), infrastructure deficits (no materials, facilities, technology), funding constraints (only 30% of school budgets for TPD), and severe student crises (95% lack foundational literacy, 40% behavioral disengagement driven by poverty and parental migration). These are structural constraints, not leadership challenges.

5.2 Policy Recommendations

Taking into account these findings, we offer the following policy recommendations.

5.2.1 Acknowledge and Allocate Resources to the Technical Leadership Framework

Instead of importing costly external models, it will be more effective to build on the successful principles already established locally. This approach involves providing formal training for Technical Leaders in CPD coordinators, with systematic instruction in coaching, peer observation, and feedback delivery. This should be offered modest compensation or release time to help recognize these responsibilities as formal institutional roles rather than voluntary work. Precise role descriptions and career trajectories should also be established to connect the Technical Leader to teacher progression and development. Building on these measures, professional learning communities can be strengthened by utilizing Technical Leaders as a basis for organized collaborative inquiry and lesson study.

5.2.2 Implement Systematic Preparation for Principal Leadership

To strengthen school leadership, compulsory training programs should be implemented prior to the appointment of principals. Pre-service training should include training in instructional leadership, facilitation of school-based professional development, and budget management. Collaborating with BTEC can help ensure that the curriculum is relevant to the local context. In addition, new principals require support from experienced leaders, and all principals should participate in annual training to stay up to date in dealing with the latest challenges and contemporary practices.

5.2.3 Establish Dedicated and Sustainable TPD Budgets

Schools should move from donor-dependent TPD toward sustainable, school-based financing. Integrating INSET/CPD budgets into school budgets and increasing investment in in-service teacher training can support the continuous professional development of teachers. Principals should manage these funds flexibly, while districts should utilize DoEYS and BTEC resources for cluster-based training and on-site coaching. TPD budgets should also cover actual travel, meals, and accommodation costs to motivate teachers by eliminating out-of-pocket payments. Lastly, multi-year plans should be embedded in school development frameworks for stable implementation.

5.2.4 Tailor TPD Content to Rural Contexts

Professional development should emphasize strategies for context-specific training in large classes (50-75 students) with minimal materials and multi-grade teaching should be introduced. Such training courses must

be delivered in Khmer, with materials that can be applied directly by the teachers there. Additionally, implementation support within schools should include follow-up coaching, peer observation cycles, and regular troubleshooting to ensure ongoing effectiveness. Lastly, the discontinuation of using cascade models and the adoption of direct training or train-the-trainer models that incorporate structured fidelity mechanisms should be considered.

5.3 Study Limitations

Four secondary schools in Battambang Province were studied; therefore, the results may not apply to other rural, urban, or primary schools in Cambodia. Data saturation was achieved across 40 interviews, and the findings were consistent with the rural education literature in Cambodia and emerging regions, suggesting transferability within similar contexts; however, the geographic and institutional breadth is limited.

Real-time summarization and translation into English from Khmer interviews may have lost linguistic complexity, cultural intricacies, and context-specific implications. However, considerable theme convergence across interviews, stakeholder groups, and schools mitigates this issue.

Group interviews could enhance efficiency and peer validation, but hierarchical dynamics or peer pressure may have prevented some teachers from expressing sensitive or critical thoughts. Individual teacher interviews revealed consistent themes, although group power dynamics may have influenced comments.

The one-year timeframe (August–September 2025) captures present conditions but not longitudinal policy consequences, recent reforms (STEPCam Phase II, new BTEC training), or temporal shifts. Future studies may evaluate whether ongoing initiatives change these relationships.

Finally, this study focused on principals' instructional leadership for TPD but did not examine other areas of leadership, such as organizational management, community relations, or student discipline. Therefore, the findings provide only some parts of the principal’s overall leadership practice. While the focus on TPD aligns with research questions and policy concerns, it limits the extent of broader leadership roles.

References

Baharuddin & Burhan. (2025). Urban and rural teacher perspectives on Indonesian educational refor m: Challenges and policy implications. *Cogent Education*, *12*(1), 2497142. https://doi.org/10.108 0/2331186X.2025.2497142

Blase, J., & Blase, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly*, *35*(3), 349–378. https://doi.org/10.1177/00131 61X99353003

Bo, C., Seak, R., Sin, N., & Souk, S. (2019). Models of teacher professional development in Camb odian primary schools: A review of selected cases. *Cambodia Education Review*, *3*(1), 30–64.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psyc hology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Chanlivong, K. (2025). *Government empowers teachers in rural Laos through workshop*. Laotian Ti mes. https://laotiantimes.com/2025/01/28/government-empowers-teachers-in-rural-laos-through-workshop /

Clayton, T. (1998). Building the new Cambodia: Educational destruction and construction under the Khmer Rouge, 1975-1979. *History of Education Quarterly*, *38*(1), 1–16. https://doi.org/10.2307/3 69662

Du Plessis, P. (2017). Challenges for rural school leaders in a developing context: A case study on leadership practices of effective rural principals. *Koers - Bulletin for Christian Scholarship*, *82* (3). https://www.koersjournal.org.za/index.php/koers/article/view/2337

Em, S., Chin, P., Khan, S., & Nun, N. (2022). Teacher education in Cambodia: Formulae, challenge s, and suggestions for improvement. *Jurnal As-Salam*, *6*, 90–104. https://doi.org/10.37249/assala m.v6i2.401

Fukao, T. (2016). *To what extent can incentives change teacher motivation? A case study of teacher s in Cambodia*. https://hdl.handle.net/10779/uos.23437772.v1

Godwin, K., Amenya, D., Tiganescu, A., & Kudenko, I. (2023). *Reconfiguring teacher collaboration: Five key insights from communities of practice in Kenya and Rwanda*. https://edtlive.b-cdn.net/l ivenew/media/20ml1wyn/edt_tp_reconfig-teacher-collaboration-final_0523.pdf

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research*. The Wallace Foundation. https://doi.org/10.5 9656/EL-SB1065.001

Ha, H. T. L., Pham, A. T. K., Nguyen, H. T., & Duong, H. T. T. (2021). Training pedagogical skil ls: Evaluation of lecturers and teacher training students at educational universities in Vietnam. *Eurasia Journal of Mathematics, Science and Technology Education*, *17*(12), em2054. https://do i.org/10.29333/ejmste/11418

Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *E lementary School Journal - ELEM SCH J*, *86*. https://doi.org/10.1086/461445

Jepkemei, E. (2017). *The power of instructional support: Using existing systems to change teacher b ehavior in Kenya*. https://shared.rti.org/content/power-instructional-support-using-existing-systems-chan

ge-teacher-behavior-kenya

Khairina, N., Yarrow, N., Cilliers, J., & Dini, I. (2024). *Improving teachers and school leadership i n Indonesia*. https://doi.org/10.1596/41472

Ly, R. (2020). *Understanding the significance of instructional leadership and school principals' roles and responsibilities*. https://cefcambodia.com/2020/09/22/understanding-the-significance-of-instruction al-leadership-and-school-principals-roles-and-responsibilities/

Marlar, W., & Zreik, M. (2024). Digital horizons: Understanding teacher retention challenges in Mya nmar's rural basic education schools through the lens of informatization. *RUDN Journal of Inf ormatization in Education*, *21*(2), 131–146. https://doi.org/10.22363/2312-8631-2024-21-2-131-146

Michael, F., & Kitula, R. P. (2022). Influence of leadership induction training on the performance of newly appointed heads of public secondary schools in Arusha City Council. *Journal of Resea rch Innovation and Implications*, *6*(3), 184–193.

Ministry of Education, Youth and Sport. (2004). *Education strategic plan 2004-2008*. https://planipolis. iiep.unesco.org/sites/default/files/ressources/cambodia_education_strategic_plan_2004-2008.pdf

Ministry of Education, Youth and Sport. (2013). *Teacher policy*. Royal Government of Cambodia. htt ps://nepcambodia.org/wp-content/uploads/2025/07/cambodia_teacher_policy.pdf

Ministry of Education, Youth and Sport. (2015). *Teacher policy action plan 2015-2020*. Royal Gover nment of Cambodia.https://data.opendevelopmentcambodia.net/en/dataset/37057336-6f36-4139-b766-65 cdcfd27dc0/resource/1b0adc76-ef4f-4778-bd61-79fc09c2fbc0/download/teacher_policy_action_plan_2015 _en__12.01.2014.pd

Ministry of Education, Youth and Sport. (2019a). *Continuous professional development framework for teachers and school directors*. https://teachertaskforce.org/sites/default/files/2022-09/2019_MoEYS-C ambodia_CPD framework-for-teachers-school-directors_EN.pdf

Ministry of Education, Youth and Sport. (2019b). *Education strategic plan 2019–2023*. https://moeys.g ov.kh/en/edu-strategic-plan

Ministry of Education, Youth and Sport. (2024a). *2023–2024 Education congress report*. https://moey s.gov.kh/en/education-congress

Ministry of Education, Youth and Sport. (2024b). *Education strategic plan 2024–2028*. https://moeys.g ov.kh/en/edu-strategic-plan

Nguyen, A. (2020). In-Service Training Management—A Case Study in Vietnam. *International Educa tion Studies*, *13*(10), 1. https://doi.org/10.5539/ies.v13n10p1

Nguyen, H. T., Vu, N.-T. T., Ha, X. V., Dinh, H.-V. T., Truong, T. D., & Reynolds, B. L. (2025). Principal instructional leadership and its influence on teachers' professional development at Vie tnamese primary schools. *Education 3-13*, *53*(3), 408–416. https://doi.org/10.1080/03004279.2023.2 195409

Phin, C. (2014). Challenges of Cambodian teachers in contributing to human and social developmen t: Are they well-trained? *International Journal of Social Science and Humanity*, *4*(5), 344–348. https://doi.org/10.7763/IJSSH.2014.V4.376

Sam, R., Tieng, M., Yoeng, H., Chiv, S., Thay, S., & Saing, S. (2025). Exploring school principal l

eadership: A case study of upper secondary school in Northwestern Cambodia. *Multidisciplinary Reviews*, *8*(10), 2025311. https://doi.org/10.31893/multirev.2025311

San, S., Ros, P., & Crunden, S. J. (2025). The effectiveness of educational leadership on teacher performance in high schools in Phnom Penh, Cambodia. *International Journal of Trend in Scientific Research and Development*, *9*(4), 490–506.

Sengsoulintha, K. (2025). Teacher educators' challenges: Focusing on teacher training colleges in Laos. *Frontiers in Education*. https://doi.org/10.3389/feduc.2025.1614060

Sindhvad, S. P. (2009). *School principals as instructional leaders: An investigation of school leadership capacity in the Philippines.* https://hdl.handle.net/11299/56986

Southeast Asian Ministers of Education Organization. (2018). *Southeast Asia teachers competency framework (SEA-TCF)*. Teachers' Council of Thailand.

Sreylin, Y. (2022). *School principals to learn management skills*. Khmer Times. https://www.khmertimeskh.com/501071990/school-principals-to-learn-management-skills/

Thinzarkyaw, W. (2019). How to develop the quality of in-service teachers in rural areas. *International Journal of Advanced Research in Science, Engineering and Technology*, *6*(9). https://www.ijarset.com/upload/2019/september/06-winthinzarkyaw-31.pdf

Tran, N. H., Hallinger, P., & Truong, T. (2018). The heart of school improvement: A multi-site case study of leadership for teacher learning in Vietnam. *School Leadership & Management*, *38*(1), 80–101. https://doi.org/10.1080/13632434.2017.1371690

UNESCO. (2019). *Global education monitoring report—Cambodia*. https://education-profiles.org/eastern-and-south-eastern-asia/cambodia/~school-leadership

UNESCO. (2021). *The persistent teacher gap in sub-Saharan Africa is jeopardizing*. https://www.unesco.org/en/articles/persistent-teacher-gap-sub-saharan-africa-jeopardizing-education-recovery

UNESCO. (2023). *Teachers and head-teachers continuous professional development: Key data analysis for quality education achievement in sub-Saharan Africa*. https://www.iicba.unesco.org/en/node/95

UNESCO. (2025). *Costing and financing the teaching profession: A strategic investment in education*. https://unesdoc.unesco.org/ark:/48223/pf0000394919

UNESCO, Global Partnership for Education, & Ministry of Education, Youth and Sport. (2024). *Launch of STEPCam Phase II: Component 2 – Teacher Professional Development [Presentation by H.E. Khuon Vicheka, Directorate General of Teacher Training]*. https://moeys.gov.kh/storage/uploads/documents//66b37faa6801d.pdf

USAID. (2017). *All children reading — Cambodia*. https://ierc-publicfiles.s3.amazonaws.com/public/resources/Cambodia%20TPD%20Options%20Brief_Final_09.14.17.pdf

VVOB. (2022). *School leadership in Africa*. https://rwanda.vvob.org/sites/rwanda/files/acsl_working_paper_v0.0_20220327.pdf

Vygotsky, L. S., Cole, M., Jolm-Steiner, V., & Souberman, E. (1978). *Mind in Society: The development of Higher Psychological Processes*. Harvard University Press. https://doi.org/10.2307/j.ctvjf9vz4

Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Harvard University Press.

World Bank. (2015). *Indonesia: Teacher certification and beyond*. https://documents1.worldbank.org/curated/en/129551468196175672/pdf/104599-WP-P102259-PUBLIC-Teacher-Certification-and-beyond-final.pdf

World Bank. (2018). *Improving teaching and learning in Indonesia*. https://www.worldbank.org/en/country/indonesia/brief/improving-teaching-and-learning-in-indonesia

World Bank. (2023a). *Cambodia—Secondary education improvement project*. https://documents.worldbank.org/en/publication/documentsreports/documentdetail/099073123112524573

World Bank. (2023b). *Continuous teacher training goes nationwide in Tanzania*. https://www.worldbank.org/en/news/feature/2023/01/24/continuous-teacher-training-goes-nationwide-in-tanzania

Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE Publications.

Appendix

Table. Coding Structure Used in this Chapter

Interviewee Code	Meaning
SASP	School A School Principal
SBSP	School B School Principal
SCSP	School C School Principal
SDSP	School D School Principal
SAT1	School A Teacher (2 Teachers)
SBT2	School B Teacher (2 Teachers)
SBT3	School B Teacher
SBT4	School B Teacher
SCT5	School C Teacher (12 Teachers)
SCT6	School C Teacher
SDT7	School D Teacher
SDT8	School D Teacher (2 Teachers)
SDT9	School D Teacher
GOA1	Deputy Director
GOA2	Head of HR
GOA3	Senior Officer
GOB4	Chief of Education Office
GOB5	Deputy Chief
GOB6	Deputy Chief
GOB7	Officer
GOC8	Deputy Director of the Faculty of Social Science and Science Education
GOC9	Head of Internal Quality Assurance (IQA)

Working Group 3 (Gender)

Identifying Gender Norms in Career Pathways: A Case Study in the Tamoeun and Bonsay Traeng Communes, Cambodia

Group Members:

Daniella PEIXOTO PEREIRA*

Wenhuizi DOU

Mio SATO

Takeru HONSAKO

Gina MOOMAW

Research Assistants:

Winnie Onofre TEMBE PAPELO (GSID)

Sivmey VANG (RUPP)

Advisors:

Isamu OKADA (GSID)

Hoy Sereivathanak REASEY(RUPP)

* Group Leader

Table of Contents

1. Introduction

Gender inequality is a global issue that affects all societies and has wide-ranging social, economic, and political consequences. The United Nations explained that gender equality is not only a fundamental human right but a necessary foundation for a peaceful, prosperous, and sustainable world. In the World Economic Forum's 2023 Global Gender Gap, which is one of the measurements and criteria for gender equality, Cambodia ranked 92 out of 146 countries, a six-place improvement from 2022 (The World Bank, 2024).

Employment is one of the main sectors in which the gender gap is visible. According to the Report of Cambodia Socio-Economic Survey (2021), there are clear gendered differences in employment status in Cambodia. A significantly higher proportion of men (56.4%) are in paid employment compared to women (40.6%), suggesting that men are more likely to have stable, formal jobs with regular income. We believe these gendered disparities are rooted in traditional Cambodian cultural values. According to Hunter (2022), Cambodian society has deeply rooted gender norms, historically reinforced by cultural codes such as Chbab Srei, which prescribe behavior, roles, and expectations for women and men. A study on differences in careers based on gender shows that boys' and girls' careers are shaped by gendered social expectations, which are created by traditional gender roles (Seehuus, 2021). According to Evans (2019), women living in rural areas in Cambodia are often expected to be housewives and tend to have more household responsibilities than men, limiting their career prospects.

Although previous studies reveal a causal connection between social norms and the career gender gap, the details of this connection such as specifically how the social norms influence people's career have not been largely researched. This study addresses this gap by examining the relationship between women's career pathways and gender norms in rural Cambodia, specifically in Tamoeun and Bonsay Traeng Communes, Thmov Koul District, Battambang Province since the gender norms can influence strongly in rural area in Cambodia and these communities reflect such context. To accomplish this, we conducted semi-structured interviews and free listing on careers and gender norms in these two communes.

This study argues that gender norms in Cambodia influence women's career paths not only directly but also indirectly by shaping family decisions, economic conditions, and career opportunities in ways that reinforce those norms The implication of this finding is that while Cambodian society has implemented some policies, including economic support, to prevent or decrease any gender gap, the core factor that the society should deal with is the daily situations deeply rooted in gender norms in Cambodia.

Although we did our best to provide a thorough analysis, there were practical limitations in our field research that could influence results. One limitation is the language barrier between the researchers and participants, which may have resulted in miscommunication. Additionally, there is also a possibility of social desirability bias, especially in mixed-gender setting interviews. In situations where other people, including those of different genders, are present, some interviewees may have responded to the questions with what they assume are socially correct, proper answers, rather than their genuine beliefs. We addressed this bias by separating a few participants to compose a same-gender subgroups, but collective interviews cannot be completely free from such limitations.

Following this introduction, the next section reviews the literature on the relationship between gender and career paths and the actual situation related to gender and career in Cambodia, as well as describing the gap

these studies have not examined. In Section 3, based on the theoretical background and gaps in the existing literature, we present our research question, main argument, and its significance. Then, we proceed to the explanation of the research method's details in Section 4, aiming to reveal the gender norms prevalent in Cambodian society and their relationship with women's career choices. Section 5 presents the findings from the interviews and suggests that a complex set of mechanisms is present and intertwined, producing gender-related barriers in career opportunities in Tamoeun and Bonsay Traeng. Section 6 brings the discussion to current policies and their critical assessment. Finally, the last section concludes this article with policy recommendations aimed at promoting gender equality in rural Cambodia, based on our findings.

2. Literature Review

This section introduces existing literature on gender norms and career choices, outlining how gender expectations influence career preference, decision-making, and labor division. In order to provide relevant context to this study's argument, it also examines previous studies on gendered barriers in education, employment, and rural livelihoods in Cambodia.

2.1 Gender Norms

Research on gender offers a range of definitions for gender norms, but for the present research, we, following UNICEF (2020), define gender norms as "the informal rules and shared beliefs that distinguish expected behavior based on gender identities" (p. 2). According to Ridgeway (2011), gender serves as a "primary frame" that people use to understand social interactions. This means that expectations about masculinity and femininity are constantly created and reinforced in everyday life. UNICEF (2020) notes that gender norms are powerful in shaping individual aspirations and opportunities, particularly in rural areas where traditional values are more strongly upheld.

2.2 Gendered Differences in Career Choices

This section introduces existing literature on gender norms and career choices, outlining how gender expectations influence career preference, decision-making, and labor division. In order to provide relevant context to this study's argument, it also examines previous studies on gendered barriers in education, employment, and rural livelihoods in Cambodia.

Additionally, another reason for gendered differences in career decisions comes from career-related self-efficacy, which refers to the belief in one's ability to be successful in a wide range of career pursuits (Ginwal et al., 2022). People develop career-related self-efficacy from having opportunities to master professional tasks, relationships with role models, and support from others. However, women's limited access to these experiences contributes to their tendency to underestimate their capabilities and avoid certain careers they believe they think they won't succeed in, further reinforcing occupational gender segregation (Ginwal et al., 2022). These findings suggest that systemic social norms and internalized gender expectations have a significant impact on career decisions.

Seehuus's (2021) study on gender differences and similarities in career preferences found that a significant barrier in addressing occupational gender segregation is men's resistance to gender-atypical work. Although

both boys and girls are influenced to pursue gender-conforming career pathways, boys tend to show a lower desire to work in female-dominated fields, especially when they involve lower pay. However, boys are more receptive to choosing female-typed employment when their pay is equal to that of male-typed jobs. Seehuus (2021) also highlights that boys' and girls' career preferences are shaped not only by rational considerations like pay and hours, but also by gendered stereotypes and social expectations. This finding further suggests that both structural factors (e.g., wage disparities) and cultural beliefs (e.g., traditional gender roles) influence the career preferences of men and women from an early age.

2.3 Role of Gender Norms in Career Decisions

Several studies examined how gender norms influence the career decisions of men and women. Bicchieri (2005) explains that social norms operate through shared beliefs about how people typically act (descriptive norms) and how they should act (injunctive norms), which together regulate behavior through social approval or disapproval. This framework helps explain how people internalize gendered norms in seemingly personal career choices. For example, if women in Tamoeun typically do not migrate for work, other women in Tamoeun may interpret this behavior as normal and adapt it to their lives, even without external pressure (descriptive norm). In contrast, a young man in Bonsay Traeng might feel obligated to migrate for work because of community expectations around masculinity and responsibility (injunctive norm), rather than because he wants to. Ridgeway (2011) also found that gender norms are reproduced through day-to-day choices as people unconsciously rely on gendered assumptions to guide their behavior. This again highlights how even in the absence of external pressure, internalized gender expectations embedded in seemingly personal choices contribute to the persistence of gender inequality. This idea illustrates that gender norms are not just culturally constructed and institutionally reinforced but also sustained through individual decision-making and social interactions.

2.4 Existing Gendered Barriers

According to multiple sources, while Cambodia has equal enrollment of boys and girls in primary school, girls in rural areas continue to drop out at higher rates than boys. UNESCO (2018) and Room to Read (2020) argue that, in addition to the responsibilities in their households, the prioritization of sons due to financial reasons and limited work opportunities for educated women, as well as safety concerns, are severe barriers that force women not to pursue higher education or careers in Cambodia. Even when women complete basic schooling, labor market structures often direct them into lower-paying, informal, or traditionally gender-typed occupations. Analyses of Cambodia's labor market and TVET sector reveal the underrepresentation of women in technical and higher-paid trades, suggesting that gendered expectations and family investment decisions play a central role in determining whether young women can enter vocational tracks that lead to better career opportunities (Asian Development Bank [ADB], 2015; International Labour Organization [ILO], 2019). Significant evidence also indicates that women in Cambodia peforms the majority of unpaid labor and household work, which reduces their time for education and paid employment and physically prevents women from seeking a wider variety of career opportunities. Furthermore, unpaid domestic and agricultural work are often invisible in official statistics, despite being a significant barrier to women's career diversification.

Women's empowerment policies that overlook this unpaid care burden risk overestimating the effect of educational expansion on women's labor outcomes (Food and Agriculture Organization of the United Nations [FAO], 2023).

2.5 Gender Labor Division in Rural Cambodia

In the Cambodian context, rural labor is primarily agricultural, with a high participation rate from both men and women; however, labor division is deeply shaped by gender norms. According to Colfer et al. (2021), men are typically assigned to physically demanding tasks such as plowing, while women are typically assigned to less physically demanding tasks such as crop transplanting and tending. Furthermore, a study conducted in Kampong Cham by Arimitsu et al. (2022) reveals that women face unequal access to agricultural training offered by NGOs and government programs. This leads to men gaining more formal power in holding land titles from attending trainings, while women lose influence in the agricultural sector because they are not acknowledged or compensated for their labor (Colfer et al., 2021).

3. Our Argument

The literature review demonstrates that career choices are shaped not only by rational factors (e.g., salary, work hours) but also by gender norms, and people behave based on the gender norms unconsciously, leading to reproducing and reinforcing these norms (Seehuus, 2021; Ridgeway, 2011). This contibutes to persistent gender inequality in education, employment, and household labor.

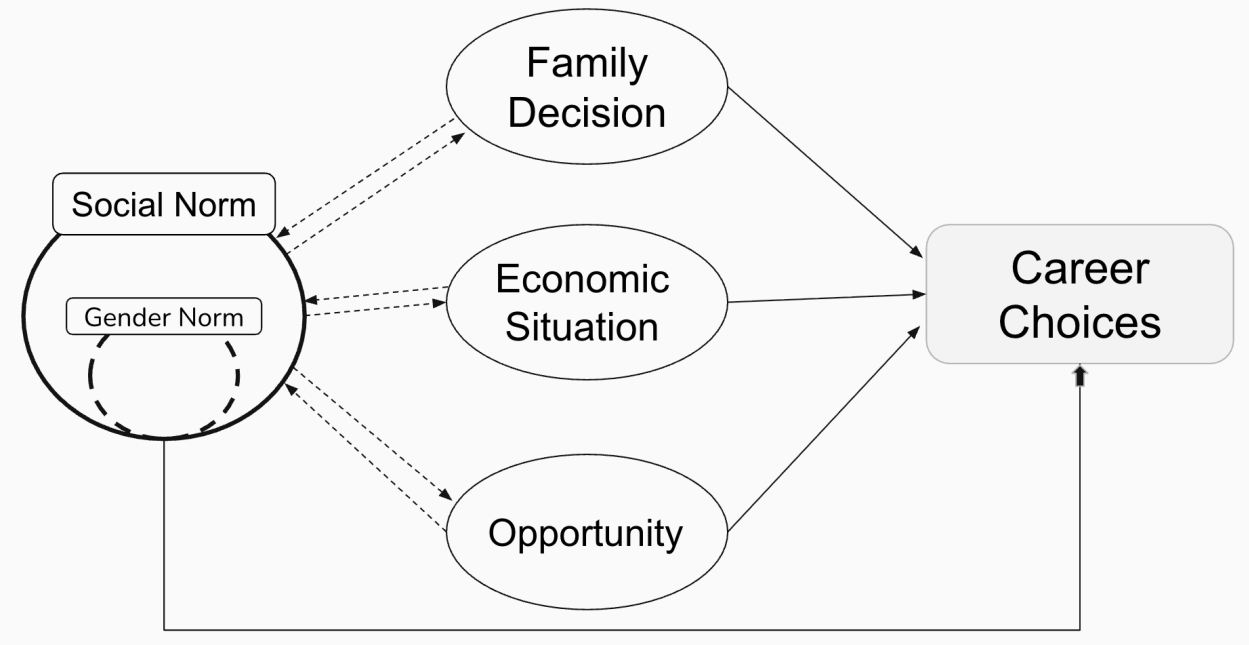
However, these studies do not fully address the processes through which gender norms interact with other factors and shape women's career choices. They often only mention gender norms as the cause of the career gender gap, which limits the understanding of how gender norms restrict women's wider career pathways. Without analyzing how these norms interact with economic constraints or family dynamics, we miss the 'hidden' barriers that discourage women from pursuing diverse professional trajectories, even when formal obstacles are removed. To fully understand their career paths, it is necessary to analyze the relationship between gender norms and career paths, together with the multiple and complex mechanisms through which the former impact the latter. Therefore, our study focuses on four significant factors (family decision, economic situation, opportunity, and social norm, including gender norm) that influence career choices. This approach allows us to understand the root cause of career gender disparities and help policymakers address the issue in a more structurally informed manner.

This study develops an analytical framework, as shown in Figure 1, based on semi-structured interviews and free listing interviews, which demonstrates the process through which gender norms influence women's career choices. This framework illustrates that gender norms not only have a direct influence on career choices but also indirectly shape them by affecting family decisions, economic situation, and opportunities. It reveals that gender norms influence various aspects of daily life, such as affecting decision-making in households, prioritizing sons under limited funds, and limiting mobility, which influence career pathways in the end. This suggests that understanding how gender norms affect family decisions, economic situation, and opportunities is also essential to understanding the mechanisms through which career choices are shaped. Our argument is that gender norms in Cambodia influence women's career paths both directly and indirectly, shaping

mechanisms such as family decisions, economic conditions, and career opportunities, which in turn, reinforce those norms.

The significance of this research lies in its contribution to development actors and policymakers promoting gender equality in areas where such norms are often implicit but deeply underlying and have pervasive power. While the current national policies tend to deal with the economic aspect and attempt to amplify the number of working women, they don't tackle the deeply rooted conservative gender norms existing in society. They apparently fail to change the social dynamics effectively, preserving the gender expectations on women and maintaining their social status, which impacts their career development. This study can contribute to understanding the complex career choice mechanisms that are actually happening in Cambodian society and relationships between gender norms and career paths, suggesting more effective approaches that address women's social empowerment for achieving gender equality.

Figure 1: Analytical Framework of Career Choices



Source: Authors

4. Methods

In gender research, methodological flexibility is crucial for empowering the voices of those who are often overlooked in the process, particularly the voices of women. As a result, most gender research is associated with qualitative studies (Beetham, 2007). Therefore, considering our study's main focus, we employed a multiple qualitative methods approach, including semi-structured interviews, group discussions, and a participatory method to understand the different gender norms in Cambodia and their relationship to career choices.

Incorporating these multiple approaches enables us to elicit implicit gender norms in a complementary manner, aiming primarily to make participants feel comfortable expressing beliefs or attitudes that they may not be fully aware of. However, these methods do not aim to classify between explicit and implicit gender

norms, nor to distinguish between expressions of unconscious bias and conscious bias. Furthermore, we acknowledge that our own cultural assumptions as researchers may have also influenced our interpretation of the data.

The obstacles above make identifying existing gender norms, particularly those related to career decisions, a challenging task. Some gender norms may unconsciously affect individual decisions. This is why asking direct questions through an interview is not enough to understand prevailing gender norms, including unconscious ones and socially desirable ones, in the field. Therefore, we deploy multiple approaches that complement each other. First, the semi-structured interviews aim to understand the gender norms that individuals are actually aware of. This method allows for easy comparison of responses across different genders and generations. Second, the mixed-gender group discussions aim to reveal shared norms, opposing ideas, and peer influences between the two genders. Our third approach is a participatory method (UNICEF, 2020). Constructing focus groups separated by gender facilitates empowering participants to discuss sensitive topics by providing a safe venue for discussion and bringing out unconscious bias behaviors related to gender norms. It is also important to consider that when analyzing the gender norms that define gender roles in a society, traditional gender norms were highly influenced by time. That is, when gender norms were created they expressed the reality of that time and the way of thinking of that society. Throughout the years, they may have undergone changes and may have undergone changes, making it crucial to first understand the actual gender norms in the field. In this way, the first step is to collect gender-disaggregated data as a preliminary foundation for achieving a greater understanding of the context in the field (Care, 2012).

By using these three methods together, we were able to collect sufficient data to identify what are the current gender norms in the two communes, which norms are changing, which norms are considered by the community to be important to preserve, and how these norms relate to career choices.

4.1 List of Interviewees

In total, we interviewed 55 people and 8 households for this study (see Table 1 for a full list). Considering that career choices are shaped by several factors, which can work as both facilitators and/or barriers for career pathways, we need to collect data from interviews with various stakeholders in Cambodia to truly understand the women's career pathways and what are the influential factors for them For example, in the interviews with households and students in TVET, we could get some beneficial information, which was what gender norms existed in the area, how they worked in daily life, and how the influence based on gender norms in daily life functioned in people's career choices. Additionally, in the interviews in provincial, district, commune offices, and the NGO, it was necessary to understand how such offices perceived the gender gaps existing locally and what polices or actions have been implemented to deal with them, and what changes have happened due to the effort. For these reasons, we implemented interviews with multilevel stakeholders to grasp the mechanism of people's career choices and the factors that surround and influential for the pathways.

Table 1: List of Interviewees and Data Collection Methods

Levels	Actors	Interviewees	Methods
Provincial	Provincial Department of Women's Affairs	7 people, including the deputy director	Semi-Structured Interview
Provincial	National Vocational Institute of Battambang	9 people, including the NVIB director, the NVIB vice director, and teachers	Semi-Structured Interview
District	Thmor Kol District Office	3 people, deputy chief chief of the office of human resources	Semi-Structured Interview
Commune	Tamoeun Commune Office	7 people, including the commune chief and commune counselors	Semi-Structured Interview
Commune	Bonsay Traeng Commune Office	2 people, the commune chief and secretary	Semi-Structured Interview
NGO	Banteay Srei	2 staff members	Semi-Structured Interview
Household	Tamoeun Households	4 households	Semi-Structured Interview
Household	Bonsay Traeng Households	4 households	Semi-Structured Interview
Student	TVET Students	8 boys 7 girls	Focus Group Discussion & Participatory Method
Student	Thmor Kol High School Students	5 boys 5 girls	Focus Group Discussion & Participatory Method

Source: Authors

4.2 Potential Biases and Solutions

We acknowledge some limitations in our methodology, which are described below.

1. Language Barriers and Translation Loss: While we had the help of a Cambodian research assistant and a university professor to translate from Khmer, the local language, to English, we recognize that the accuracy and cultural nuances of participants' responses may have been diminished or misinterpreted through translations. To address this limitation, we paid close attention to contextual cues and ask follow-up questions to help ensure that participants' intended meanings were accurately understood.
2. Unfamiliarity with Topic: Many concepts related to gender did not translate neatly into the local language

or cultural context, and our academic phrasing of some interview questions was challenging to communicate effectively to participants (households), which sometimes led to misunderstandings or oversimplifications. With the help of native Cambodians, we supplemented the questions with examples based on their daily lives, allowing the interviewees to better visualize and understand what we were asking.

3. Social Desirability Bias: Interviewees seem to want to present themselves in a positive light, particularly when discussing sensitive gender issues, which may have limited the openness and authenticity of their insights. For example, when male and female students were combined in the same discussion groups, the male students, in particular, tended to agree with and express more progressive and gender-equitable views, often emphasizing ideals of equality. However, we suspected these male students were simply expressing socially acceptable view given that the context of gender discussion in a classroom with girls that were openly expressing gender equality discourses.To address this, we conducted follow-ups within gender-segregated groups to reveal attitudes and beliefs that differed from those expressed in mixed groups. Once in the gender separeted groups, the male students became noticeably more vocal about their conservative beliefs, revealing underlying attitudes that contradicted their earlier statements.

Despite these constraints, this study placed particular emphasis on two aspects to better incorporate the perspectives of interview participants into the analysis: the atmosphere of the interviews and the handling of the interview data. To create a comfortable environment during interviews where interviewees can freely share their perceptions, values, and experiences, we exhibited receptive behaviors, including maintaining eye contact, nodding, smiling, and making eye contact. To interpret interview data precisely, we record the interview and listen to it several times, and then ask our translators to clarify any ambiguous responses.

5. Analysis

This section consists of two subsections. Section 5.1 explains the meanings and relationships of each component in the analytical framework shown in Figure 1, followed by an explanation of how this framework was developed based on interview analysis. Section 5.2 systematically discusses the process by which gender norms influence the actual career choices of interviewees, using the framework.

5.1 Introduction of Analytical Framework

As discussed in section 4, interviews were conducted to identify the gender norms that influence individuals' career choices. The interviews revealed that not only gender norms, but also other factors, substantially influence individual career choices. We classified those factors into four main categories: Social Norms, Family Decisions, Economic Situation, and Opportunities.

Social Norms refer to the shared expectations and beliefs about how people should behave within a group or society. Gender-related expectations and beliefs (Gender Norms) are included in this category as a subset of social norms. Any interview statement about expected roles for women, men, or a specific family member falls under the Social Norm category. Family Decision refers to decisions made within the household, including those made collectively by family members as well as individual decisions shaped by family expectations or obligations. Economic Situation refers to the financial conditions of households and the distribution of

resources among family members. Opportunity refers to the availability and accessibility of education and employment.

Figure 1 illustrates how these four significant factors interact and shape career choices. In the interviews, all four categories were identified as having direct relationships with career choices. These direct influences are represented by bold arrows in Figure 1. In addition to these direct influences, the mutual influences between social norms and the other three factors (Family Decision, Economic Situation, and Opportunity) were also observed. These relationships are illustrated by dashed arrows in Figure 1.

Section 5.1.1 explains how the direct relationships between each of the four factors and career choices were identified based on the interview data. Section 5.1.2 explains how interviews demonstrate the mutual relationships between social norms and family decisions, economic situation, and opportunities.

5.1.1 Direct Relationships Between the Four Factors and Career Choices

Family decision and Career Choices: The Tameoun commune chief claims that "the decision on labor migration is made in the whole family, and it is often made by parents" (Interview on Aug 27, 2025). Likewise, in household 4, the mother explained that she dropped out of primary school because her parents could not support her and needed her help with their agricultural work. These experiences suggest that the strong decision-making role of parents affects children's career choices. Additionally, one point specifically mentioned by TVET and NGOs is that they are trying to promote new strategies to change parents' values and encourage greater financial support for girls. This suggests that parental norms do influence women's access to education, and it has been recognized by policymakers.

Economic Situation and Career Choices: The general economic conditions of the families we visited in the communes were characterized by economic vulnerability. Household interviews revealed that many households had experienced children dropping out of school due to financial reasons. Although Cambodia provides free basic education, some children in Tameoun and Bonsay Traeng communes still face difficulties in accessing school, since they need to stop studying to help their mothers. For example, in household 3, the oldest four children left school at grade 4 or 5, and one daughter, who is currently in grade 5, also expressed her intention to stop studying so she can work and help her mother. Financial constraints also showed a direct link to career choices. For instance, the grandmother in household 2 mentioned that she could not pursue her dream job of owning a small business because she did not have enough funds to start it.

Opportunity and Career Choices: Whether a school or workplace is located near one's home can significantly impact career choices, especially for women. While the lack of opportunities is limited for all, its impact affects both genders differently. According to the TVET staff, one of the reasons for low female enrollment in higher levels of education is the long distance to school. While primary and secondary schools are in every village, high schools are often located far away. Considering that in household 5, the 16-year-old grandson knows how to use a motorbike, while the 18-year-old daughters do not, distance is a major obstacle for female students to access schooling. This case can also apply when they choose their employment. This limited range of occupations within the communes significantly influences individuals' career choices and often drives them to seek work outside their communities.

Social Norms and Career Choices: During the interview, social norms were not often mentioned as the

primary reason for the individual's current job choice. For example, sisters who are responsible for most of the housework in household 2 answered that “since the husband goes to work, the wives take care of children and parents” (Interview on Aug 27, 2025). Even for students in TVET and high school, gender-related norms were not mentioned as reasons for choosing their dream job. Earning money and whether they love the job were two popular reasons. However, TVET staff commented that since females often perceive these fields as male-dominated, few female students enroll in classes related to machinery, construction, and electricity. Indeed, TVET students also listed these occupations as common jobs for males.

These findings suggest that gendered career images do not serve as a direct reason for choosing a particular job, but they still do directly influence career choices by discouraging people from selecting specific types of work. Furthermore, women are expected to balance employment and family care, as there is an on-ground belief that women are the ones responsible for the household activities. Our interviews affirmed that there is a strong expectation that women should comply with these expectations and find jobs that would allow them to reconcile both responsibilities. Therefore, while social norms weren’t mentioned as the direct factor in career choices, it is clear that the norms are present throughout the decision-making process.

5.1.2 Mutual Relationship Between Social Norms and the Other Factors

Through the interviews, we primarily identified three social norms related to wives’ housework responsibilities, respect for parents, and female stereotypes. The following examples illustrate how these norms impact the Family Decision, Economic Situation, and Opportunities.

Social Norm and Family Decision: In the interview for district offices, they introduced norms that “children have to follow their parents and family decision” (Interview on Aug 27, 2025). In the household, they also highlighted the norm that “children must listen to their parents” as an important value passed from parents to children. This norm helps strengthen parents' authority within the family. Furthermore, according to the Tameoun commune chief, the Khmer norm that “the wife should be responsible for housework under the economic responsibility of the husband” contributes to a heavy household burden on females (Interview on Aug 27, 2025). Through the interviews with households and the Women’s Department Affair members, we also confirmed that women are more responsible for household chores and prioritize their families over their careers (Interview on Aug 27, 2025). These findings show that the family decision we identified is consistent with social norms.

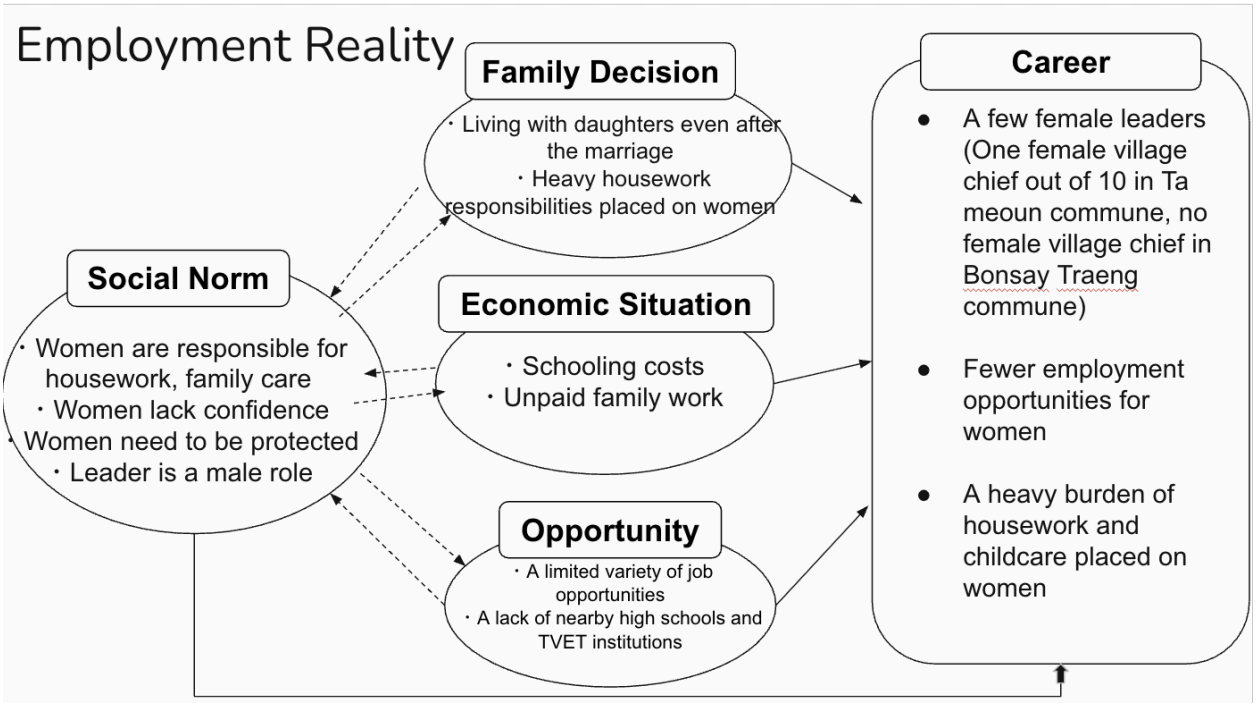
Social Norms and Economic Situation: Because of economic reasons, it is not always possible to provide all children with the same opportunities. For example, it is not always possible to send all children to school due to economic reasons. Through the interviews, we identified cases where women are less prioritized for schooling due to financial constraints. Nowadays, many parents or provincial people often mention that children can make their own choices independently, regardless of gender. However, if there are economic restrictions or family responsibilities, parents’ decisions can significantly impact their children, especially the choices made by female children. The statements from household 5, “We wish she could go to university, but we can’t afford it. We are already paying for university for her brother.” (Interview on Aug 28, 2025). In this household, the son received financial support for schooling while the daughter did not. This case implicit the impact of social norms on economic constraints, especially for women.

Social Norms and Opportunity: Female stereotypes that limit their access to schooling are confirmed in the interviews. TVET staff stated that the reason girls cannot go to high school when it is far away is due to "the gender norm that girls need to be kept safe" (Interview on Aug 26, 2025). The stereotype about female vulnerability that limits their mobility was also confirmed in the household interviews. For example, in household 5, an 18-year-old girl who just graduated from high school was not allowed to go to TVET. The grandfather in the same household explained that this is because the TVET school that she is interested in attending is far away and "she is not strong enough to use a motorcycle to go out" (Interview on Aug 28, 2025). This suggests that female stereotypes, such as "females are weak," influence their access to opportunities.

5.2 Specific Cases (Employment Reality)

Now, we proceed to assess how each factor is related to social norms and how they affect employment reality among young Cambodian females in more specific ways. Figure 2 illustrates the mechanism structure we identified. Taking a closer look at employment realities in the communes, three problems were observed through the interviews. The first problem is the lack of job opportunities, in which men are more covered and obtain better job options and leadership positions, while lacking female leaders at the commune level. The second problem is the fewer employment opportunities for women, as reported by the Department of Women Affairs, provincial offices, and NGO. The third problem is the heavier burden of housework and child-rearing placed on women. This trend was confirmed not only through household interviews but also through interviews with commune chiefs, the Department of Women Affairs, provincial offices, and NGO. The causes of these problems can be classified into all four categories.

Figure 2: Analytical Framework of Employment Reality



Source: Authors

Family Decision: Regarding Family Decisions, two primary factors affect women's career choices. The first is parents' preference to live together with their daughters. In fact, in the three-generation households we interviewed (households 2, 5, 7), the grandparents were living together with their married daughters. Similarly, one of the sons in household 3 had already moved to his wife's family after marriage, and the mother in household 8 stated that her daughter's future husband must live in her house. This expectation that women must remain with their families is likely to limit their career choices in the two communes, where a few varieties of employment options.

The second factor is the heavy housework responsibilities placed on women. One of the village chiefs in Tameoun commune noted that only 30% of husbands in the village assist with housework (Interview on Aug 29, 2025). Although husbands' participation in housework has increased recently, wives are still responsible for most housework tasks. Even among children, gender differences in housework roles were observed. In household 5, although the grandparents claimed that each household task was rotated, the 18-year-old granddaughter was mainly responsible for housework tasks, while the 16-year-old grandson had never done any housework and only helped with farming. These different family roles can contribute to future career differences between males and females.

Nowadays, many parents or provincial people often mention that children can make their own choices independently. However, if there are economic restrictions or family responsibilities, parents' decisions can significantly impact their children, especially the choices made by female children. The statements from household 4, "I can't allow her to go study, I need her help to take care of the house, she is the oldest daughter", explained that reality. Because the age of decision-making for their careers occurs when they are young and dependent on their parents, parents have a significant influence on their children when making decisions. The parents, particularly the mother, since the father is usually outside the house working, teach their daughters how to do the chores. Gradually, their responsibilities within the house will increase, and they will include in their daily routine doing the chores, which may affect studying hours and consequently their academic performance. So, whether the parents view education as valuable for their daughters strongly influences the decision.

During our interviews, many women mentioned they need their daughters' help because taking care of the house and the kids is too much work. When they see their moms working in the house, girls assume this is an expected behavior, which is enforced by the family decision to include their daughters in the housework dynamics. Therefore, when kids are growing, girls already have many household responsibilities, and because the parents need help in their house, they don't allow girls to pursue higher education or to go far away from the house to prioritize their career.

Economic Situation: The economic situation shows that women are the most affected by the vulnerable economic situation faced by the communes. The Report of Cambodia Socio-Economic Survey (2021) shows that women are disproportionately represented in unpaid family work, with 20.9% of women engaged in this category, compared to only 9.7% of men. This means that more than twice as many women as men are performing labor that is not formally recognized or compensated. Unpaid family work, often involving

agricultural labor or household responsibilities, contributes to the economy but is invisible in income statistics and offers no financial independence.

During our interview, every household mentioned financial problems. The problem starts in early levels, when children start going to school. It is not only about the cost of school fees, since basic level education is free. For example, a mother from household 6 highlighted her willingness to support her children's education, but expressed concern over whether she could truly "afford it." When asked about school fees, she clarified that the major financial struggle is not only the school fee, but also costs such as "computer fee, textbook fee, gas for transportation fee." So, those costs also push girls to drop out of school.

In household 5, two grandsons were supported to study at a university, whereas the youngest granddaughter was not. This family stated that "if they had sufficient money, they would like her to study at university" (Interview on Aug 28, 2025). This case suggests that when household budgets are limited, boys are more likely to receive financial support than girls.

During interviews and group discussions with TVET students and high school students, girls mentioned that they are expected to be financially independent and support their families from an early age. In this way, they need to prioritize earning money over pursuing higher levels of education to obtain better jobs.

In general, a common career for women is running small home-based businesses or engaging in small-scale agriculture and animal husbandry, which allow them to earn money to feed the family while continuing to manage household responsibilities.

Overall, the household interviews revealed that economic constraints limit educational attainment, particularly for girls, as they are less likely to be prioritized for financial support. This, in turn, can restrict their future employment choices.

Opportunity: Regarding Opportunity, there is a limited variety of jobs in the communes. Interviews with the commune chief of Tameoun and households revealed that the main occupations were in agriculture, small business, grocery celling, and teaching. Working in a factory in other regions of Cambodia or engaging in construction work in Thailand were also popular options, particularly in Bonsay Traeng communes. However, such opportunities were not available for those who had lost their spouses and needed to take care of their families, or to those who were not permitted to work far away from their parents.

Within the limited scope of job opportunities, the gender disparity is particularly visible in leadership positions. Women are underrepresented in local leadership positions, such as village chiefs and commune council members, limiting their voice in decision-making in both their lives and the public, highlighting their vulnerabilities (Battambang Provincial Department of Planning, 2024). Preliminary data from local commune records indicate that in both Tamoeun and Bonsay Traeng, the proportion of women in leadership or decision-making roles is noticeably low. In Tamoeun, women make up approximately 30% of village chiefs and 18% of the commune council (Battambang Provincial Department of Planning, 2024). Also, in Bonsay Traeng, there has never been a female village chief, and women currently hold around 30% of commune council positions (Battambang Provincial Department of Planning, 2024).

In rural areas, in addition to the lack of job opportunities available, education also shows evident disparities between boys and girls, especially in higher education. High schools and TVET institutions are located far

away, and concerns about girls traveling alone discourage their enrollment at the high school and university levels. Additionally, during the interview, we identified that even though girls do attend high schoolmany of them drop out before completing it.

As mentioned by TVET staff, because higher-level classes are only offered at the National Vocational Institute in Battambang (NVIB), which can be far from their homes. On the other hand, certificates, which offer secondary level vocational training for semi skilled to highly skilled workers, can be obtained closer to home in their community. Then, higher-level classes are dominated by more men, who are more likely to obtain higher diplomas and bachelor's degrees. The TVET data reveal a clear gender disparity in enrollment, with the proportion of women decreasing sharply in higher-level programs. In the general Professional Certificate programs, women make up 44.84% of the students (3,532 out of 7,877 students). This figure suggests a near-equal representation at the entry level. However, this balance is lost in the more advanced technical education. In the Technical Diploma programs, women's enrollment drops to just 9.47% (18 out of 190 total students). Similarly, in the Bachelor's programs, women account for only 15.5% of the students (16 out of 103 total students).

As a result, the lack of education directly limits women's career choices, as without higher diplomas or bachelor's of TVET, their opportunities in the labor market remain significantly narrower than those of men. Those situations demonstrate that opportunities disproportionately affect women and their career choices.

Social Norms: Social norms, which include gender norms, are closely related to the other three factors and have a significant influence on career choices. Those units are strongly reinforced by social norms. During our interviews, it was mentioned several times that women are expected to be responsible for household chores, take care of the house, and look after their younger siblings (Women's Affairs, Bounteay Srei, Household 1, 4, 7, etc.). The Women's Department Affair members stated that "women tend to prioritize their families over their careers," while the Tamoen Commune leaders stated that "it is common in Khmer culture for women to be the ones responsible for the household activities, and for the men to be the head of the household" (Interview on Aug 27, 2025). On the other hand, men are believed to deserve higher education more than women (Provincial Hall). Even the norm that "women need to be protected" (TVET students, Thmor Kol District Office) justifies keeping girls at home when schools are far. These interviews reveal prevailing social norms that women are the ones responsible for the household chores. This norm contributes to shaping women's roles within their families, often leading them to become primary housekeepers and caregivers.

Interviews with NGO, Banteay Srei, and village chiefs in Tameoun communes also revealed that even when women attain leadership positions, such as village leaders and school principals, they often step down from these roles. Bosay Traeng commune chief and NGO staff explained that this is caused by females' low self-confidence. The first female village chief in Tameoun communes also shared her experience that women were not easily trusted in leadership positions due to the belief that a leader is a male role. These norms make it challenging for women to maintain leadership positions. In this way, social norms affect how society sees women's roles within their communities, limiting their career choices.

6. Discussion

The previous section illustrates how gender norms affect career choices to the disadvantage of females, through multiple mechanisms that channel through family choices, economic situations, and opportunities. In this section, we first review existing policies and then critically assess them to identify areas that could be further addressed to enhance gender-equal career opportunities.

6.1 Existing Policies on Economic Participation and Leadership

Neary Rattanak VI, a comprehensive five-year plan developed by the Ministry of Women's Affairs, outlines six priority strategies, with Strategy I: Women's Economic Empowerment and Strategy V: Women in Leadership and Governance directly prioritizing women's economic participation and leadership. Strategy I focuses on integrating women into labor markets in order to increase their access to paid employment, based on the assumption that increased income generation can strengthen women's bargaining power within households. Strategy 5 focuses on increasing women's access to leadership roles in public institutions, local government, and community organizations, based on the assumption that increasing women's visibility in decision-making spaces challenges gender norms that restrict their advancement into leadership roles.

The "TVET 1.5 M" improves access to education for vulnerable youth by providing students with technical skills that are in demand in the local job market, thereby enhancing their future employability n more productive occupations. The program offers full financial support, including free tuition, dormitory, and a monthly living stipend, helping to remove key barriers to education for girls, particularly by ensuring safe housing away from home.

6.2 Existing Policies on Social Norms Promotion and Protection

Regarding social norms, there are policies focused specifically on their promotion and protection. The Third biggest accomplishment of Neary Rattanak VI, named "Promotion of Women's and Girls Education," describes the efforts of the National Committee for the Promotion of Social Morality, Women, and Kmer Family values to provide interventions and programs focused on the promotion of social values. One effort mentioned is to mitigate the negative influence that the internet has on young girls by promoting social values on online platforms. According to the policy, internet influence leads to inappropriate and immoral acts; therefore, national policies attempt to intervene and promote correct social values that are virtuous and decent.

In addition, Strategy II, "Promoting Social, Women, and Family Value," classifies as a top priority focused on maintaining a highly moral, civilised society. For this reason, the policy emphasizes the importance of promoting moral values, social values, women's values, and decency in the Cambodian family and society. Three of the four priorities within this strategy aim to promote, protect, and enforce those values.

The term "gender dividend" in Neary Rattanak's policy discourse refers to the economic and social returns that a society can gain by reducing gender inequality, especially through investing in women's education, health, employment, and leadership. Gender equality is presented as a driver of human capital development and labor productivity rather than solely as a rights-based objective.

6.3 Critical Discussion

Career choices are not solely determined by individual preferences or gender norms rooted in Cambodia. They are affected by four interacting factors: “social norms,” “family decisions,” “economic situation,” and “opportunities.” The most significant finding is the cycle structure where gender norms (e.g., “women should be responsible for household chores and family care”) shape the other three factors, and the resulting career realities (e.g., women’s concentration in low-education, low-skill jobs) in turn reinforce those norms. The policies and programs we have just shown some clearly have achievements. Women now have more opportunities, such as in leadership positions, free tuition and dormitories at TVET, and empowerment projects by NGOs. Those programs are especially important by eliminating one of the main obstacles to girls' education by guaranteeing safe accommodation away from home through the provision of free dormitory. So we could observe some progress in gender equality.

However, as shown in the chart, it is not fully effective unless other conditions are met (e.g., even if education is free, if parents still deny, girls cannot attend). Additionally, Most policies and programs primarily focus on women, encouraging them to study, work, and lead. On the other hand, there are very few programs for men, and men’s attendance in gender trainings is still low. For example, the Good Men’s Network is a positive initiative, but it is still limited in scale and impact. Many men attend only the sessions that are specifically for men, but they tend to avoid those focused on women. This means the lack of understanding between men and women can remain.

As Women’s Affairs said, “There is a change in mindset.” The mindset towards gender norms has been changing in line with new policies. Based on our fieldwork experience, we argue that the mindset change pertains to women’s economic role. During the interviews, when asked about what jobs men or women should do, the general answer included: “men and women can choose whichever career they want”; “the times are changing, now there is no separating between what men or women can do.” However, when analysing the statements in accordance with the policies, it becomes clear that the intention of the promotion of mindset change is to increase the number of working women and take advantage of their dividends.

Regarding women’s social role, the national law emphasizes the importance of promoting moral social values. Some important values that the Tamoen Commune leaders mentioned as being important to protect included: “1- men should be the head of the household; 2- women should be responsible for household chores.” When asked which values should change, they mentioned that “men should change how they see women, stop seeing them as a possession item, and start to see them as partners, with different roles in the family” (Interview on Aug 27, 2025). When we asked the Women’s Department Affairs what the immoral values they want to combat are, they mentioned “it is immoral for women to wear provocative clothes,” “the internet makes girls behave promiscuously.” Finally, during the TVET interview, we learned that “one of the most important Khmer values is to protect their girls’ virginity. If we fail to protect girls’ virginity, we lose our value as Khmer people. That’s why we can’t let our girls be away from the house.” Therefore, by having policies that directly preserve some values that keep women’s social role submissive to men, the current policies do not bring true empowerment, but rather focus on economic empowerment only.

Although mindsets are starting to change, these barriers persist. As a result, women’s choices remain more limited than those of men, particularly in higher education and career options. To achieve more gender equality, it is essential to break the cycle. Additionally, it is also important not only to change people’s awareness but

also to intervene in the family decision-making processes and structures that maintain these norms.

7. Policy Recommendations and Conclusion

7.1 Policy Recommendations

This study argues that current policy frameworks in Cambodia primarily target women's economic empowerment rather than their social empowerment. With the understanding that economic empowerment is often considered a precondition for normative change, and building on the findings of this study, we offer the following recommendations, which aim to promote gender equality in Battambang by addressing social empowerment not only in career choice, but also in the family decision-making process, economic conditions, and available opportunities through which gender norms operate.

7.1.1 Changing Men's Social Roles

Due to the lack of initiatives targeting men's involvement in advocating for gender equality, addressing masculinity and men's roles in sustaining gender norms is largely disregarded. One approach to address this gap is the expansion of the Good Men's Network, an initiative led by the NGO Banteay Srei. The program encourages men to prevent gender-based violence and recognize unpaid housework as legitimate work. By promoting the idea that household labor is a shared responsibility, this program challenges traditional norms that assign domestic work exclusively to women. Another approach is the development of public education on masculinity, such as workshops challenging the belief that "men must be strong providers," Increasing the number of programs aimed at men can overcome the low participation rates of men in gender equality initiatives.

7.1.2 Changing Women's Social Roles

Women's social roles are not only shaped by economic success, but also by perspectives on safety and autonomy. In particular, the belief that "women should be protected" limits girls' educational opportunities. One approach to address this is through the expansion of safe housing away from home based on the TVET model. TVET's free, school-monitored, dormitory model should be extended to high schools and higher education institutions in rural areas, allowing young women to safely commute and reside far from home. By reducing parent's safety concerns, this expansion could remove one of the key barriers that prevent families from allowing daughters to pursue further education.

7.1.3 Addressing Structural Barriers

Under Neary Rattanak VI Strategy 1, the government could introduce programs that provide grants or initial investment funds to women pursuing education or employment in high-paying, non-traditional fields (such as technology, construction, and electrical engineering) that are traditionally dominated by men. This has the potential to enhance the return on investment in higher education, encourage parents to recognize the economic value of investing in their daughters' education, and break down the limitations of traditional, norm-based career choices. Under Strategy 5, commune-level awareness-raising initiatives could be strengthened to target households with girls who are not continuing their education. Local education stakeholders (school

principals, TVET staff) and commune councils could raise awareness among parents that perceptions (e.g., “eldest daughters’ household responsibilities” or “prioritizing sons’ education”) limit daughters’ educational opportunities, emphasizing the long-term economic benefits of investing in girls’ education.

7.2 Conclusion

Women's economic empowerment is given a lot of weight in Cambodia's existing government policy frameworks and grassroots programs; this study argues that social empowerment deserves equal consideration. Economic gains do not automatically translate into gender norms transformation. Gender norms such as masculinity, protection, and proper roles for men and women must be continuously challenged as a part of policies intending to improve women's livelihoods. Additionally, this study further advocates for inclusive policy approaches that specifically target gender norm-influenced family decision-making, economic situations, and opportunity structures that directly impact women’s career choices. By addressing these interconnected factors, policies can move beyond surface-level norm change and more effectively achieve gender equality in rural Cambodia.

References

Asian Development Bank. (2015). *Gender equality in the labor market in Cambodia*. Asian DevelopmentBank.

Battambang Provincial Department of Planning. (2024). *Commune Bansay Traeng (Code: 20209): State of socio-economic conditions 2024* (Commune/Sangkat database, December 2023).

Battambang Provincial Department of Planning. (2024). *Commune Ta Meun (Code: 20202): State of socio-economic conditions 2024* (Commune/Sangkat database, December 2023).

Bicchieri, C. (2005). *The grammar of society: The nature and dynamics of social norms*. Cambridge University Press. https://doi.org/10.1017/CBO9780511616037

Evans, A. (2019). How cities erode gender inequality: A new theory and evidence from Cambodia. *Gender & Society, 33*(6), 961–984. https://doi.org/10.1177/0891243219873784

Food and Agriculture Organization of the United Nations. (2023). *National gender profile of agriculture and rural livelihoods: Cambodia* (Country Gender Assessment Series). FAO. https://doi.org/10.4060/cc8398en

Ginwal, R., Kumar, D., Lohani, J., Pande, R., Padam, & Bisht, S. (2022). Influence of gender on career choice. *International Journal of Scientific Development and Research, 7*(12).

Hunter, C. (2022). *Gender equality deep-dive for Cambodia*. United Nations Resident Coordinator's Office in Cambodia.

International Labour Organization. (2019). *Skills and employment: The gender dimension of TVET in Asia and the Pacific*. ILO Regional Office for Asia and the Pacific.

Ministry of Women's Affairs. (2024). *Neary Rattanak VI*. Ministry of Women's Affairs. https://mowa.gov.kh/en/nearyrattanakenvi

Ridgeway, C. L. (2013). *Framed by gender: How gender inequality persists in the modern world*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199755776.001.0001

Room to Read. (2020). *Girls' education program in Cambodia: Empowering girls to stay in school and succeed*. Room to Read Cambodia.

Seehuus, S. (2021). Gender differences and similarities in work preferences: Results from a factorial survey experiment. *Acta Sociologica, 66*(1). https://doi.org/10.1177/00016993211060241

UNESCO. (2018). *Education for All 2015 national review report: Cambodia*. UNESCO.

UNICEF. (2020). *Advancing positive gender norms and socialization through UNICEF programmes: Monitoring and documenting change*. UNICEF.

List of Individual and Company Donors to the Overseas Fieldwork Fund
(In order of receipt)

Year 1991

Otake Corporation
Tsushima Kogyo Co., Ltd.
Tomita Co., Ltd.
Showa Seiyaku Co., Ltd.
Hotta Setsubi Kogyo Co., Ltd.
Sankichi Kondo, CPA
Nakamo Sun Route Co., Ltd.
Hayashi Yaokichi Co., Ltd.
Kazuo Oguri
Matsukazeya Co., Ltd.
Toyota Motor Corporation
The Kitankai
Hoyu Co., Ltd.
Daito Sanshin Co., Ltd.
Yamasei Sangyo Co., Ltd.
Tachibana Shouten Co., Ltd.
Asahi Kako Co., Ltd.

Year 1992

Sintokogio, Ltd.
Dai Nippon Construction
TOENEC Corporation
Aichi Toyota Motor Co., Ltd.
The Tono Shinkin Bank
The Juroku Bank, Ltd.
UNY Co., Ltd.
The Ogaki Kyoritsu Bank, Ltd.
Pacific Industrial Co., Ltd.
Toyoda Gosei Co., Ltd.
Nippondenso Co., Ltd.
Aisin Seiki Co., Ltd.
Toyota Tsusho Corporation
Taguchi Fukujukai Foundation
The Aichi Bank, Ltd.
The Bank of Nagoya, Ltd.
The Chukyo Bank, Ltd.
Aichi Steel Corporation
The Daisan Bank, Ltd.
Toyoda Machinery Corporation
Chubu Electric Power Co., Inc.
Okaya & Co., Ltd.
The Tokai Bank, Ltd.
Central Japan Railway Company
Nagoya Railroad Co., Ltd.
Toyota Industries Corporation
Japan Transcity Corporation
Takisada Co., Ltd.
The Hyakugo Bank, Ltd.
Shikishima Baking Co., Ltd.
Chuo Seisakusho, Ltd.
Toyoshima & Co., Ltd. Nagoya headquarter
Toho Gas Co., Ltd.
Matsuzakaya Co., Ltd.
Maruei Department Store Co., Ltd.
Muto Shoukai Co., Ltd.
Yoshiyuki Hattori, CPA
Nagoya Mitsukoshi, Inc.
CPA Mitsuoka Akira Office
Howa Setsubi Kogyo Co., Ltd.
Kowa Company, Ltd.
Daido Steel Co., Ltd.
Sankyo Kasei Sangyo Co., Ltd.
NGK Spark Plug Co., Ltd.
NGK Insulators, Ltd

海外実地研修基金に拠出いただいた個人・企業一覧（受け入れ順）

平成 3 年度

株式会社大竹製作所
津島興業株式会社
富田株式会社
昭和製薬株式会社
ホッタ設備工業株式会社
公認会計士　近藤三吉
株式会社ナカモ・サンルート
株式会社林八百吉商店
小栗和夫
株式会社松風屋
トヨタ自動車株式会社
社団法人キタン会
ホーユー株式会社
大東三進株式会社
山清産業株式会社
株式会社立花商店
朝日化工株式会社

平成 4 年度

新東工業株式会社
大日本土木株式会社
株式会社トーエネック
愛知トヨタ自動車株式会社
東濃信用金庫
株式会社十六銀行
ユニー株式会社
株式会社大垣共立銀行
太平洋工業株式会社
豊田合成株式会社
日本電装株式会社
アイシン精機株式会社
豊田通商株式会社
財団法人田口福寿会
株式会社愛知銀行
株式会社名古屋銀行
株式会社中京銀行
愛知製鋼株式会社
株式会社第三銀行
豊田工機株式会社
中部電力株式会社
岡谷鋼機株式会社
株式会社東海銀行
東海旅客鉄道株式会社
名古屋鉄道株式会社
株式会社豊田自動織機製作所
日本トランスシティ株式会社
瀧定株式会社
株式会社百五銀行
敷島製パン株式会社
株式会社中央製作所
豊島株式会社名古屋本社
東邦ガス株式会社
株式会社松坂屋
株式会社丸栄
株式会社武藤商会
公認会計士　服部義之
株式会社名古屋三越
公認会計士　光岡朗事務所
朋和設備工業株式会社
興和株式会社
大同特殊鋼株式会社
三協化成産業株式会社
日本特殊陶業株式会社
日本ガイシ株式会社