UNLOCKING NEW SOURCES OF AGRICULTURAL GROWTH:

ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE

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Content

List of Abbreviations

ABA	: ABA Bank (Cambodia) Plc. (Advanced Bank of Asia)
AC	: Agricultural Cooperative
ADB	: Asian Development Bank
ARDB	: Agricultural and Rural Development Bank
CGCC	: Credit Guarantee Corporation of Cambodia
COVID-19	: Coronavirus Disease 2019
FTB	: Foreign Trade Bank of Cambodia
GDA	: General Directorate of Agriculture (Ministry of Agriculture, Forestry and Fisheries)
GDB	: General Department of Budget (Ministry of Economy and Finance)
GDP	: General Department of Policy (Ministry of Economy and Finance); also Gross Domestic Product
ISIC	: International Standard Industrial Classification
LDC	: Least Developed Country
MAC	: Modern Agricultural Community
MAFF	: Ministry of Agriculture, Forestry and Fisheries
MEF	: Ministry of Economy and Finance
MFI	: Microfinance Institution
NBC	: National Bank of Cambodia
NGO	: Non-Governmental Organisation
REGS	: Rice Export Guarantee Scheme
RGC	: Royal Government of Cambodia
SME	: Small and Medium Enterprise
SME Bank	: SME Bank of Cambodia Plc.
USD	: United States Dollar

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This study also benefited enormously from interviews with Agricultural Cooperatives (ACs) and Modern Agricultural Communities (MACs) across the provinces of Takeo, Kandal, Kampong Chhnang, Kampong Thom, Siem Reap and Tboung Khmum. Their lived experiences, challenges and aspirations provided essential ground-level perspectives that anchored the research in Cambodia's agricultural realities.

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Abstract

This research proposal, titled 'Unlocking New Sources of Agricultural Growth: Assessing the Role of Finance in Modern Agriculture', aims to explores the role of finance in unlocking growth opportunities for Cambodia's agricultural sector, with a particular focus on Modern Agricultural Communities (MACs). Agriculture is a key driver of Cambodia's economy, contributing significantly to GDP and employing a large proportion of the rural population. Despite its importance, the sector faces substantial barriers in accessing affordable and tailored financial services, hindering its modernisation and growth potential. MACs, as a recent government initiative, aim to enhance agricultural productivity, market access and resilience to climate change through collective farming models and professional management. However, these cooperatives face challenges such as limited credit access, high interest rates and governance issues. This research assesses the current financing landscape for MACs, identifies key gaps and challenges and evaluates innovative financial mechanisms that could promote sustainable and climate-resilient agricultural growth. The study aims to propose policy recommendations and financial strategies to improve access to finance, attract investment and strengthen the operational efficiency of MACs. The significance of the study lies in its potential to contribute to Cambodia's economic transition as the country prepares to graduate from Least Developed Country (LDC) status in 2029. By improving financial access and supporting agricultural cooperatives, the research aims to enhance the sector's resilience to climate change, boost productivity and increase market competitiveness. The findings will inform policy recommendations to improve financial access and support the modernisation of agriculture in Cambodia, ensuring its long-term sustainability and food security in the face of climate change. Ultimately, this research aims to contribute to the development of inclusive financial models that drive agricultural modernisation, enhance competitiveness and support long-term sustainability in Cambodia's agricultural sector.

1. Introduction

1.1 Overview of Agricultural Finance

What is Agriculture?

Agriculture plays a fundamental role in economic development, encompassing the cultivation of crops, livestock production and natural resource management. It is broadly defined as the practice of soil cultivation, crop production and animal husbandry, along with the preparation and distribution of agricultural products for human consumption (National Geograpic 2024). The Asian Development Bank (ADB) conceptualises agriculture as a multidisciplinary field involving the production, processing, marketing, distribution, utilisation and trade of food, feed and other products. The ADB further emphasises the significance of sustainable agricultural practices in enhancing productivity, conserving natural resources and maintaining environmental balance (ADB 2015). Similarly, the World Bank provides a comprehensive definition of agriculture, encompassing activities related to agriculture, hunting, forestry and fishing, in line with divisions 1–5 of the International Standard Industrial Classification (ISIC). Within this framework, rice is identified as Cambodia's dominant crop, contributing over one-fourth of the country's agricultural GDP and accounting for 40% of the total value added in the agricultural sector (World Bank 2015). In the Cambodian context, the Ministry of Agriculture, Forestry and Fisheries (MAFF) defines agriculture as the backbone of the national economy, sustaining food security, household income and the livelihoods of 80% of the rural population. The ministry underscores the need for productivity enhancement, diversification and commercialisation while promoting sustainable practices in livestock farming, aquaculture, forestry and fisheries. Additionally, it highlights the importance of institutional capacity-building, the efficiency of agricultural support services and human resource development to strengthen the sector's long-term resilience and competitiveness (MAFF 2015).

Key Term Explanation: Modern Agricultural Community (MAC)

In this report, the term Modern Agriculture refers specifically to the Modern Agricultural Community model promoted by the Royal Government of Cambodia. The terms Modern Agricultural Cooperative and Modern Agricultural Community are used across different literature and official sources, with both carrying the same meaning and describing the same institutional model. For clarity and consistency, this report exclusively uses the term Modern Agricultural Community (MAC).

MACs represent a new generation of farmer organisations characterised by collective production, reduced costs, joint management, professional governance, shared investments and structured market engagement. They differ fundamentally from traditional Agricultural Cooperatives (ACs) by operating with a business-oriented model, stronger governance mechanisms and a clearer commercial focus designed to improve productivity, reduce costs and enhance market power.

By standardising terminology throughout the report, readers can better understand the analytical comparisons, survey findings and policy recommendations related to Cambodia's transition towards modernised, community-based agricultural development.

Snapshot of Agriculture's Contribution to Economic Growth

Cambodia's agricultural sector remains a cornerstone of the country's economic growth. Before Covid-19, agriculture contributed approximately 20.7% of the country's GDP; it employed a significant portion of the labour force (around 31.2%) as of 2019, with annual growth of 1.7% over 2010–2019.[1] The sector continued to record a positive growth rate between 0.6% and 0.8% from 2020 to 2024, and contributed around 16.7% to GDP in 2024.[2] However, limited access to affordable credit has constrained agricultural productivity and

[1] Asian Development Bank (ADB) 2024.
[2] Ministry of Agriculture, Forestry and Fisheries (MAFF) Annual Report 2024.

modernisation. To address these challenges, the Royal Government of Cambodia (RGC) has developed a comprehensive approach to agricultural financing, integrating policy interventions, financial incentives and institutional reforms.

Summary of Existing Policies and Financing Intervention

The state-owned Agricultural and Rural Development Bank (ARDB) plays a crucial role in agricultural finance by providing loans to small and medium-sized enterprises (SMEs), smallholder farmers and ACs. These loans help relevant key players access credit for their agricultural production, storage and processing activities (ARDB 2024). The lowest interest rate provided by ARDB is 5% per annum, which is made available to rice millers and rice processing companies under the government special fund program; meanwhile, rates of 8%–11% per annum are charged to smallholder farmers, and 7%–9% per annum are charged to ACs, MACs and MSMEs, limiting their opportunities to access finance. However, the interest charged varies slightly depending on the sources of funds available, and these rates are still much lower than the industry average. In addition, the Rice Export Guarantee Scheme (REGS), launched in 2024 by the Credit Guarantee Corporation of Cambodia (CGCC), established an initial fund of USD 30 million to assist rice exporters and millers in securing working capital loans despite insufficient collateral. This initiative aligns with Cambodia's goal of exporting 1 million tons of rice by 2025 (CGCC 2024). Under REGS, participating financial institutions (PFIs) provide a high loan-to-value of up to 250% of the collateral value or up to 3 million dollars under CGCC's guarantee to rice exporters and rice millers looking to expand their rice export operations.

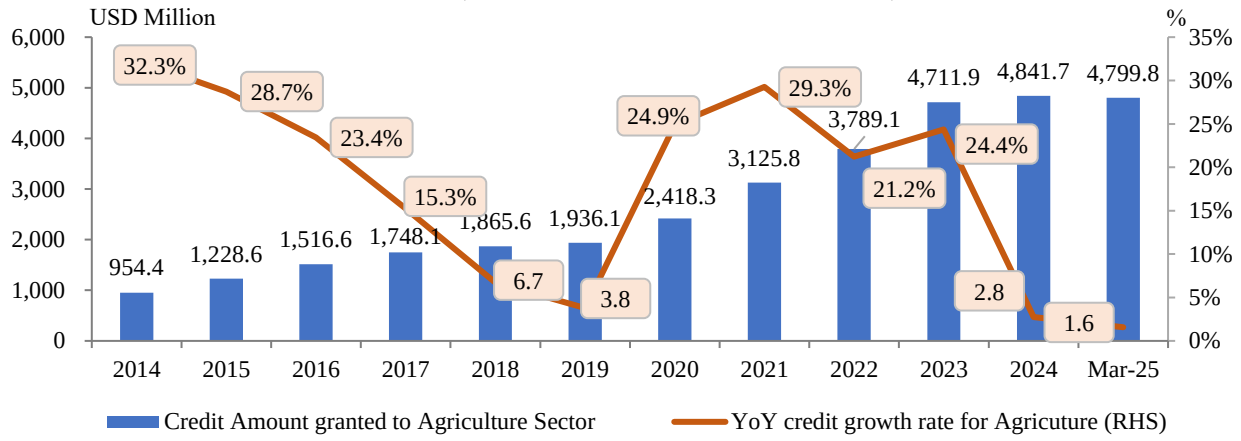
Further, the Small and Medium Enterprise Bank of Cambodia (SME Bank) has implemented two phases of the SME Co-financing Scheme to enhance financial access for SMEs, including those in the food sector, a subset of agro-processing (SME Bank, n.d.). This initiative is part of the government's effort to support businesses during the post-COVID-19 pandemic through providing financing to SMEs in an effective and sustainable manner across various sectors, including agro-processing and food production, with an interest rate from 6.5% per annum and under collaboration with other PFIs. The scheme aims to facilitate access to financing for SMEs, promoting growth and development in these industries.

Despite these initiatives, significant challenges remain in financing Cambodia's agricultural sector. Many smallholder farmers and ACs still face difficulties in securing affordable loans owing to stringent collateral requirements, high interest rates and limited financial literacy. The dominance of informal lending further complicates access to formal financial institutions. Additionally, climate-related risks, such as floods and droughts, discourage financial institutions from expanding agricultural loan portfolios. There is also a lack of tailored financial products that align with the seasonal nature of agricultural production. Addressing these gaps requires enhanced risk-sharing mechanisms, financial education programs and the development of innovative financial instruments to ensure inclusive and sustainable agricultural growth.

Agricultural Financing Review

Credit to the agricultural sector from banking institutions has seen a dramatic increase since 2014, with an average annual growth rate of around 25%. However, this growth slowed to 7% in 2018, primarily owing to adverse weather conditions and a reduction in sectoral productivity, which made banks reluctant to provide loans to the sector (The Phnom Penh Post 2020). From 2019 to 2023, there was a dramatic increase in credit provided to the agricultural sector by Cambodian banking institutions. Loans to agriculture surged from a mere USD 1.9 billion to USD 4.7 billion attributed to the rising demand for agricultural production during the Covid-19 pandemic (Ly et al. 2021). However, starting from 2024, the growth in lending rates began to decelerate, resulting in only a 2.8% increase in agricultural credit during 2024 and a modest 1.6% year-on-year rise as of March 2025. This slowdown reflects the sector's persistent challenges, including volatile commodity prices, the adverse effects of climate change and banks' cautious lending stance amid heightened risk perceptions and broader economic uncertainty (David 2024).

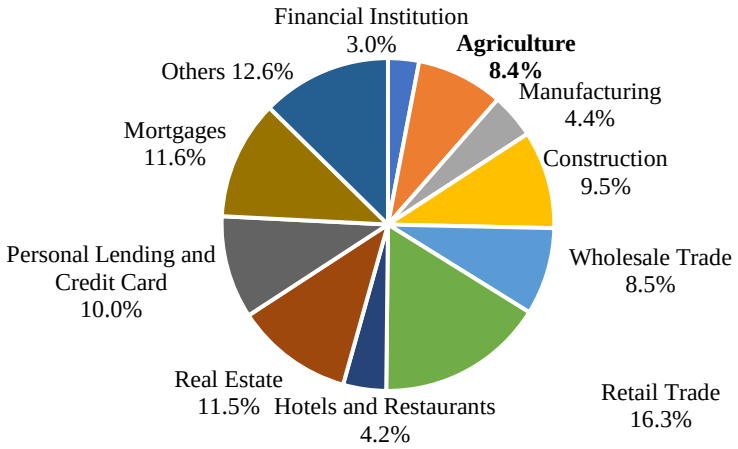
Figure 1: Credit to the Agricultural Sector from Banking Institutions During the Last Decade
(In million USD, 2014 – March 2025)



Source: National Bank of Cambodia

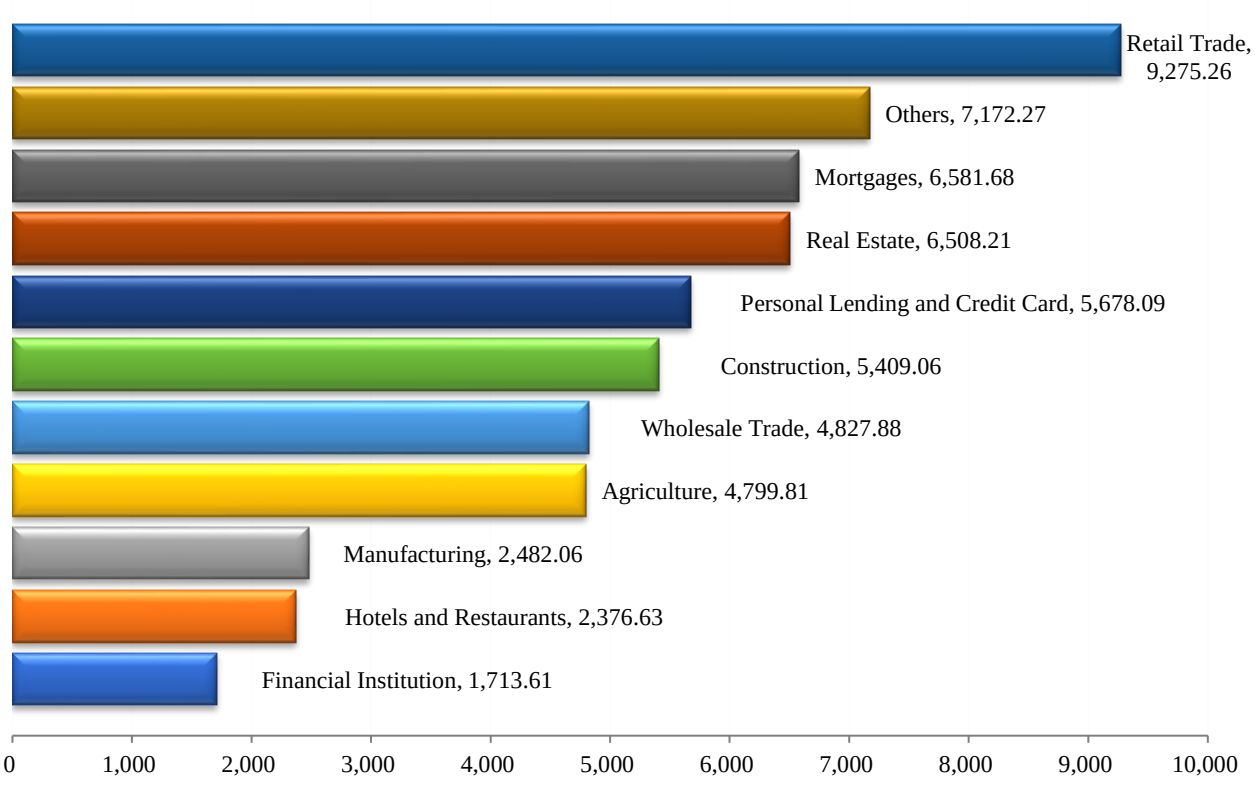
The credit share allocated to agriculture remains modest, at about 8.4% (accounting for around USD 4.8 billion) in March 2025. This is relatively low compared to credit extended to other sectors such as construction, real estate, retail and mortgages (see Figures 2 and 3). While agriculture accounts for a significant portion of Cambodia's GDP and rural employment, banking institutions allocate the sector a smaller proportion of total credit owing to perceived risks, lower profitability and seasonal income variability. The recent decline in the share of agricultural financing can be attributed to the diversification of loan patterns towards non-agricultural sectors, such as textiles, tourism and manufacturing, which have seen increases in their share in recent years (David 2024). There have been differences in interest rates between banks and microfinance institutions (MFIs) with banks charging lower interest rates on agricultural loans compared to MFIs. These authors also noted that the interest rates on credit to the agricultural sector were similar to those for other sectors, with the majority of loans having maturities of over three years. Most bank borrowers preferred instalment repayment, while MFI borrowers favoured balloon payments, with some choosing seasonal repayment as well (Heng and Sarun 2016). Consequently, the difference in interest rates between banks and MFIs, along with varying repayment structures, adds complexity to the financing of agriculture, particularly for smallholder farmers and cooperatives, who often struggle to meet the financial terms set by these institutions.

Figure 2: Credit by Sector from Banking Institutions
(by March 2025)



Source: National Bank of Cambodia

Figure 3: Loans Granted by Banking Institutions to Various Sectors
(In Million USD, March 2025)



Source: National Bank of Cambodia

1.2 Research Objective

This study seeks to explore and evaluate the role of finance in unlocking new sources of agricultural growth in Cambodia by focusing on MACs. The specific objectives are to:

- assess the current financing landscape for the agricultural sector and MACs
- examine international experiences to identify best practices in financing modern agriculture
- identify key challenges and barriers that hinder MACs from accessing adequate financial resources
- design financing policy recommendations to improve access to finance and strengthen the sustainability of MACs.

1.3 Significance of the Study

This study holds significant importance for Cambodia's agricultural transformation, particularly in advancing the role of finance in supporting MACs. The impacts can be categorised into three main dimensions:

Economic Impact

- Supporting Cambodia's transition beyond Least Developed Country (LDC) status in 2029 by ensuring agriculture remains a strong and competitive pillar of the economy.
- Driving economic diversification through the modernisation of agriculture, enabling the sector to contribute more broadly to national growth.
- Boosting agricultural productivity and competitiveness by strengthening access to finance and enabling MACs to adopt modern technologies, infrastructure and farming practices.

Social Impact

- Promoting rural economies and advancing inclusive development by empowering MACs to improve collective bargaining power, expand market access and enhance smallholder farmers' livelihoods.
- Creating opportunities for rural communities to actively participate in Cambodia's broader socio-economic transformation, thereby reducing inequalities between urban and rural areas.

Environmental Impact

- Enhancing climate resilience and sustainable practices by supporting climate-smart agriculture, efficient resource management and innovative financial models that reduce vulnerability to climate risks.
- Fostering sustainable agricultural finance through policies and financial mechanisms that encourage long-term resilience, environmental sustainability and responsible investment.

2. Research Methodology

This study adopts a qualitative, practice-based research approach to explore how financial mechanisms can unlock new sources of growth in Cambodia's agricultural sector. Specifically, it investigates how enhancing access to finance for MACs can stimulate growth, increase resilience and support sustainable agricultural development. The methodology integrates a desk review, case studies, stakeholder analysis, a policy review, field consultations and semi-structured questionnaires to produce evidence-based insights and actionable policy recommendations.

Desk Review

The desk review consolidates existing knowledge on agricultural finance models, with a focus on MACs. It examines barriers to financing, the role of financial institutions and the policy landscape in Cambodia, as well as comparative insights from countries with successful agricultural finance strategies. This provides the foundation for identifying financing gaps and opportunities in the Cambodian context.

Case Studies

Case studies from selected countries that have successfully implemented agricultural finance mechanisms are analysed. These cases highlight best practices in financing smallholder farmers and MACs, offering lessons for designing innovative financial products, risk-sharing models and policy instruments applicable to Cambodia.

Stakeholder Analysis

A comprehensive stakeholder analysis maps and assesses the roles, power and interests of key actors in Cambodia's agricultural finance ecosystem, including government agencies, financial institutions (commercial banks, MFIs, ARDB, SME Bank), MACs, NGOs and development partners. This analysis uncovers constraints and identifies potential collaboration pathways to expand financial access.

Policy Analysis

Cambodia's current financial and agricultural policies are critically reviewed to evaluate how they affect MACs' ability to access finance. Policies such as the National Strategy for Agricultural Development (2019–2030), Industrial Development Policy (2015–2025) and the Pentagonal Strategy Phase I are assessed for alignment with climate-smart and inclusive agricultural development. Policy gaps are identified, and evidence-based recommendations proposed.

Field Survey and Key Informant Interviews (KIIs)

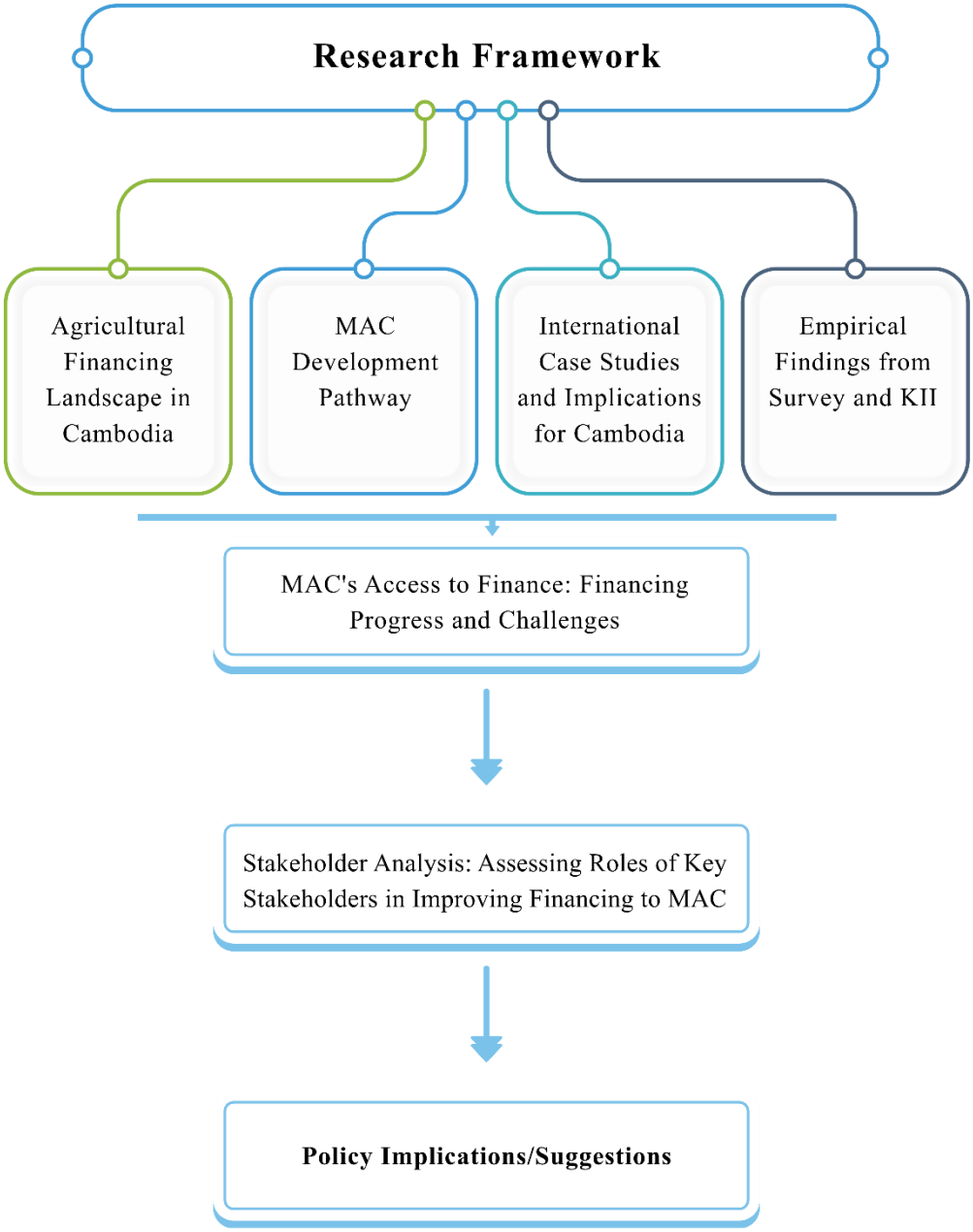
To collect primary data, field consultations and semi-structured interviews were conducted with the following stakeholder groups:

- **Government and State-owned Institutions:** Key public agencies and financial bodies were consulted to understand policy priorities, credit guarantee mechanisms and financing strategies for agriculture. These include the General Department of Policy (GDP) and the General Department of Budget (GDB) of the Ministry of Economy and Finance (MEF), the General Directorate of Agriculture (GDA) of the MAFF, the Small and Medium Enterprise Bank of Cambodia (SME Bank), and the CGCC.
- **Private Banks and Financial Institutions:** Major banks and financial service providers were engaged to capture perspectives on lending practices, financial product design and challenges in financing agriculture. These include ACLEDA Bank, Canadia Bank, Wing Bank, Chip Mong Bank and Foreign Trade Bank (FTB). Two institutions, KB PRASAC Microfinance Institution and ABA Bank, were invited but declined to participate.
- **Modern Agricultural Communities (MACs):** A total of 12 MACs across six provinces (Takeo, Kandal, Kampong Chhnang, Kampong Thom, Siem Reap, and Tboung Khmum) were included, involving 48 individual respondents. Participants were board of director members and farmer representatives. These consultations provided grassroots insights into financing needs, barriers to accessing credit, operational challenges and readiness for scaling up through innovative financing.
- **Agricultural Cooperatives:** A total of six ACs across six provinces (Takeo, Kandal, Kampong Chhnang, Kampong Thom, Siem Reap, and Tboung Khmum) were included, with 26 individual respondents. Like MACs, participants were drawn from community management team and farmer members, including presidents, vice presidents, accountants and farmer members. This provided comparative perspectives on financial access, governance practices and cooperative challenges in agricultural modernisation.

3. Research Framework

The research framework guiding this study integrates four core analytical components and three sequential assessment layers to examine how finance can strengthen the development and scaling of MACs in Cambodia. This structured framework allows the study to assess the agricultural financing ecosystem, evaluate MAC readiness, incorporate international lessons and derive policy directions based on empirical evidence.

Figure 4: Research Framework for Accessing Roles of Finance to MACs



Source: Authors

i. Agricultural Financing Landscape in Cambodia

The first component provides an overview of Cambodia's agricultural financing landscape by examining the overall credit flowing to the agriculture sector and the distribution of credit across key subsectors. It focuses on existing financing policies and current patterns of credit allocation, highlighting how financial resources are directed within agriculture. This section establishes the baseline conditions for agricultural credit supply, helping to identify structural gaps and opportunities for strengthening policy support to the sector.

ii. MAC Development Pathway

The second component assesses the emerging model of MACs, introduced in 2023 as part of Cambodia's national agenda to modernise the agricultural sector. Within the research framework, this

section examines MACs as structured, community-based agribusiness entities that operate through collective purchasing, production and selling under professional management. It evaluates their expected benefits—such as economies of scale, enhanced market linkages and improved value chain integration—as well as key constraints including governance gaps, uneven capacity and significant implementation costs.

iii. International Case Studies and Implications for Cambodia

The third component synthesises lessons from six international models—Thailand, Vietnam, Indonesia, China, India and South Australia—to understand how comparable countries have structured cooperative development and agricultural financing. It identifies effective instruments (e.g. specialised agricultural banks, credit guarantees, interest rate subsidies, cooperative legal frameworks, digital finance tools) and extracts practical implications for Cambodia. These insights inform the design of suitable financial mechanisms and institutional arrangements that could support MAC development in the Cambodian context.

iv. Empirical Findings from the Survey and KIIs

This last analytical component incorporates first-hand evidence from stakeholder surveys and key informant interviews (KIIs). It captures perceptions of banking and financial institutions, government agencies, development partners and MAC leaders regarding financing gaps, credit constraints, risk perceptions, institutional roles and opportunities. The empirical assessment allows the study to validate or contrast findings from the literature and case studies, ensuring that policy recommendations reflect actual conditions on the ground.

v. Sequential Analytical Layers

a. **MAC Access to Finance: Progress and Challenges**

After establishing the four knowledge pillars, the framework evaluates MACs' real-world access to finance. This section consolidates findings on credit barriers—including collateral limitations, low financial literacy, incomplete documentation and inconsistent understanding of MAC models among lenders. It also highlights factors enabling progress, such as early governance improvements and growing interest among MACs in formal credit.

b. Stakeholder Analysis: Roles of Key Actors in Improving MAC Financing

Building on the assessment of access to finance, this layer identifies and analyses the influence and interest levels of key actors—including MEF, MAFF, NBC, ARDB, BFIs, MFIs, provincial authorities and the MACs themselves. Using a power–interest mapping approach, the study clarifies which institutions are best positioned to drive improvements in MAC financing and which require capacity strengthening or policy support to play a greater role.

c. Policy Implications and Suggestions

The final layer synthesises the findings from the financing landscape, MAC assessment, case studies and empirical evidence to propose actionable policy recommendations. These include strengthening MAC governance, expanding credit guarantees, adjusting lending policies for agricultural cycles, supporting digital financial records, exploring MAC-specific loan products and enhancing inter-institutional coordination. This section outlines short, medium and long-term policy pathways to position MACs as drivers of agricultural transformation and new sources of growth for Cambodia.

4. Current Development of MACs

MACs are a part of the 6th Priority Policy Programs of the current ruling government of Cambodia under the 7th Term of the National Assembly. The modernising of agriculture, which envisions the implementation of large-scale joint agricultural production in the agricultural sector, has been pursued since 2023. Key characteristics of MACs include collective agricultural production among farmer groups, and professional joint management to increase quality, price and sustainable supply—namely, joint purchasing, joint production, joint selling and joint management by the community before distributing profits according to the proportion of each member's share. Comparing to current ACs, MACs benefit from enhancing market bargaining power in both purchasing inputs and selling agricultural products of the community, reducing production costs and maximising profits through the benefits of economies of scale, receiving technical support, infrastructure materials, technology and consulting on agricultural production and highly professional business management. In addition, under MAC practices, access to a broad agricultural market and the ability to implement contract farming increase, reducing risks from the impacts of climate change, improving the livelihoods of member farmers and receiving better support for working capital, operations and business expansion.

MACs have a direct impact on farmers by promoting economies of scale, integrated value chains and inclusive financial access, ultimately improving loan performance. However, they face governance issues, uneven development, dependency risks and high implementation costs. Despite these challenges, they are a priority because they directly represent farmers, ensure inclusivity, support the entire agricultural value chain and build on existing partnerships.

5. Country Case Studies

5.1. Thailand

Thailand's agricultural sector continues to play a vital role in rural employment and export earnings, contributing roughly 9% of GDP in 2023 while generating around USD 49.2 billion in agricultural export revenues. The sector is characterised by diverse production—rice, cassava, rubber, fruits—and a mix of traditional farming and modern agri-tech adoption, though it remains vulnerable to climate change, global price fluctuations and high farmer indebtedness (Iconic Research, n.d.).

ACs have been central to Thailand's rural development since the establishment of the Wat Chan Agricultural Cooperative in 1916, created to support indebted small farmers during the transition from subsistence to market-based agriculture (CLT, n.d.). Following the Cooperative Act B.E. 2511, small credit cooperatives were consolidated into district-level cooperatives, and today Thailand operates a three-tier structure—primary cooperatives, provincial federations and the national Agricultural Cooperative Federation of Thailand (ACFT). The system comprises 8,130 cooperatives with 11.6 million members, all linked through the Cooperative League of Thailand (COOP 2021a).

Table 1: List of Agricultural Cooperatives by Sector in Thailand

Sector	Number of cooperatives (2018)
Agriculture cooperatives	4,376
Thrift and credit cooperatives	1,474
Service cooperatives	1,277
Credit union cooperatives	604
Consumer cooperatives	199
Fishery cooperatives	108
Land settlement cooperatives	92
Total	**8,130**

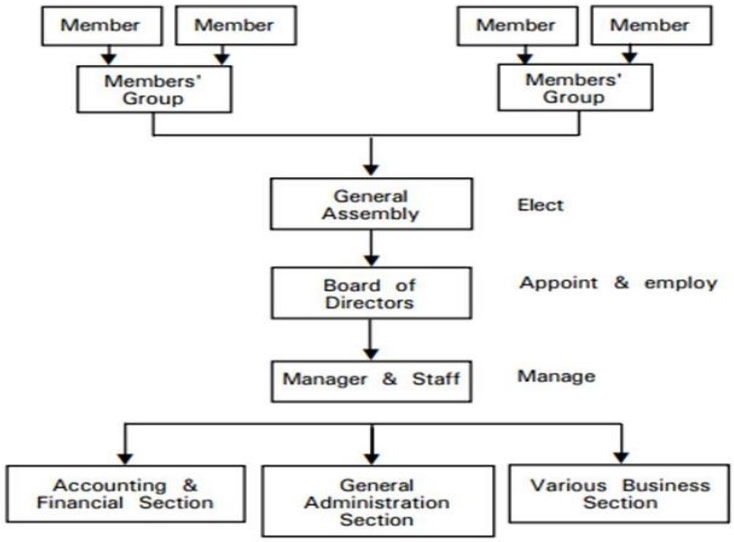
Source: International Co-operation Alliance Asian and Pacific, 2021.

Financing is primarily provided through the Bank for Agriculture and Agricultural Cooperatives (BAAC), established in 1966, which offers short, medium and long-term loans covering input purchases, machinery,

livestock, land refinancing and agro-processing investments (BAAC 2025). BAAC also implements strategic programs such as the THB 55 billion 'Young Smart Farmer' loan scheme and climate-smart agriculture initiatives in partnership with GIZ to promote low-emission rice farming and agri-tech applications (Metta 2024). These targeted lending schemes make BAAC the backbone of Thailand's rural credit market.

However, challenges such as complex multi-layered cooperative governance, slow decision-making and limited managerial capacity reduce cooperatives' competitiveness (Faysse 2018). For Cambodia, Thailand demonstrates the value of a specialised agricultural development bank, a structured cooperative system and targeted youth and climate-smart financing programs. Yet it also shows that MACs will require simplified governance procedures, leadership training and digital transformation to avoid bureaucratic bottlenecks and to enhance responsiveness to market and climate pressures.

Figure 5: Operational Framework of Agricultural Cooperatives in Thailand



Source: Co-operative League of Thailand

5.2. Vietnam

Vietnam's agricultural sector is a key pillar of national development, contributing nearly 15% of GDP in 2023 and serving as a major source of employment and exports, particularly in rice, coffee, cashew nuts and rubber. Agricultural reforms and trade liberalisation since the 1990s have transformed Vietnam into one of the world's leading agricultural exporters, though the sector still requires modernisation and climate-resilient investment (Le 2025).

Cooperatives have long contributed to rural socio-economic development, starting with the Dan Chu Handicraft Production Cooperative in 1948. Since independence, over 50,000 cooperatives have been established, and the 2012 Cooperative Law revitalised the system to emphasise market linkages, innovation and partnerships with private firms (COOP 2021b). As of 2024, Vietnam hosts more than 31,700 cooperatives—including over 20,000 ACs—of which around 2,000 are high-tech and 2,200 have formal business partnerships (Viet Nam News 2024).

Vietnam deploys a multi-instrument financing strategy combining fiscal incentives, tax exemptions and directed credit. Resolution No. 216/2025/QH15 extends agricultural land-use tax exemptions to 2030, reducing production costs and enabling reinvestment (L. G. Nguyen and Nguyen Tran 2025). Meanwhile, State Bank of Vietnam (SBV) administers preferential loans through the VND 100,000 billion 'Credit Program for Agriculture, Forestry and Fisheries' and the VND 100 trillion high-tech agriculture program, with interest rates 0.5–1.5 percentage points below market levels (X. D. Nguyen and Nguyen 2021). Decree No. 57/2018/ND-CP further incentivises high-tech agricultural investment through tax reductions and long land-rent exemptions.

Persistent challenges remain: many incentives favour larger high-tech firms, leaving smallholder-based cooperatives with limited access to capital; managerial deficits and weak governance limit cooperatives' ability to adopt advanced technologies; and fragmented production systems hinder scaling. Cambodia can draw lessons from Vietnam's combination of tax exemptions, unsecured lending ceilings and high-tech agriculture credit schemes, while avoiding the uneven distribution of benefits by ensuring MACs receive dedicated capacity-building, governance training and inclusive access to modern agricultural finance (Hiep 2024).

5.3. Indonesia

Indonesia's agricultural sector is fundamental to food security and employment, engaging nearly 29% of the workforce and contributing about 13.7% to GDP in 2020, with strong duality between large commercial plantations and smallholder farms (Oxford Business Group 2025; World Bank Group 2022). The country is the world's largest producer of palm oil and a major exporter of cocoa and coffee, but the sector is increasingly affected by climate shocks such as droughts and flooding (World Bank 2023; World Integrated Trade Solution 2025; Simoes and Hidalgo 2025; Reuters 2026). Government strategies increasingly emphasize climate-smart agriculture, mechanization, and cooperative-based modernization to strengthen productivity and resilience (Savelli et al. 2021; Andoko and Adhi 2025).

Cooperatives are governed under Law No. 25 of 1992, which recognizes members as owners and embeds democratic management in the cooperative's legal principles, while Government Regulation No. 7 of 2021 simplified cooperative establishment and strengthened scaling by formally centering "ease, protection, and empowerment" and by reducing the minimum founders for primary cooperatives (ASEAN Briefing 2022). Conventional cooperatives—especially Koperasi Unit Desa (KUD)—have long provided savings and loans, post-harvest support, and marketing services, while more modern cooperative models increasingly stress stronger networks, better service quality, and traceability-oriented upgrading (Puspasari and Sudibyo 2021; Utomo et al. 2023; Andoko and Adhi 2025). The flagship Koperasi Merah Putih program is intended to establish around 80,000 new village-level cooperatives to expand grassroots participation and local economic activity (ANTARA News 2025).

Agricultural finance is supported through a combination of targeted cooperative lending and broader monetary–fiscal coordination, including Bank Indonesia's burden-sharing framework and subsidized KUR lending (Bank Indonesia 2021, 2022; Alibhai et al. 2024). Under the Koperasi Merah Putih scheme, cooperatives can apply for loans of up to Rp3 billion through major state banks at around 6%, while later public support also included Rp16 trillion placed through banks for cooperative financing (ANTARA News 2025; Reuters 2025).

Yet, both conventional and modern cooperatives still face governance and capacity constraints, including weak organizational management, limited managerial capability, and uneven digital readiness (Utomo et al. 2023; Andoko and Adhi 2025). For Cambodia, Indonesia illustrates how coordinated interest subsidies, loan guarantees and state supports can sharply lower agricultural borrowing costs for community-based organisations, but also demonstrates that financial support must be paired with systematic institutional strengthening, digital readiness and member-governance mechanisms to ensure that MACs can scale effectively.

5.4. China

China's agricultural sector plays a foundational role in national food security, feeding nearly 19% of the global population with only 7% of arable land through highly intensive production of rice, wheat, maize and a vast horticulture system producing around 749 million tonnes of vegetables annually (A. Chen et al. 2019; World Population Review 2026). Mechanisation exceeds 75% overall and 97% for wheat, supporting large-scale productivity across fragmented smallholder farms (Zhang 2025). At the same time, farmer cooperatives have expanded at scale: by 2021, China had about 2.259 million registered agricultural cooperatives, alongside roughly 157,000 demonstration cooperatives, making them an important platform for service delivery, coordination, and rural modernization (R. Chen et al. 2022; Li et al. 2024).

China's Farmer Professional Cooperatives (FPCs) are governed under the 2007 Cooperative Law, which aims to standardise cooperative operations, protect member rights and enable preferential access to credit, tax incentives and technical support (Law of the People's Republic of China on Specialized Farmers Cooperatives 2006). Tax incentives—including VAT exemptions and reduced corporate income tax for buyers working with cooperatives—have improved product quality and competitiveness, with research showing strong government support as a key driver of cooperative expansion (Bijman and Hu 2011).

Agricultural financing is delivered mainly through specialised products from the Agricultural Bank of China (ABC) and the Postal Savings Bank of China (PSBC). The Agricultural Production Trusteeship Loan and Jinsui Agricultural Guarantee Loan offer flexible repayment, collateral-light conditions and interest rates at or near the Loan Prime Rate, while PSBC's rural credit lines—including Quick Loans, Credit-based Rural Loans and Industrial Loans—provide additional funding options up to RMB 10 million (Agricultural Bank of China 2025; Postal Savings Bank of China 2025). These instruments collectively expand access to modernisation finance for cooperatives and farmer organisations.

Nevertheless, structural challenges persist: elite capture, weak internal governance and inadequate member participation limit cooperative effectiveness, while management capacity and innovation readiness remain uneven (Hu et al. 2017; G. Liu et al. 2024). Government training plays an important role in strengthening cooperative service capacity across production stages, and its overall contribution is reported to be more significant than direct financial support, although financial support may have stronger effects in some mid-production services (Y. Liu et al. 2024). For Cambodia, China's experience highlights the importance of strong cooperative legislation, targeted tax and credit incentives and specialised agricultural banking products—but also stresses that MACs must prioritise democratic governance, capacity development and accountability to prevent elite capture and ensure equitable benefits.

5.5. India

India's agricultural sector remains central to employment and food security, yet it is increasingly vulnerable to climate change, water scarcity, and land degradation. To address these challenges, the Government of India has introduced key policy interventions such as the National Mission for Sustainable Agriculture (NMSA), the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), and the Pradhan Mantri Fasal Bima Yojana (PMFBY), which collectively aim to enhance climate resilience through improved soil health, efficient irrigation systems, and risk mitigation mechanisms. However, structural gaps in financing persist. While sustainable agricultural finance reached an estimated INR 22.4 trillion (USD 301 billion) annually over 2020–2022, a substantial share remains dependent on public funding, indicating limited private sector engagement. This underscores the need for more diversified and scalable financing models to support climate-resilient agricultural transformation (CPI 2025).

The cooperative-linked rural finance system is supported indirectly through instruments such as the Kisan Credit Card (KCC), which provides flexible credit for crop cultivation, post-harvest activities, allied sectors and investment in equipment and infrastructure (Press Information Bureau 2022). Kisan Credit Card (KCC) lending has expanded significantly, alongside a sharp increase in India's ground-level agricultural credit, which reached about ₹28.67 lakh crore in 2025 (Press Information Bureau 2026). The scheme enhances financial inclusion by extending eligibility to tenant farmers, sharecroppers, and members of Self-Help Groups (SHGs) and Joint Liability Groups (JLGs), which play a key role in rural credit delivery (Press Information Bureau 2022).

Modern agricultural practices—such as organic inputs, integrated pest management, rotational cropping, drip and sprinkler irrigation and digital agriculture using IoT, satellite imagery and mobile advisory platforms—are increasingly adopted to improve productivity and climate resilience (ASQI 2024). These practices help reduce chemical dependency, conserve water and lower production risks, supporting smallholders' ability to access formal finance and reduce vulnerability.

However, financing gaps persist owing to the absence of a sustainable agriculture taxonomy, limited data systems for tracking fund flows and low private-sector participation linked to land-tenure uncertainties and perceived lending risks (CPI 2025). For Cambodia, India illustrates the importance of integrating sustainable finance standards, blended finance tools, crop insurance mechanisms and digital advisory services to support MACs and ACs. Cambodia can also learn from India's KCC model to expand credit access to tenant farmers and informal producers within MACs.

Figure 6: Kisan Credit Card (KCC) Scheme

Source: Central Bank of India 2025

5.6. South Australia

South Australia's primary industries and agribusiness sector generated AUD 17.1 billion in 2023–24 and contributed approximately AUD 12.6 billion in direct exports and net trade, with major outputs in field crops, wine, horticulture, livestock and aquaculture (Department of Primary Industries and Regions 2024). However, extreme climate variability poses significant risks—2024–25 grain production was 42% below the five-year average because of drought and frost conditions (PIRSA 2025). These conditions highlight the state's urgent need for climate-resilient agriculture and risk-management frameworks.

The cooperative landscape operates under Australia's Co-operatives National Law (South Australia) Act 2013, which provides clear governance rules, reporting standards and member-ownership principles ('one member, one vote') (Co-Operatives National Law (South Australia) Act 2013 2018). Prominent cooperatives—such as Almondco Australia, which aggregates over 80% of national almond growers, and Lenswood Apples, established in 1933—play leading roles in processing, storage, grading and export-oriented marketing (ALMONDCO Australia 2025; Lenswood Apples 2025). These cooperatives illustrate how producer-owned enterprises can drive scale, quality and market power.

Financing for agricultural producers and cooperatives is facilitated through commercial agribusiness banks, state programs via PIRSA and concessional federal loans offered by the Regional Investment Corporation (RIC). RIC's Farm Investment, Drought and AgriStarter loans support climate adaptation, business resilience and intergenerational succession, while PIRSA provides technical assistance and links farmers to innovation hubs such as the SA Drought Resilience Adoption and Innovation Hub (SA Drought Hub 2025; RIC 2025). These mechanisms ensure that capital is available for technological upgrades and climate-resilient infrastructure.

South Australia faces persistent challenges—water insecurity in the Murray–Darling Basin, seasonal labour shortages, biosecurity risks such as fruit fly outbreaks, and volatile export markets, especially for wine (ABARES 2024; MDBA 2025). For Cambodia, South Australia demonstrates how strong cooperative laws, producer-owned marketing co-ops and targeted concessional loans can support MACs in improving market access, adopting technology and managing climate risks. The model underscores the importance of formal cooperative governance and state-facilitated financing channels to build resilient agricultural communities.

5.7. Country Case Study Comparison

The following matrix summarises key lessons from six country case studies on ACs and financing systems. It highlights how each country developed its cooperative structures, the financial mechanisms used to support farmers and cooperatives, the main challenges they face and the implications for Cambodia.

Table 2: Comparative Matrix Table of Country Case Studies

Country	Summary of Agricultural Cooperative Development	Financing Model to Agriculture and Cooperatives	Key Challenges	Implications for Cambodia
Thailand	Cooperative movement began in 1916 with Wat Chan Cooperative; expanded under Cooperative Act B.E.2511; three-tier structure of primary co-ops, provincial federations and ACFT; 8,130 cooperatives, 11.6 M members; CLT as apex body.	BAAC provides short, medium, long-term credit; financing for inputs, machinery, land refinancing; Young Smart Farmer Loan (THB 55B); climate-smart rice finance with GIZ; backbone of rural finance.	Multi-layered governance delays decisions; limited managerial capacity; slow digital transformation; competition with private agribusiness.	Cambodia can replicate BAAC's dedicated agriculture bank model but must simplify cooperative governance and enhance leadership training & digitalisation for MACs.
Vietnam	Longstanding cooperative system since 1948; revitalised by Cooperative Law (2012); 31,700 cooperatives nationwide (>20,000 agricultural); 2,000 high-tech co-ops, 2,200 with business partnerships.	Land-use tax exemption extended to 2030 (Resolution No. 216/2025/QH15); SBV's VND 100,000B agriculture credit program & VND 100T high-tech agriculture loans; preferential interest rates (0.5–1.5% lower); Decree 57/2018 incentivises high-tech investment.	Incentives favour large high-tech firms; small cooperatives lack access; weak governance; limited scaling ability; managerial gaps.	Cambodia should apply Vietnam's model of unsecured lending ceilings + high-tech credit but ensure equitable access for smaller MACs through governance & capacity-building.
Indonesia	Cooperative system under Law No.25/1992; traditional KUDs provide inputs and marketing; modern cooperatives integrate value-add, processing & digital traceability; target of 80,000 new cooperatives under Koperasi Merah Putih.	Village co-ops eligible for IDR 3B loans via BRI, BNI, Mandiri at ~6%; IDR 16T state capital injection; BI's PEN framework reduces lending rates (from 9–11% to 5–6%); KUR loans and guarantees improve access (Bank Indonesia 2020–2023; Ministry of Finance 2020–2021).	Weak governance; poor digital readiness; limited value chain integration; low member participation; fragmented scale.	Cambodia can adopt Indonesia's interest-subsidy + guarantee scheme for MACs but must integrate governance training, digital literacy & cooperative management reforms.
China	Over 2.25 M cooperatives; governed by 2007 FPC Law; >160,000 demonstration cooperatives; strong government guidance; cooperatives central in land consolidation & technology transfer.	ABC's Trusteeship Loan & Jinsui Guarantee Loan; PSBC's Quick Loans, Rural Credit Loans; flexible repayment, low collateral, LPR-linked interest; strong credit guarantee ecosystem.	Elite capture; weak member participation; management gaps; subsidies less effective than training; need for stronger internal governance.	Cambodia should design MACs with strong democratic governance, member protections & mandatory training to prevent elite capture while leveraging China-style specialised loan products.

India	Community-financing ecosystem through SHGs & JLGs; cooperative functions linked indirectly via KCC eligibility for tenant farmers, sharecroppers & rural groups.	KCC provides flexible credit for crops, livestock, post-harvest & equipment; loans grew from USD 153B (2019–20) to USD 280B (2023–24); GLC targets tripled; large-scale public finance for sustainability.	Lack of sustainable agriculture taxonomy; low private investment; land-tenure uncertainties; weak tracking systems; high dependence on public funding.	Cambodia can develop a MAC credit card model similar to KCC; needs a national sustainable finance taxonomy, strengthened data systems & blended finance tools.
South Australia	Long history under Co-operatives National Law (South Australia) Act 2013; leading co-ops: Almondco (80% of growers) & Lenswood Apples (est. 1933) for marketing, packing & export.	Financing from agribusiness banks; RIC concessional loans (Farm Investment, Drought, AgriStarter); strong state programs via PIRSA supporting innovation & drought resilience.	Climate variability, water scarcity, labour shortages, biosecurity threats, unstable export markets.	Cambodia can adopt a modern cooperative law, producer-owned marketing co-ops and concessional loan schemes to help MACs scale, improve market power & strengthen climate resilience.

6. Key Findings

6.1. Results from Consultation Meeting with Government Entities

A. Ministry of Economy and Finance (MEF)

General Department of Budget (GDB)

The interview with the GDB indicates that this entity influences through disciplined budget formulation, targeted program financing and systematic performance oversight. In practical terms, this involves aligning the agricultural sector budget with national priorities, reviewing MAFF's submissions against planned activities and expected outputs and applying a structured monitoring and evaluation process that ties disbursement to demonstrated results. GDB emphasises that budget allocations for agriculture should be catalytic and results-oriented, supporting productivity, commercialisation and resilience as the central pillars of rural development.

Budget data from the MEF show a steady expansion of agriculture-related expenditures implemented through MAFF, increasing from approximately USD 103 million in 2020 to an estimated USD 195–196 million in 2025. Within this upward trend, GDB highlighted a dedicated 2025 budget line for the establishment of MACs. Although modest at around USD 382.7 thousand, this allocation is intended to stimulate broader impacts by enabling activities that facilitate access to credit, attract private investment and strengthen service delivery at the community level. GDB also noted that agricultural financing is not confined to MAFF's budget; additional financial instruments, particularly through ARDB, are designed to support value chains that demonstrate commercial potential and readiness for formal lending.

According to GDB's representative, sector budget approval is contingent on MAFF's ability to provide credible plans, documentation and performance evidence, including baseline indicators and measurable targets. Routine budget envelopes fund essential functions, while special financing windows are deployed for programs requiring dedicated credit, blended finance[3] or guarantee mechanisms. This dual approach ensures that budget instruments remain flexible enough to address evolving sector needs while maintaining macro-fiscal discipline. It also creates room for targeted pilots such as MACs without compromising core allocations for research, extension, inspection and plant protection services.

GDB's team further underscored the importance of a structured monitoring and evaluation framework. Semi-annual and annual performance reports are mandatory under an updated M&E Prakas that clarifies institutional roles and verification responsibilities. In this system, MAC-related expenditures are embedded

[3] Blended finance is a financing approach that combines public or donor concessional funds with private or commercial capital to reduce risks.

within an evidence-based loop that links funding to tangible outputs and outcomes. These include reduced input costs through pooled procurement, enhanced aggregation and logistics, improved compliance with buyer standards, increased contract farming uptake and more reliable quality assurance. For GDB, this approach preserves fiscal prudence while supporting modernisation at scale. Their representative agrees that the MAC model has strong potential to become a new driver of agricultural growth, viewing MAC spending as catalytic capital that helps organised, market-oriented communities achieve durable gains in productivity, market access and resilience.

General Department of Policy (GDP)

GDP representatives describe a coherent toolkit that includes price stabilisation programs for key crops, concessional finance delivered through public development banks, the deployment of agricultural officers at the commune level and explicit promotion of MACs as the organising model for market access and quality compliance. The underlying logic is to reduce transaction costs, build reliable supply that meets buyer standards and crowd-in private and concessional capital along priority value chains such as cassava, cashew and rubber. GDP emphasises that policy signals, verification systems and alignment across ministries are as important as money when the goal is to shift behaviour at scale.

As discussed, the GDP representatives place particular weight on the design features that convert policy into bankable operations. These include governance capacity within communities, credible business plans and record-keeping as preconditions for credit readiness, and pipeline development that helps lenders and investors assess risk consistently. Awareness-building is another priority, so that producers understand the commercial and compliance benefits of organising as MACs. Coordination between MAFF on standards, testing and extension and MEF on guarantees and refinancing schemes through the CGCC is important to enable communities to meet the financing requirements.

In policy terms, the GDP representatives frame MACs as a lever to move agriculture from atomised smallholder production towards integrated, market-oriented economic enterprises. The expected payoffs include economies of scale in input procurement and logistics, more stable prices through contracted sales, higher quality and standards compliance that reduce rejection losses, and environmental co-benefits produced by climate-smart agronomy and improved post-harvest handling. GDP argues that these payoffs depend on credible verification and reporting, so that buyers, lenders and development partners can trust the signal that a MAC label conveys. As affirmed by representatives from GDP, MACs constitute a potential new source of agricultural growth. To improve financing access to MACs, the combination of public policy signals, blended finance or co-financing programs and institutional support are recommended to lower risk for communities and promote better financing access. The GDP team sees MACs as the most direct route to formalisation of rural agricultural production, to improve competitiveness on price, volume and quality.

B. Ministry of Agriculture, Fisheries and Forestry (MAFF)

General Department of Agriculture (GDA)

According to the GDA representatives, Cambodia has approximately 1,400 ACs, although most remain underdeveloped. These ACs continue to face structural and operational limitations, including inadequate capital for expansion, weak leadership and management capacity, lack of clear organisational structures, production levels that do not consistently meet market demand and climate change risks. These longstanding challenges have slowed community progress, and highlight the need for a more effective, modernised institutional model within Cambodia's agricultural sector.

To address these issues, the RGC through MAFF introduced the MAC model to incorporate modern practices, strengthen governance and improve management efficiency. Unlike regular ACs, MACs require a formal leadership structure—comprising a CEO, inventory/stock manager and finance officer—supported by a clear business plan and transparent financial management. Members contribute a small equity amount, commit farmland for collective production and participate in regular meetings to review operational and financial performance. Farmer members of MACs are required to comply to the following principles:

collective production and harvesting, common agricultural input utilisation standard and quality and common market access and price.

As reported by the GDA representatives, a unique and defining feature of the MAC model is that every MAC must secure a contract farming agreement, ensuring guaranteed off-take and price stability before operations begin. MAFF plays a direct role in this process by conducting business-matching between MACs and potential market partners, buyers, processors or exporters. This requirement ensures that a MAC is not only well-structured internally but also commercially viable from the outset. This dual emphasis on strong governance and pre-established market linkages distinguishes MACs from regular ACs and serves as a risk-mitigation mechanism for both farmers and financial institutions.

The first pilot of MAC development focuses on producing the four strategic crops: paddy rice, vegetables, cashew nuts and pepper. As of 29 September 2025, the official registry from MAFF records 22 MACs across provinces including Siem Reap, Kampong Thom, Kampong Chhnang, Takeo, Kandal, Tboung Khmum, Pursat, Oddar Meanchey, Banteay Meanchey, Kampong Cham and Battambang, totalling about 2,913 members and approximately 20,139 hectares.

Importantly, the GDA representatives also highlighted that the RGC has already introduced the Modern Agricultural Cooperative Development Fund, which is currently undergoing administrative procedures before full activation. This fund is designed as a financing mechanism that is open to public sector agencies wishing to allocate resources to support the development of MACs.

Despite these innovations, MACs continue to face several challenges. Public awareness of the MAC model remains limited, and many farmers are reluctant to move away from traditional practices owing to concerns about land security or unfamiliarity with modern systems. In addition, many MACs lack sufficient operational capital to hire full-time CEOs, inventory/stock managers and finance staff and to invest in their long-term assets. Though banking and financing institutions—including ARDB, Chip Mong Bank and FTB—offer credit at lower rates of around 8% with the CGCC guarantee scheme, financing needs still persist in light of the large amount of investment needed for the MACs to build essential infrastructure such as offices, storage facilities and processing equipment at the early stage of their operations.

Overall, the GDA views MACs as a promising mechanism for transforming traditional agricultural communities into more productive, market-oriented and financially resilient institutions, provided that continued support, capacity-building and financial mechanisms—such as the new Development Fund or other special financing schemes—are effectively implemented.

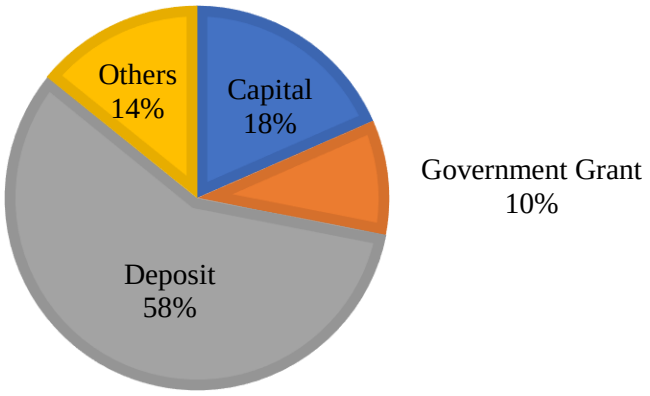
6.2. Results from Banks and Financial Institutions

A survey was conducted with seven banks and financial institutions (BFIs) to collect information on their funding sources, loan products, interest rates, collateral requirements, loan tenors, purposes, repayment methods and non-performing loan (NPL) ratios for both the agricultural sector in general and MACs in particular. The method was a random selection of banks having loan products for the agricultural sector. However, the findings revealed that most participating institutions possess limited or no specific data related to loans extended to MACs, resulting in insufficient quantitative information to comprehensively present the lending situation for this segment. The findings below capture important data and insights from the survey results with bank and financial institutions participated in the research study.

(1) Source of Funds

Among our selected sample, on average, banks source funds for lending from customer deposits, followed by capital. The structure of the source of funds varies significantly between private banks and state-owned policy banks, such that private banks obtain most of their funds from customer deposits while state-owned banks receive more funds from government grants and various partners.

Figure 7: Source of Funds
(Average in Percentage)

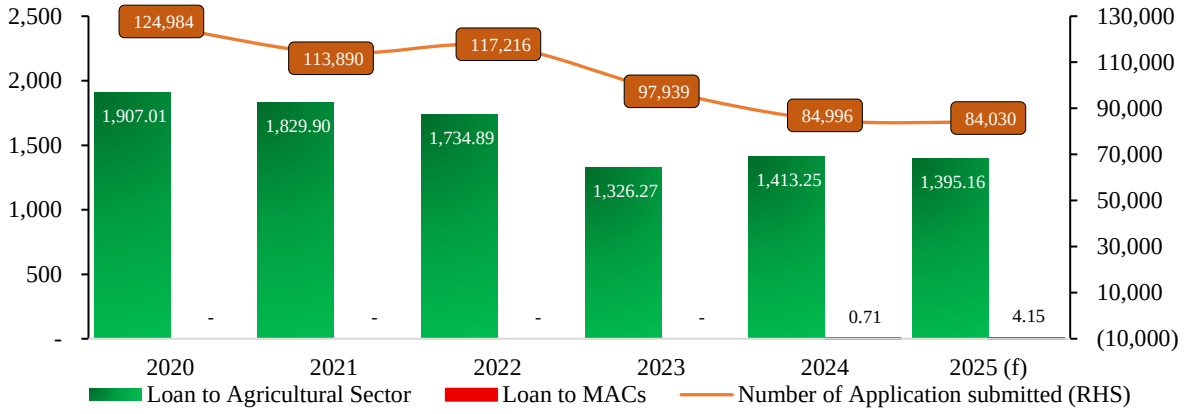


Source: Survey Results

(2) Loan to the Agricultural Sector

Both amount and number of loans granted to the agricultural sector are projected to decline sharply, falling by around 27% over the period. Despite a slight rebound in 2024, total agricultural lending remains well below pre-2022 levels. Meanwhile, loans to MACs were only approved in 2024, and hence very minimal amounts were granted over 2024 and 2025; however, this is expected to have reached USD 4.15 million by the end of 2025.

Figure 8: Loan to the Agricultural Sector & MACs and Number of Overall Agricultural Loan Applications Submitted
(2020–2025, in Million USD)



Source: Survey Results

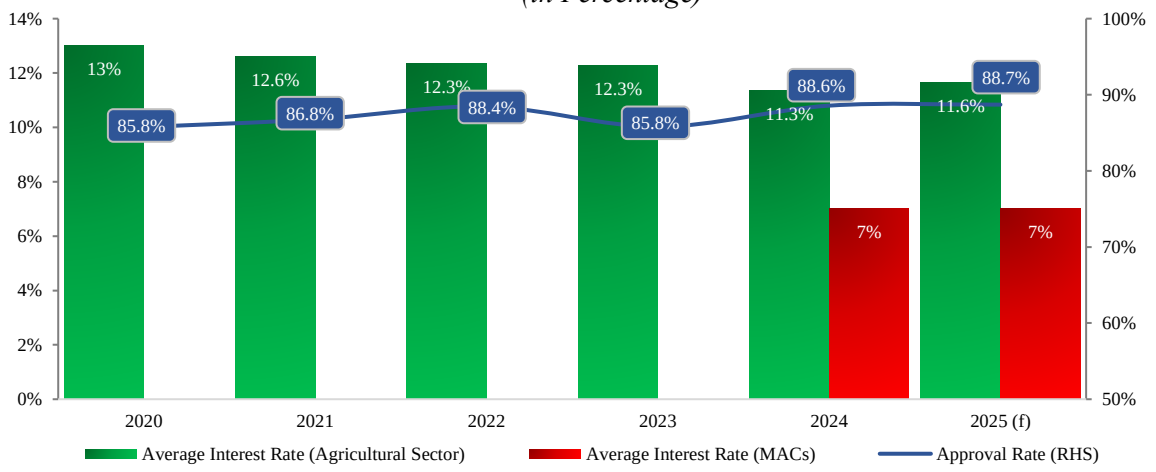
(3) Lending Criteria

a. Interest Rate

In general, the lending interest rate to the agricultural sector has seen a steady decline over the period, from 13% on average to 11.3% in 2024, but is expected to make a modest gain to 11.6% in 2025. Interest rates on loans to MACs remained level at 7% over 2024 and 2025—a result of government support via various incentivised programs through partner BFIs. Despite the relatively high lending rates, the loan approval rate maintained a steady upward trend, rising from 85.76% in 2020 to an estimated 88.7% in 2025, suggesting improved credit assessment processes and lenders' growing confidence in the sector's repayment capacity.

Figure 9: Average Loan Interest Rate to the Agricultural Sector & MACs and Overall Agricultural Loan Approval Rate

(in Percentage)



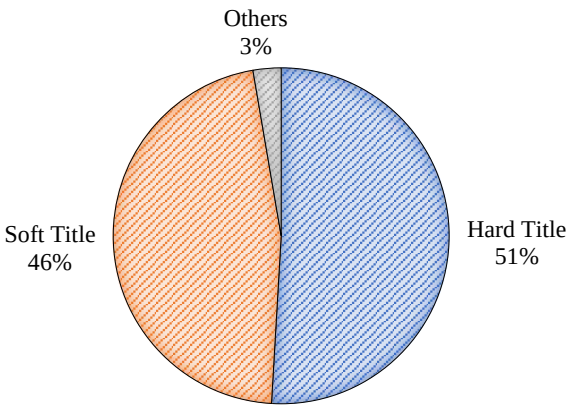
Source: Survey Results

b. Collateral

The collateral composition for agricultural loans is predominantly based on hard titles, which account for 51% of the total, reflecting bank preference for legally recognised land titles that provide stronger ownership security and easier enforcement in case of default. Soft titles (46%) remain widely used among smallholder farmers, particularly in rural areas where formal land registration is limited. A small fraction of loans is secured by other forms of collateral such as movable assets or guarantees. This distribution highlights the ongoing challenges in expanding credit access for farmers lacking formal land documentation, underscoring the importance of land titling and collateral diversification to support inclusive rural financing.

Figure 10: Share in Collateral Types

(in Percentage)

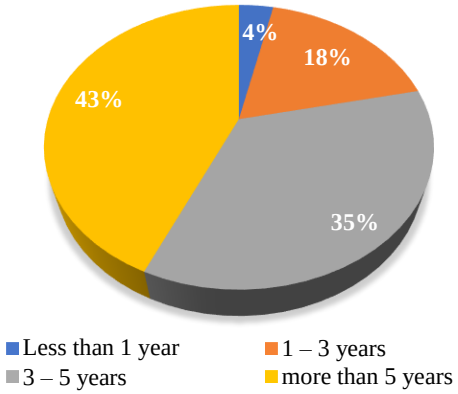


Source: Survey Results

c. Loan Tenor

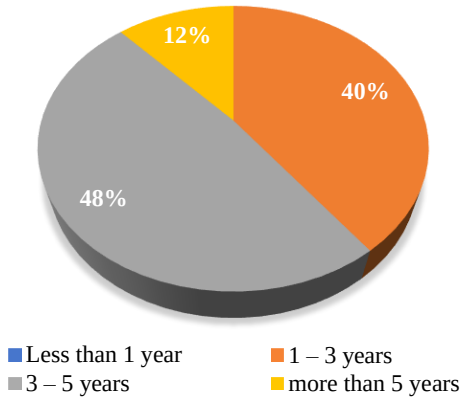
The loan tenor structure indicates that both the agricultural sector and MACs tend to favour medium to long-term borrowing, though with differing maturity preferences. For the agricultural sector, most loans were disbursed with a tenor of more than 5-year (43%), followed by 3–5-year loans (35%), while 4% were short term loans. In contrast, loans to MACs are even more skewed towards medium-term financing, with 48% having 3–5-year maturities and 40% 1–3-year maturities, whereas only 12% extend beyond five years. Although loans to MACs remain limited at the time of writing, it is suggested that the pattern for these will be similar to loans to the sector overall, and hence that long-term loans (exceeding 5 years) will increase.

Figure 11: Average Loan Tenor to the Agricultural Sector
(in Percentage)



Source: Survey Results

Figure 12: Average Loan Tenor to MACs
(in Percentage)

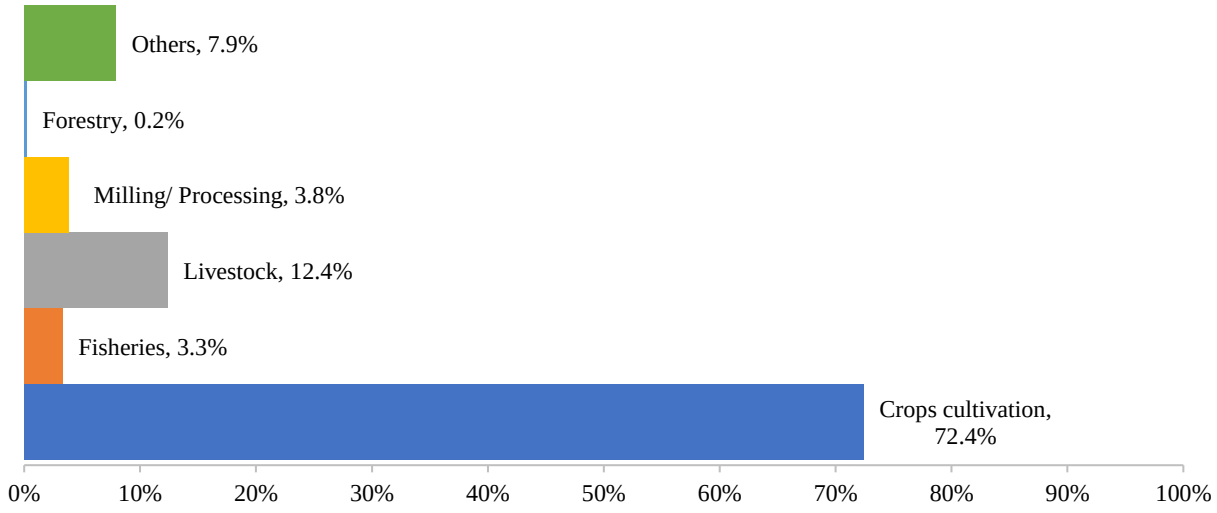


Source: Survey Results

d. Purposes

The distribution of lending to the agricultural sector shows a strong concentration in crop cultivation, which accounts for 72.4% of total agricultural loans. This dominance reflects the sector's heavy reliance on crop-based activities, particularly rice and cash crops that form the backbone of rural livelihoods. Livestock production represents the second-largest share at 12.4%, followed by milling and processing (3.8%) and fisheries (3.3%), indicating relatively limited credit allocation towards value-added or diversified agricultural activities. Only a marginal portion of lending supports forestry (0.2%) and other agricultural-related purposes (7.9%), suggesting a continued focus of financial institutions on traditional farming rather than upstream or downstream agribusiness segments. At present, loans extended to MACs are concentrated solely in crop cultivation, reflecting their initial focus on primary agricultural production. However, there is growing anticipation that lending activities will gradually expand into milling, processing and livestock sectors in coming years, supporting value chain development and diversification within the agricultural economy.

Figure 13: Purposes of Lending to the Agricultural Sector
(in Percentage)

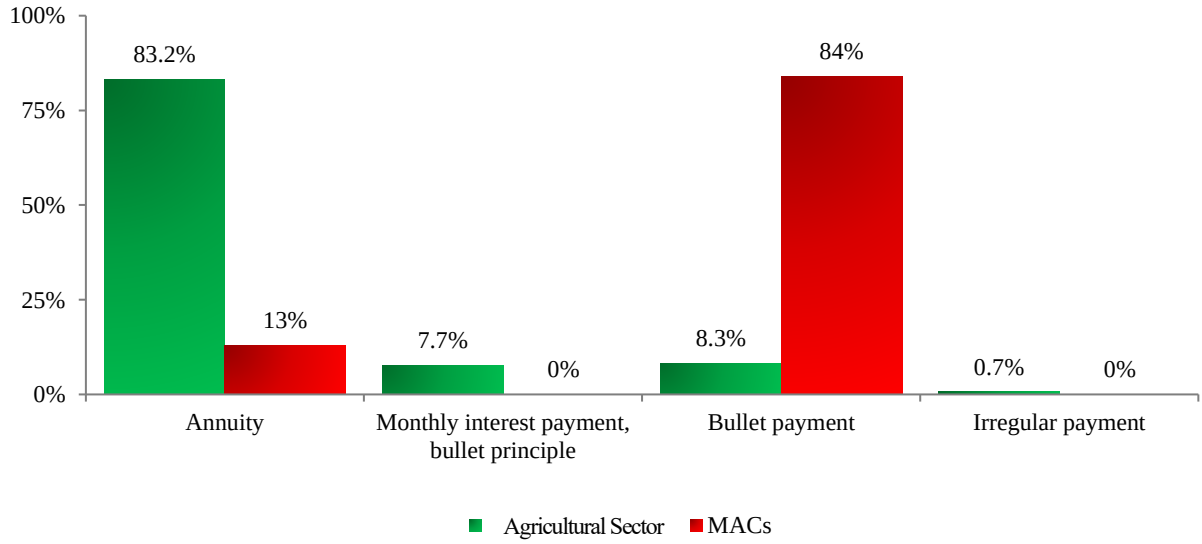


Source: Survey Results

e. Repayment Methods

The repayment structure of agricultural loans demonstrates distinct differences between the general agricultural sector and MACs. For the agricultural sector, the annuity repayment method overwhelmingly dominates, accounting for about 83% of total loans, reflecting borrowers' preference for predictable instalment payments that combine both principal and interest. In contrast, loans to MACs are primarily repaid through bullet payments, representing around 84% of total MAC lending. This structure allows MACs greater cash flow flexibility, enabling them to repay the full principal at maturity after completing production or marketing cycles. Only a small portion of loans in either category use monthly interest with bullet principal or irregular repayment schedules, which are generally tailored to seasonal or project-based financing needs. The contrasting repayment profiles underscore the difference in operational models and cash flow patterns between individual farmers and organised MACs.

Figure 14: Repayment Method of Loans to the Agricultural Sector & MACs
(in Percentage)

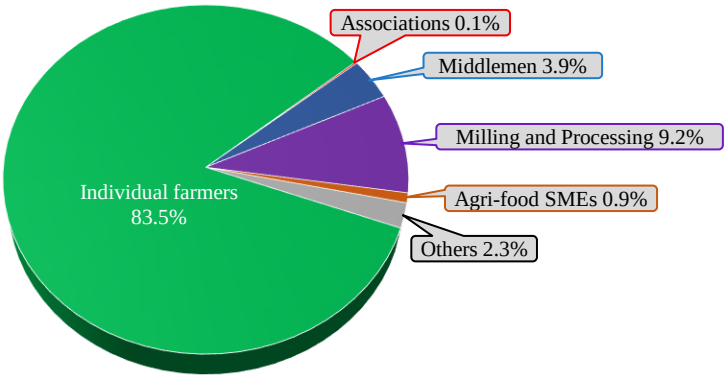


Source: Survey Results

(4) Share of Agricultural Loans by Customer Category

The customer composition of agricultural lending is overwhelmingly dominated by individual farmers, who account for 83.5% of total borrowers. This category includes smallholders engaged in crop production, livestock and fisheries, reflecting the sector's traditional structure, where individual farming households remain the primary credit recipients. Milling, drying and processing enterprises represent 9.2%, indicating some degree of financing towards post-harvest and value-added activities. Middlemen or aggregators make up 3.9%, highlighting their intermediary role in connecting producers to markets. Meanwhile, agri-food SMEs such as fish-sauce or dried-meat producers, and agriculture-related retailers together contribute only about 3.2% of total customers. Little loan portfolio is allocated to agricultural associations or communities (only 0.1%), signalling a huge gap in access to loans among agricultural stakeholders and limitations in accessing finance for agricultural associations or communities—and the least potential of these associations or communities to the lenders.

Figure 15: Share of Agricultural Loans by Customer Category
(in Percentage)

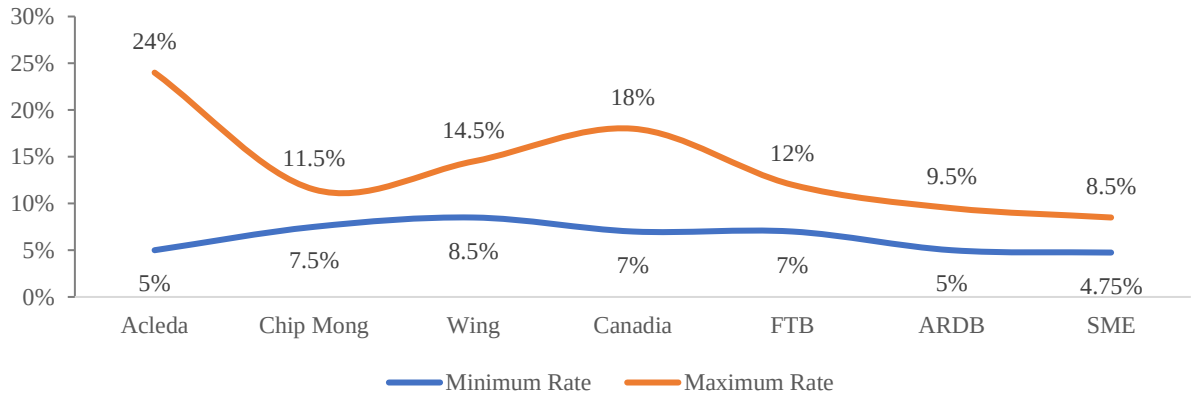


Source: Survey Results

(5) A Review of Loan Products

Our review of agricultural loan products across major Cambodian banks reveals a diverse range of financing options catering to different borrower segments within the agricultural value chain. ACLEDA Bank remains the most comprehensive lender to the agricultural sector, offering a wide interest rate range between 5% and 24%, loan sizes up to USD 6.96 million and maturities of up to 122 months, primarily targeting farmers, SMEs and agri-businesses engaged in farming, fishing and forestry. Chip Mong Bank and Canadia Bank provide similar long-term financing, with interest rates ranging from 7% to 18%, suitable for medium and large agri-enterprises using land and buildings as collateral. Wing Bank focuses on short to medium-term credit lines and overdraft facilities for farmers, rice millers and exporters, emphasising working capital and CAPEX needs. In contrast, FTB offers one of the largest loan ceilings (up to USD 20 million) and flexible repayment schedules, making it a key financier for large-scale agricultural investment projects. Public banks play a critical role in promoting inclusive and affordable agricultural financing. ARDB provides specialised loans for farmers, MSMEs, ACs and green finance projects with comparatively low interest rates (5% to 9.5%) and tenors of up to seven years, while accepting a wider range of collateral, such as land titles, inventory, machinery, equipment, credit guarantees, certificates of deposit and tri-party mechanisms (invoice financing). Similarly, the SME Bank of Cambodia offers affordable rates (4.75% to 8.5%) and medium to long-term loans (up to 10 years) to support agro-processing industries and SMEs along the agricultural value chain, excepting farmers. All in all, apart from ARDB, most banks have yet to develop loan products specifically tailored for the agricultural sector; instead, agricultural loans are generally classified under their broader category of SME loans.

Figure 16: Banks' Interest Rate Range for Agricultural Loans
(in Percentage per annum)



Source: Survey Results

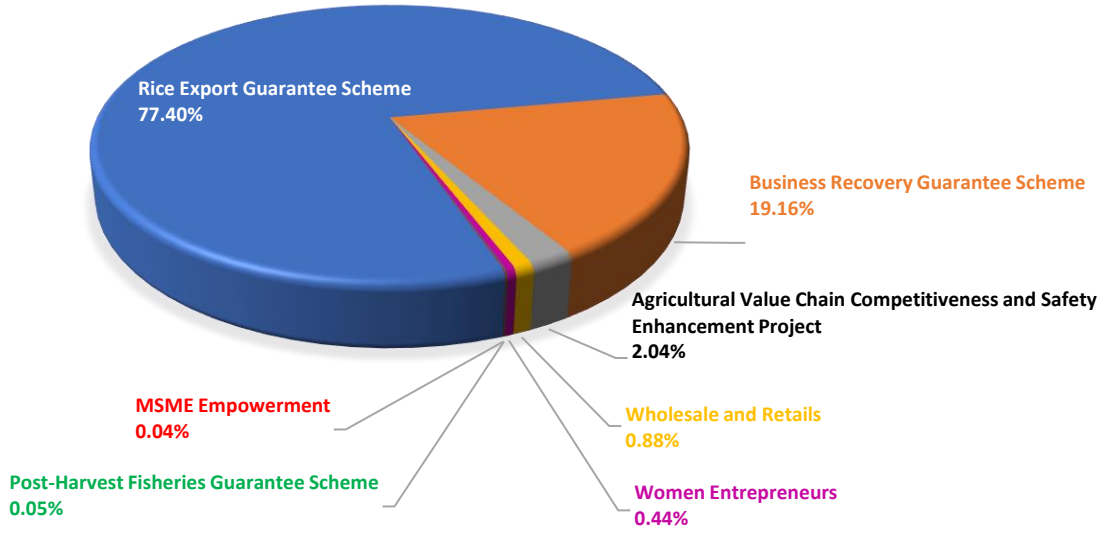
(6) Key Credit Assessment

The assessment criteria for agricultural and MAC loan applications vary across banks but generally converge on core principles of creditworthiness, repayment capacity and business viability. ACLEDA Bank applies one of the most comprehensive frameworks, emphasising the traditional '5Cs' of credit, character, capital, capacity (cash flow), collateral and conditions, supported by home or business visits, environmental and social impact assessments, credit bureau verification and anti-money laundering compliance. This approach reflects ACLEDA's prudential stance as a dominant retail lender with a strong risk-management culture. Similarly, Canadia Bank integrates both financial and operational benchmarks into its SME-based evaluation of agricultural borrowers, requiring at least three years of business experience, a debt-service ratio above 1.5 and a loan-to-value ratio under 80%, alongside mandatory site inspections and Credit Bureau Cambodia (CBC) checks. By contrast, Chip Mong Bank and Wing Bank adopt more streamlined assessments suited to smaller or working capital loans. Chip Mong focuses primarily on cash flow adequacy, community structure and purpose control, while Wing evaluates the intended use of funds, cash flow generation and availability of a secondary repayment source, indicating a focus on liquidity and repayment stability rather than collateral strength. FTB balances these approaches, placing weight on loan purpose, the borrower's agricultural experience, diversified income sources and adequate collateral, reflecting its preference for medium-to-large agribusiness clients with long-term growth potential. Policy-oriented banks, notably ARDB, emphasise institutional soundness and governance. Their appraisal process centres on management capacity, business plans, cash flow and profitability projections, loan repayment history and formal registration status, which aligns with ARDB's role in supporting cooperatives and structured agribusinesses. Overall, while each bank employs distinct evaluation methods, their assessment frameworks collectively aim to balance risk management with the unique financing needs of Cambodia's agricultural sector.

(7) Roles of Credit Guarantee Corporation of Cambodia (CGCC)

The CGCC, a state-owned institution, has played an increasingly vital role in facilitating access to credit, particularly for the agricultural sector and MACs. As of June 2025, CGCC reported notable achievements, including 5,027 guaranteed accounts and USD 305.33 million in total guaranteed loans, with an outstanding guaranteed amount of USD 122.5 million and an NPL ratio of 10.99%, indicating moderate credit risk exposure.

Figure 17: Share of CGCC's Guaranteed Loan Amount in Credit to the Agricultural Sector
(as of 30 June 2025, in Percentage)



Source: Survey Results

Within the agricultural sector, CGCC's support has grown substantially, guaranteed loans rose from just USD 0.54 million in 2021 to USD 20.46 million in 2024, before reaching USD 15.77 million in 2025, accounting for an average 12.6% share of total guaranteed loans, while average fee charge for guarantee product remain flat at 1% throughout the period. The REGS dominates CGCC's agricultural portfolio, representing 77.40% of total guarantees, followed by the Business Recovery Guarantee Scheme (19.16%) and the Agricultural Value Chain Competitiveness and Safety Enhancement Project (2.04%). For MAC-related lending, guarantees remain nascent but expanding, contributing 4.24% of total guarantees, with strong potential for scaling up.

Table 3: Credit Guarantee Scheme Amount to the Agricultural Sector by Product Type and Share to Total Guaranteed Loan Amount[4]

No.	Product Type/Names	Guarantee Amount (Million USD)	Share to Total Guarantee Amount (%)
1	Rice Export Guarantee Scheme	31.55	77.40%
2	Business Recovery Guarantee Scheme	Agricultural Sector 7.81 *Of which MACs 0.94*	Agricultural Sector 19.16% *Of which MACs 2.30%*
3	Agricultural Value Chain Competitiveness and Safety Enhancement Project	Agricultural Sector 0.83 *Of which MACs 0.79*	Agricultural Sector 2.04% *Of which MACs* 1.94%
4	Wholesale and Retails	0.36	0.88%
5	Women Entrepreneurs	0.18	0.44%
6	Post-Harvest Fisheries Guarantee Scheme	0.02	0.05%
7	MSME Empowerment	0.01	0.04%

Source: Survey Results

[4] Data are reported as of 30 June 2025.

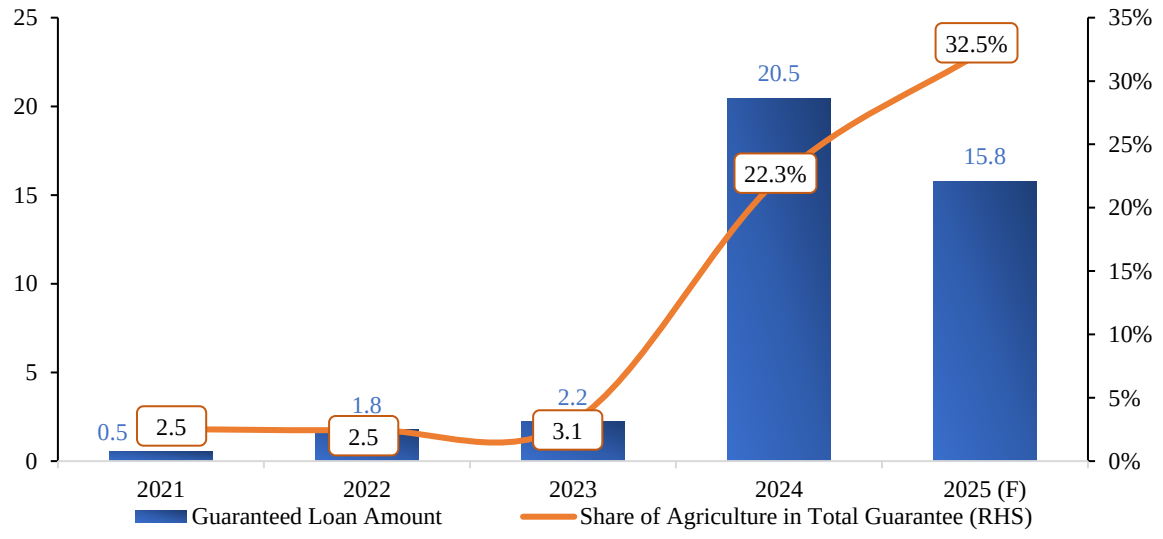
CGCC's guarantee assessments rely on a structured process tailored to scheme type, individual, portfolio or wholesale guarantees, where PFIs must comply with scheme conditions and submit detailed loan information. The evaluation criteria follow the traditional 5Cs supplemented by periodic site inspections, expense verification and collaboration with MAFF to ensure that MACs maintain good governance, sound financial practices and clear business plans. Loan rejections primarily stem from lack of repayment ability (40%), poor credit history (40%) and insufficient documentation (10%), while misuse of funds accounts for the remaining 10%. When a guarantee application is rejected by CGCC, the loan account is not covered under CGCC's guarantee schemes, and it becomes subject to the internal decision of PFIs. In such cases, PFIs may reject the loan application outright or require additional collateral before proceeding, as this falls outside CGCC's process and within the PFIs' internal credit approval procedures.

To effectively manage and mitigate NPLs, CGCC implements several proactive measures:

i. **Early Identification:** Detecting potential NPLs through close monitoring of borrower performance and repayment trends.
ii. **Proactive Communication:** Engaging PFIs regularly to explore restructuring or recovery options for at-risk borrowers.
iii. **Encouraging Restructuring:** Promoting loan restructuring for eligible customers to restore financial stability.
iv. **Continuous Monitoring and Analysis:** Conducting daily and monthly reviews to track NPL developments and identify root causes.
v. **Risk Assessment Enhancement:** Strengthening internal credit risk tools to improve predictive capacity and minimise future defaults.

To better support Cambodia's agricultural sector and MACs, CGCC could further enhance its impact through tailored guarantee products that reflect the seasonal and risk characteristics of agriculture and by deepening collaboration with financial institutions to co-design financing models suited to smallholders and cooperative structures. Additionally, CGCC could expand guarantee schemes that cover the entire agricultural value chain, ensuring inclusivity for women-led and marginalised cooperatives, and complementing these efforts with technical support and financial literacy initiatives to promote sustainable and equitable sector growth.

Figure 18: Proportion of Guarantee Scheme to the Agricultural Sector
(from 2021 to 2025f, in Million USD, in Percentage)



Source: Survey Results

(8) Perspectives Towards MACs

BFIs and the CGCC collectively emphasise that for the agricultural sector and MACs to gain broader access to financing, significant institutional, managerial and financial improvements are required. ACLEDA Bank notes that current macroeconomic challenges continue to affect asset quality and business performance in agriculture, prompting the need for careful risk management and portfolio oversight. Chip Mong Bank underscores the importance of formalising legal and organisational structures, clearly segregating responsibilities within cooperatives and ensuring transparent financial reporting to improve lender confidence. It also highlights the role of financial literacy in enabling cooperative members to manage credit effectively. Similarly, Wing Bank stresses planning and budgeting discipline, stronger technical and management capacity, proper financial record-keeping and responsible debt management, while reiterating that sufficient collateral remains a key comfort factor for financial institutions. FTB calls for the establishment of a national agricultural value chain policy that promotes collective risk-sharing among stakeholders, reducing the financing burden on banks and creating a more enabling policy environment for agricultural lending.

As a policy-oriented bank, ARDB provides a comprehensive roadmap, recommending the development of clear business plans and financial projections, stronger cooperative management capacity, adoption of digital and operational tools for transparency and efficiency, and the strengthening of market linkages and contract farming models to ensure stable revenue and repayment capacity. It further advocates for continuous capacity-building and financial literacy training to enhance institutional readiness and creditworthiness. Meanwhile, the CGCC aligns with these views, identifying improved governance, accurate financial records, clear business and investment plans and market diversification as prerequisites for eligibility under guarantee schemes. It also highlights that MACs benefit from non-collateralised guaranteed loans through partner banks such as ARDB and FTB, but their growth potential depends heavily on support from MAFF and internal improvements in entrepreneurship, leadership and financial management. However, CGCC also cautions that limited management expertise and human resource capacity remain critical obstacles to scaling up financing access.

In summary, both financial institutions and CGCC view MACs as promising yet underdeveloped financial intermediaries for agricultural growth. Their recommendations converge on a few essential priorities: strengthening governance and leadership, improving financial transparency and literacy, adopting digital systems for accountability, securing stable market linkages and fostering coordinated public–private risk-sharing policies. Addressing these institutional and structural gaps will be pivotal for transforming MACs into credible, bankable entities capable of channelling sustainable finance across Cambodia's agricultural sector.

(9) Perspectives on the Potential of MACs as a New Source of Agricultural Growth

Regarding the perspectives of BFIs towards MACs, only a few institutions have developed a clear understanding or provided concrete opinions about their impressions of this borrower group. Among them, two FIs agreed that MACs demonstrate high creditability and are well developed, while one institution highlighted that MACs are open to receiving institutional support and are distinguished by having a clearly structured budget plan. In contrast, ARDB provided the most comprehensive and forward-looking assessment of MACs and their prospects. ARDB regards MACs as a promising and increasingly creditworthy customer segment within Cambodia's agricultural financing landscape. Their strengths lie in formal legal registration, defined governance structures and business-oriented operating models, which distinguish them from informal farmer groups or individual borrowers and enable more effective engagement with financial institutions.

ARDB further emphasises that MACs possess stronger financing credibility owing to their collective accountability, transparent internal controls and structured financial management, all of which help mitigate default risk and enhance lender confidence. Many MACs have also benefited from technical assistance and capacity-building programs provided by government agencies and development partners, improving their

financial literacy, record-keeping and operational efficiency. In terms of financing readiness, ARDB notes that while collateral availability remains limited, some MACs hold communal assets such as machinery, storage facilities or buildings that can serve as loan security. More importantly, MACs adopt alternative risk-mitigation mechanisms, such as joint guarantees or contract-based income streams, which provide additional assurance to lenders. Furthermore, their aggregator role, facilitating bulk input procurement and collective marketing, helps reduce transaction costs for financial institutions and creates predictable, traceable cash flows, thereby strengthening their overall creditworthiness. Beyond their commercial function, MACs also serve as instruments of rural economic and social development. This dual role is supported by strong governance structures, transparent management practices and sound financial positions, which collectively justify continued policy-bank support and public investment. In this context, ARDB has proposed a 'MAC Governance Readiness Framework' that links the quality of governance to eligibility for specific financial instruments, including differentiated interest rates and loan tenors, thereby aligning institutional performance with financing conditions and reinforcing MACs' role as reliable partners for sustainable agricultural finance in Cambodia.

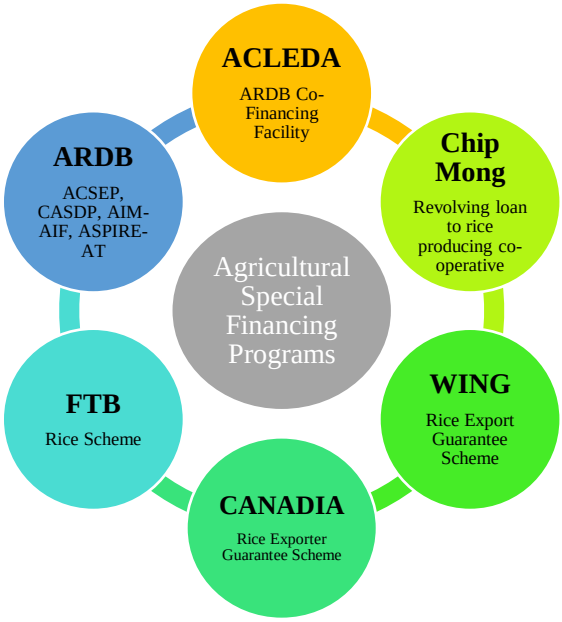
Conversely, institutions such as ACLEDA, Canadia and SME Bank did not provide assessments, reflecting either limited engagement or a cautious stance towards this emerging segment. Meanwhile, CGCC maintains a more conservative position, stating that MACs are not yet strong potential borrowers compared to other business groups because of their start-up nature, limited collateral and lack of financial track records or experienced management.

While some banks and ARDB identify MACs as a promising conduit for expanding agricultural finance, given their collective model, governance structure and institutional support, others, including CGCC, will likely remain hesitant until MACs demonstrate stronger financial discipline, management maturity and collateral capacity. This divergence underscores both the growing recognition of MACs' potential and the need for continued institutional strengthening to make them fully bankable in Cambodia's evolving agricultural finance landscape.

(10) Agricultural Special Financing Programs in Which BFIs Participate

The participation of BFIs in Cambodia's agricultural special financing programs reflects a growing commitment to enhance credit accessibility and strengthen the country's agri-financial ecosystem. ACLEDA Bank partnered with ARDB under the ARDB Co-Financing Facility (ARDB_CFF), a USD 40 million initiative implemented from 2022 to 2023, structured as a 50–50 cost-sharing scheme to support MSMEs, cooperatives and producers in horticulture, livestock, aquaculture and agro-processing. Chip Mong Bank introduced revolving loan schemes, allocating USD 1 million to fish-raising cooperatives (2023–2025) and USD 10 million to rice-producing cooperatives (2025–present), improving liquidity and access to working capital for producer groups. Wing Bank diversified its agricultural financing through three key programs totalling USD 13 million, including a Rice Export Guarantee Scheme (2025–2026), a Credit Facility for Agricultural Development (2024–2029), and another dedicated to Climate Resilient Technologies (2025–2028), all aimed at promoting agribusiness modernisation and sustainability. Canadia Bank supported rice exporters through its Rice Exporter Guarantee Scheme (USD 3 million, 2024–2025), providing competitively priced loans to members of the Cambodia Rice Federation. FTB also contributed to export-oriented financing through its Rice Scheme (USD 6 million, 2024–2025), targeting rice millers and exporters. Meanwhile, as the leading policy and development bank, ARDB remains central to agricultural financing through large-scale programs such as ACSEP (USD 51 million, 2021–2029), Cambodia Agricultural Sector Diversification Project (CASDP) (USD 15 million, 2019–2026), AIM-AIF (USD 20 million, 2024–2027) and ASPIRE-AT (USD 7.9 million, 2023–2029), which combine direct lending, grants and wholesale financing to expand credit reach, build cooperative capacity and promote rural inclusion. In summary, these initiatives collectively highlight Cambodia's evolving agricultural finance landscape, where commercial banks, specialised lenders and development institutions collaborate to provide both capital and capacity-building support, strengthening value chains, enhancing financial inclusion and promoting sustainable growth across the agricultural sector.

Figure 19: Current Main Agricultural Special Financing Program in which BFIs Participate



Source: Survey Results

(11) BFI and CGCC Views on Strengthening Agricultural Growth Through MAC Financing

Most financial institutions agree that channelling agricultural finance through MACs can play a pivotal role in strengthening Cambodia's agricultural sector and creating new sources of growth. Chip Mong Bank views lending to MACs as an effective way to build successful role models for other farming communities, thereby fostering replication and broader sectoral development. Wing Bank similarly emphasises that expanding credit access to MACs is a key strategy for unlocking agricultural growth and improving production capacity. ARDB provides the most comprehensive perspective, recognising MACs as strategic conduits for financial inclusion and agricultural transformation. ARDB highlights that financing MACs not only enhances their operational and institutional capacity but also promotes investment in aggregation, storage and processing infrastructure, crucial for improving productivity and market access. Moreover, it underscores that lending through MACs reduces transaction costs, facilitates group-based risk-sharing and enables banks to serve smallholders more efficiently, thereby catalysing adoption of improved technologies, climate-resilient practices and higher-value market linkages.

Complementing these institutional perspectives, CGCC stresses that access to financial support through loans is essential for promoting MAC development and unlocking new growth potential in agriculture. CGCC further emphasises the need to strengthen MACs' entrepreneurship, leadership, financial literacy and cash flow management capabilities to ensure profitable and sustainable operations. By enhancing these competencies, MACs can minimise the risk of loan mismanagement, reduce over-indebtedness and improve their long-term creditworthiness, thereby reinforcing their role as reliable partners in Cambodia's agricultural financing ecosystem.

While FTB notes its engagement with MACs is still in the pilot phase and ACLEDA, Canadia and SME Bank have yet to comment, the overall responses indicate growing recognition among active participants that financing through MACs is not only a viable credit delivery model but also a catalyst for inclusive and sustainable agricultural growth in Cambodia.

(12) Suggestions for Promoting MAC Development

BFIs emphasise that the government and key stakeholders must adopt coordinated and practical interventions to accelerate the development of MACs and enhance their role in Cambodia's agricultural

value chain. Chip Mong Bank proposes collaboration between the government and SME Bank to create co-funding schemes with BFIs, enabling lower interest rate loans and wider credit accessibility for agricultural producers. Wing Bank provides a comprehensive set of recommendations, advocating for investment in large-scale warehouse and drying facilities, as well as the introduction of inventory or warehouse receipt financing to improve working capital and stabilise farmgate prices. It also suggests promoting industrial-scale agro-processing hubs for rubber, cassava, animal feed and fertilisers, linked to contract farming with MACs, alongside establishing sub-national agricultural support offices to deliver localised technical assistance and capacity-building. Moreover, Wing recommends enabling BFIs to access concessional funding sources and encouraging the National Bank of Cambodia (NBC) to assign a 0% risk weight for MAC-related agricultural loans to incentivise sector lending. FTB calls for a national policy on agricultural value chains that ensures shared risk management among policymakers and lenders, reducing the burden on BFIs and strengthening confidence in agricultural financing. Meanwhile, ARDB underscores a multi-dimensional approach: translating policy into actionable frameworks, designing cooperative-tailored loan products, engaging in de-risking mechanisms such as guarantee funds and concessional credit lines, and fostering value chain partnerships among input suppliers, processors and agri-tech firms to enhance market access and local value addition.

Complementing these perspectives, CGCC highlights that promoting MAC development also requires comprehensive training, capacity-building and technical support in key areas such as farming, entrepreneurship, leadership, financial literacy and cash flow management. CGCC further emphasises the importance of ensuring an adequate water supply and establishing reliable market linkages for agricultural products, noting that such structural and operational improvements are crucial for enabling MACs to manage loans effectively, maintain profitability and sustain long-term growth within Cambodia's agricultural finance ecosystem.

Overall, BFIs and CGCC share a unified vision that strengthening MACs requires a holistic policy and institutional approach—one that goes beyond financing alone. Expanding MACs' access to affordable credit must be complemented by investments in infrastructure, capacity-building and market systems to ensure that cooperatives can operate efficiently and sustainably. Policy banks play an important role in supporting MACs, absorbing early-stage risks through first-loss or co-financing mechanisms and crowding-in commercial banks via blended finance and credit guarantees. By aligning government initiatives, financial sector engagement and technical support mechanisms, Cambodia can transform MACs into robust, creditworthy institutions that not only enhance agricultural productivity but also serve as key drivers of inclusive and resilient rural economic growth.

6.3. Results from Field Survey with MACs

A total of 12 MACs across six provinces (Takeo, Kandal, Kampong Chhnang, Kampong Thom, Siem Reap and Tboung Khmum) were selected randomly under close collaboration and discussion with Provincial Department of Agriculture, Forestry and Fisheries (PDAFF) officers in the respective provinces. To capture comprehensive insights and date, the interview was divided into focus group discussions and individual interviews, involving 33 individual respondents across the 12 MACs selected. Participants were board of director members and farmer representatives. These consultations provided grassroots insights into financing needs, barriers to accessing credit, operational challenges and readiness for scaling up through innovative financing.

i. About the Participatory MACs

(1) Banle Phtas Samnanh Tramkak MAC

Banle Phtas Samnanh Tramkak MAC, located in Takeo Province, was established on 22 August 2024 to promote modernised vegetable cultivation and strengthen farmers' collective competitiveness through net-house farming practices. The community comprises 54 members, jointly managing 4.3 hectares of farmland under hard title with multi-ownership arrangements. The MAC specialises in producing lettuce, bok choy and curly wrap bok choy, cultivated primarily using net-house agri-tech techniques aimed at improving yield consistency and product quality. Financially, the MAC reports an

average annual income of KHR 700 million and an average annual expenditure of KHR 574 million, maintaining a generally good business standing but with limited capital reserves. Its funding mainly relies on own capital, while also benefiting from a loan with the ARDB at 7% annual interest, equivalent to USD 50,000 for three years. The loan supports activities such as warehouse construction and purchasing agricultural inputs. However, persistent issues continue to affect growth stability such as limited capital, unstable market demand and the absence of accurate daily consumption data for vegetables by commodity. Looking ahead, the MAC aims to expand its agricultural land and production capacity, diversify market linkages and strengthen technical training and net-house management.

(2) Srov Phkar Romduol Khnar Chhmar Senchey MAC

Srov Phkar Romduol Khnar Chhmar Senchey MAC, located in Kampong Chhnang Province, was established on 21 August 2025. It comprises 51 members managing approximately 298 hectares of paddy land under soft title deeds with sole ownership. The primary crops cultivated are Romdoul paddy and Sen Kro Ob paddy, with members adopting agri-tech such as drones and the use of organic agri-inputs (fertilisers and crop nutrients) to improve productivity and sustainability. Financially, the MAC reports an average annual income of KHR 150 million and an annual expenditure of KHR 120 million. Although the community maintains a modestly positive financial balance, it continues to face working capital shortages that limit investment and growth. With funding sourced entirely from members' own capital, the MAC has identified a capital need equivalent to about USD 159,000 to purchase essential agricultural equipment such as a combine harvester (~USD 45,000), drone (USD 10,000), tractor (~USD 45,000), warehouse (USD 25,000), drying machine (USD 25,000) and colour sorter (~USD 9,000). This MAC has not yet accessed loans from BFIs owing to its early stage, and therefore continues to rent machinery from third parties, increasing operational costs and reducing profit margins. Institutional challenges include the absence of a formal management team (e.g. CEO, CFO, COO), limited warehouse capacity and inadequate investment capital. To address these challenges, the MAC is implementing annual quality audits through an internal audit team and is planning to procure essential farming tools to reduce dependency on equipment rental. The community also benefits from a partnership with Amru Rice, which supports market access and quality assurance. In the coming years, the MAC aims to expand its agricultural activities, strengthen its management structure and improve access to finance to ensure sustainable growth.

(3) Sosei MAC

Sosei MAC, established on 6 May 2024 in Siem Reap Province, comprises 76 members who collectively manage 18 hectares of farmland under hard title deeds with multi-ownership arrangements. The community primarily focuses on vegetable cultivation, particularly chilli farming, and has adopted several agricultural technologies such as net-houses and drip irrigation systems, and is currently preparing to install solar panels for water pumps to enhance irrigation efficiency and reduce energy costs. In 2024, Sor Sey MAC reported an average annual income of KHR 324 million and an annual expenditure of approximately KHR 180 million. The community's funding structure is primarily based on 95% loans from BFIs and 5% own capital, indicating strong engagement with the formal financial system. ARDB is the main financing partner, providing a loan of USD 200,000 with a 7% annual interest rate, a 7-year tenor and collateralised by 7 hectares of members' land along with a business plan. Although Sor Sey MAC's capital is assessed as sufficient for current operations, the community plans to expand its investment by approximately USD 700,000 by 2027 to build an additional 271 net-houses. The MAC has, however, encountered challenges in accessing credit, including high interest rates, strict collateral requirements and lengthy approval procedures. To improve access to affordable credit, Sor Sey MAC recommends that interest rates be reduced to 3–5% and that loan procedures be simplified to allow timely and equitable access to finance for agricultural communities. Looking forward, Sor Sey MAC plans to obtain Good Agricultural Practices (GAP) certification to strengthen market access, produce up to 70% of the vegetables currently imported into Siem Reap and expand into agro-tourism in alignment with the Ministry of Tourism's Green Belt Project. The community has also expressed a

need for modern farming technology, training and study visits and a sustainable irrigation system to ensure year-round production.

(4) Tum Ring Cashew MAC

Tum Ring Cashew MAC, established on 5 July 2024 in Kampong Thom Province, is composed of 72 members managing approximately 33 hectares of land under mixed land titles with multi-ownership arrangements. The MAC primarily engages in cashew nut cultivation and has recently implemented a new governance structure, appointing one CEO and one accountant to improve operational and financial management. Members follow standardised agricultural practices, particularly in the use of fertilisers and crop protection inputs, to enhance both yield quality and consistency. Financially, the MAC generated an average annual income of KHR 1.85 billion and an average annual expenditure of KHR 1.51 billion in 2024. The community's funding structure relies entirely on 100% loans from BFIs, particularly from ARDB. The MAC received a loan of USD 290,000 at a 7% annual interest rate with a 3-year repayment period, secured by business plans and total agricultural land as collateral. Despite the financial progress, capital remains insufficient, with an estimated need of approximately USD 880,000 to support further investments. Additionally, the community also faces some loan utilisation challenges, as funds must be fully withdrawn on approval, limiting flexibility. Some funds were temporarily deposited in ACLEDA Bank to earn interest until ready for disbursement. To strengthen MAC development, the community suggests expanding training on community management, enhancing marketing and financial literacy and facilitating access to affordable credit. For enhancing credit affordability, MAC members recommend reducing loan interest rates to 3–5% and simplifying the loan approval process to encourage timely and productive investments.

(5) Prasat Sambour Rung Roeang MAC

Prasat Sambour Rung Roeang MAC, established on 30 July 2024 and located in Kampong Thom, comprises 173 members collectively managing approximately 726 hectares of farmland. Financially, the community reported an average annual income of KHR 388.8 million and annual expenditure of KHR 92 million in 2024. However, capital remains insufficient to fully support its expansion and productivity improvement plans. The MAC's financial structure relies primarily on 90% loans from BFIs—particularly ARDB—and 10% own capital. The MAC has secured a loan of USD 440,000 from ARDB at a 7% annual interest rate with a three-year tenor, guaranteed by CGCC. Despite their collective efforts, this MAC still faces a capital shortfall, requiring an estimated USD 750,000 to further expand operations—particularly for input procurement, labour and facility development. Transportation constraints, limited market demand and the uncertainty of MAC operations are other key challenges. To improve access to finance, the MAC members recommend lowering interest rates to 4–5% and simplifying loan procedures and approval timelines to enable faster access to capital for production, processing and market expansion activities. Over the next couple years, the MAC plans to construct a cashew processing factory, improve storage and transport infrastructure and expand agricultural land to strengthen value chain competitiveness.

(6) Aphiwat Damnam Srauv Kampong Thom MAC

Aphiwat Damnam Srauv Kampong Thom MAC, established on 25 April 2025 in Kampong Thom Province, is a modern cooperative comprising 168 members managing around 3,500 hectares of farmland. It focuses on paddy rice cultivation, integrating modern mechanisation technologies such as drones, harvesting machines and tractors to enhance productivity, improve pest management and increase production efficiency. Financially, the community reported an average annual income of KHR 4 billion and annual expenditure of KHR 2.8 billion in 2024. The MAC's financial structure relies entirely on 100% loans from BFIs, notably the FTB. The MAC obtained an FTB loan of USD 400,000 at an 8.05% annual interest rate, with a three-year tenor. Despite its progress, the MAC estimates an additional USD 2 million is required to expand operations, including building a warehouse (~USD 120,000) and investing in agricultural machinery to improve productivity. Key challenges include insufficient drones for pest control, lack of proper office workspace and limited experience in contract

farming, which has led to operational inefficiencies and compliance gaps among members. To further enhance its development, the MAC recommends reducing loan interest rates to 4–5%, simplifying loan approval procedures and expanding government-backed programs that support modern mechanisation, value chain infrastructure and access to affordable finance for agricultural communities. Over the next few years, the MAC plans to purchase additional drones, develop high-quality rice seed varieties and feed rice production and construct both an office workspace and warehouse to strengthen operations and logistics.

(7) Phnomkulen Cashew MAC

Phnomkulen Cashew MAC, established on 17 July 2025 in Siem Reap, comprises 112 members collectively managing approximately 331 hectares of farmland. As a newly formed MAC, it faces transportation difficulties owing to poor road conditions, and remains in the development stage with no clear financial budgeting. The MAC has not yet received any loans from financial institutions and continues to rely on support from MAFF to strengthen its operations and financial capacity. Over the coming years, the MAC aims to increase its membership base by 50%, expand its agricultural activities—particularly into livestock production as encouraged by MAFF—and continue enhancing agricultural practices to meet market standards. To support this progress, the MAC requests assistance in accessing formal credit, developing a business plan, constructing office workspace and storage facilities and procuring essential agricultural machinery such as peeling machines, packaging machines and drying ovens. Additional support in technical training and market facilitation is also needed to strengthen its long-term sustainability and improve members' livelihoods.

(8) Memot Tboung Khmoum Pepper MAC

Memot Tboung Khmoum Pepper MAC, established on 7 November 2024 in Tboung Khmoum, comprises 83 members collectively managing approximately 300 hectares of farmland. The MAC specialises in pepper production and has adopted several improved agricultural practices, including the use of solar-powered water pumps, climate-resilient mulching techniques and standard farming practices verified by Sela Pepper. Financially, the community reported an average annual income of KHR 550,653 and annual expenditure of KHR 346,994 in 2024. Although the business situation is generally good—with 38 out of 83 members already obtaining GAP certification and 24 more currently in the process—capital remains insufficient to support expansion and operational strengthening. The MAC's financial structure relies primarily on loans from ARDB, complemented by own capital (10%). The cooperative has secured an ARDB loan of USD 437,000 at a 7% annual interest rate with a one-year tenor, supported by MAFF, its business plan and CGCC credit guarantees. Despite this support, the MAC still faces a capital shortfall of approximately USD 852,864 to expand production, strengthen operational capacity and invest in essential facilities. Other key challenges include the absence of a warehouse, limited access to capital, lack of accounting software and insufficient funds to cover salaries for key management positions such as CEO, CFO and COO. To address these constraints, the MAC has initiated new activities—including rubber, durian and cashew nut—to diversify income sources. It is also implementing the Pepper Smart Agriculture Plan and utilising climate-resilient mulching to improve production efficiency. Looking forward, the MAC plans to expand into the international export market and continue diversifying into additional agricultural activities. To improve access to finance, MAC members recommend lowering interest rates to around 5% and simplifying loan approval procedures to support timely and effective investment for production, processing and market expansion.

(9) Sala Visai Cashew MAC

Sala Visia Cashew MAC, located in Sala Visai Commune, Prasat Balang District, Kampong Thom Province, was established on 30 July 2024 to enhance local cashew nut production and trade. The cooperative currently consists of 88 members and manages approximately 255 hectares of farmland, most of which are under soft title deeds. The MAC primarily relies on yields from four-year-old M23 cashew trees, known for producing larger nuts that can be harvested annually, from late February until mid-May. Despite its progress, the cooperative faces several challenges. First, limited local awareness

and understanding of the MAC's structure and the requirement to retain 10% of profits as internal reserves have discouraged some farmers from joining. Second, contract compliance remains weak, as MAC cannot make immediate payments to farmers such as private brokers do. The cooperative also faces cash flow constraints, needing buyers capable of providing advance deposits to ensure prompt payment to members and sustain trust. Additionally, unfavourable weather conditions, such as heavy rainfall during harvest season, have resulted in excess humidity levels that exceed quality standards. Financial limitations further restrict the MAC's ability to cover crop-handling costs and purchase fertilisers and pesticides at scale. Moreover, the reliance on heirloom cashew varieties, many of which are now aging, poses a long-term productivity risk. The MAC also reports difficulties with its bank loan, particularly regarding service fees and interest charged on undisbursed funds. Looking ahead, it plans to expand along the processing value chain over the next one to three years. Its development strategy includes expanding cultivation areas, enhancing technical support in both farming and processing and equipping the cooperative with adequate machinery and facilities to reduce reliance on costly rentals. To achieve these goals, the MAC estimates a financial need of USD 740,000, earmarked for establishing a permanent office and operating site, constructing a storehouse, drying yard, water storage facilities and well, and acquiring ploughing tractors, processing machines, transport vehicles and drone sprayers. These investments are expected to strengthen the cooperative's operational capacity, improve post-harvest management and reinforce its long-term sustainability within Cambodia's cashew nut value chain.

(10) Damnam Srauv Baray Taing Kouk MAC

Damnam Srauv Baray Taing Kouk MAC, located in Baray Commune, Baray District, Kampong Thom Province, was established on 4 April 2025 with the aim of organising local paddy rice growers into a structured production and marketing network. The cooperative currently consists of 180 members, cultivating a total of 5,000 hectares of paddy fields. Its members primarily grow two dry-season rice varieties, Sen Kro Ob 01 and Srongae Sral, the latter of which offers comparatively higher yields. Given the favourable dry-season cropping conditions, the MAC can harvest twice per year, contributing significantly to local paddy output. Despite this potential, it faces multiple operational and infrastructural challenges. It currently sells unprocessed wet paddy directly to the market because of a lack of technical capacity and processing facilities, which limits value addition. The irrigation system remains below standard, characterised by insufficient water, shallow canals and the need for structural improvement, while the area also experiences limited electricity coverage and inadequate road access, further constraining production efficiency and transportation. Additionally, the cooperative lacks its own storeroom for wet paddy and must rent storage space from others, increasing post-harvest costs. In terms of financial access, the MAC reports strict lending conditions and long processing times of up to one month, which hinder timely access to working capital. When financing is insufficient, the cooperative requires approximately USD 4,750,000 to cover essential production inputs such as land rent, labour, fertiliser, pesticides, seeds and ploughing services. Looking ahead, Baray Taing Kork MAC plans to expand its operations over the next one to three years by producing its own paddy seed varieties and improving irrigation coverage through the installation of additional pumping stations to ensure adequate water supply for all members. To strengthen its long-term development, the MAC suggests that support should prioritise upgrading irrigation systems, improving rural infrastructure such as roads and facilitating better market access for processed and higher-value paddy rice products.

(11) Srauv Neang Om MAC

Srauv Neang Om MAC, located in Kantuot Commune, Svay Leu District, Siem Reap Province, was officially established on 13 March 2024 as a farmer-based organisation primarily engaged in paddy rice cultivation. The cooperative currently comprises 57 members managing a total cultivation area of 531 hectares, which includes both paddy fields and small vegetable plots. Among its members, 30% of the cultivated land has been officially mapped and issued hard titles, while the remaining 70% still hold soft land titles, reflecting an ongoing process of land formalisation. Neang Om MAC initially grew

three main heavy rice varieties, Phka Rumdoul, Neang Om and Kha 9, but discontinued Phka Rumdoul in 2025 after discovering its poor suitability to local soil and water conditions, which resulted in a low yield and financial loss in 2024. The cooperative expects to recover by 2025, projecting profit from the wet-season paddy harvest scheduled for the winter months. Despite this positive outlook, the MAC faces significant operational challenges. Internal management issues during the loss period created mistrust among members, and the cooperative continues to experience a shortage of funds and limited human resources, particularly the absence of key operational staff such as a CEO, accountant, technician, administrator and stock manager. Access to finance remains constrained owing to high borrowing costs and lengthy loan processing times. The cooperative reports that financial institutions impose an additional 1% processing fee and 0.8% CGCC guarantee fee, raising the total cost of borrowing from the nominal 7% interest rate to approximately 9%, with an average loan approval period of about 2.5 months. MAC estimates it requires around USD 670,000 to invest in essential equipment and expansion activities, including purchasing a rice milling machine (to enable value-added processing and earn income from milling by-products), acquiring field machinery such as tractors and harvesters, constructing a seed-drying kiln and promoting its brand internationally through advertising and website development. In the medium term, Neang Om MAC plans to develop its own seed production capacity to supply both rice and paddy seed, alongside strengthening online visibility and branding through digital marketing platforms. To ensure sustainable growth, the cooperative proposes several development priorities, including establishing its own rice milling facilities, raising livestock fed by milling by-products and expanding market access through stronger branding and promotion. Regarding financial access, the MAC calls for lower interest rates, government-backed incentives such as 3–5-year interest-free periods and targeted subsidies to reduce production costs and support the long-term viability of MACs.

(12) Bonle Sovathipheap Kohkhsachtonlea MAC

Bonle Sovathipheap Kohkhsachtonlea MAC is a vegetable-growing cooperative established on 30 August 2024 in Koh Khsach Tonlea Commune, Sa'ang District, Kandal Province. The cooperative currently consists of 104 member families cultivating a total of 24 hectares of farmland, primarily producing lettuce, cabbage, bok choy and ginger. To support its operations and growth, the community requires approximately USD 300,000 in funding, which will be used as working capital for the procurement of agricultural tools, seeds and fertilisers and to construct additional net-houses aimed at improving crop quality and year-round production capacity. Despite its strong production base, the MAC faces several challenges, including limited access to capital, restricted market outlets and shortages of skilled human resources. Members have expressed the need for more technical training, particularly in modern cultivation methods and farm management practices. In addition, the absence of a formal management structure (CEO, CFO, COO) hinders effective coordination and business development. Looking ahead, the MAC plans to expand its cultivated area, diversify crop varieties to better align with market demand and explore livestock farming as an additional income source. There are also ambitions to develop agro-tourism activities, which could generate supplementary revenue and strengthen community engagement. To achieve these goals, members suggest that support should focus on providing additional investment capital, enhancing technical training and capacity-building, constructing more net-houses and establishing a clear organisational structure to professionalise management and ensure sustainable growth.

ii. Key Findings

(1) Current Development

To ensure the representativeness and reliability of the research findings, the study carefully designed its sampling strategy for the MACs based on the official available data. The selection of sample MACs in this study followed an evidence-based and sequential approach aligned with official government records. Initially, the sampling framework was derived from the registry published by MAFF, which identified only nine formally recognised MACs at the time of research design. During the subsequent

data collection phase, the updated information obtained from the PDAFFs revealed an expansion to 12 operational MACs, which subsequently formed the sample for this study. While consultations with MAFF, conducted following the completion of the field survey, indicated that the total number of registered MACs had increased to 22 as of September 2025, these newly established MACs were not included within the scope of this study because of time limits and budget constraints.

In addition, the study employed two main methodological approaches to generate a comprehensive understanding of the selected MACs: individual interviews and focus group discussions. These complementary methods enabled the research team to capture both quantitative data and qualitative insights regarding the operational performance, challenges and financial access conditions of the cooperatives. Regarding the MAC data collection, the study engaged a total of 33 individual respondents and conducted focus group discussions with representatives from 12 MACs. All participating MACs were formally registered and recognised by MAFF, ensuring the reliability and institutional validity of the sample.

Based on the data collected, the agricultural activities of the surveyed MACs were primarily concentrated in four main commodities: (i) paddy rice, (ii) cashew nut, (iii) vegetables and (iv) pepper. Among these, paddy rice accounted for the largest share at 34%, followed closely by cashew nut at 33%, while vegetable cultivation represented 25% and pepper contributed the remaining 8%. This distribution reflects a relatively diversified production structure, indicating that MACs are engaged across both staple and high-value crop segments. Such diversification suggests an adaptive production strategy that balances food security objectives with income generation opportunities, consistent with Cambodia's broader efforts to modernise and commercialise its agricultural sector (see Figure 20).

Figure 20: Agricultural Commodities

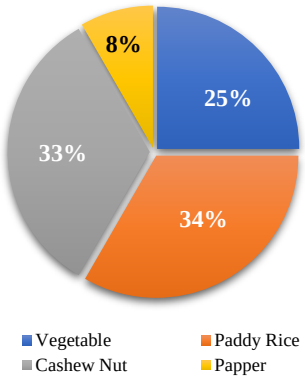


Figure 21: Vegetable Category

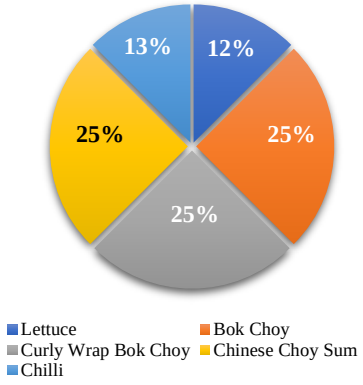
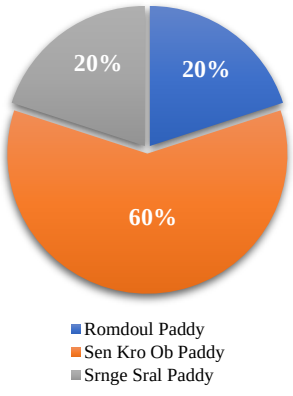


Figure 22: Paddy Rice Category



Source: Authors' calculation

Furthermore, within the vegetable category, cultivation is distributed among five major varieties, with bok choy (25%), curly wrap bok choy (25%) and Chinese choy sum (25%) representing the principal crops, while chilli (13%) and lettuce (12%) constitute smaller but commercially relevant shares. This balanced distribution indicates that vegetable-oriented MACs have adopted a diversification strategy aimed at mitigating production risks, ensuring year-round income generation and responding to differentiated market preferences (see Figure 21).

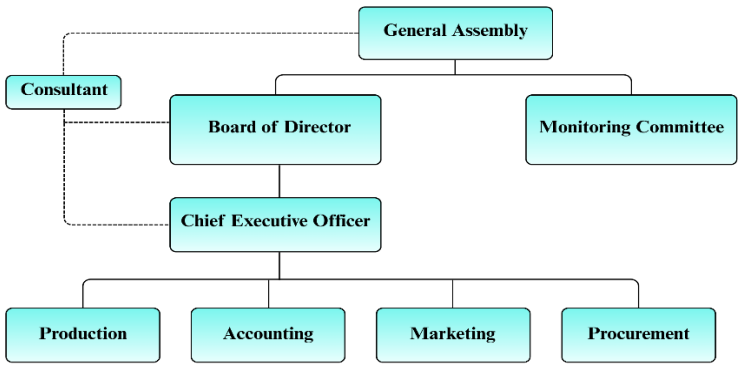
In contrast, the paddy rice category demonstrates a more concentrated production pattern. Sen Kro Ob paddy dominates with 60% of total cultivation, while Romdoul paddy and Srongae Sral paddy each account for 20% across different MACs within the same focus. The predominance of Sen Kro Ob paddy suggests a strategic focus on high-yield and market-favoured varieties, reflecting both economic rationality and local agronomic suitability (see Figure 22).

Overall, these findings highlight that MACs are simultaneously pursuing diversification and specialisation strategies, balancing resilience with market orientation to enhance productivity and competitiveness within Cambodia's modern agricultural framework.

(2) Governance Structure

To promote standardised and transparent management across all MACs, MAFF has established a formal governance framework to guide their organisational operations and decision-making processes. This structure defines clear lines of authority, accountability and advisory support to ensure the effective functioning of each cooperative.

Figure 23: Example of MAC Governance Structure



Source: Survey Results

At the top of this structure, the General Assembly functions as the supreme decision-making body, representing all members and setting the overall direction of the cooperative. The Board of Directors provides strategic leadership and oversees policy implementation, while the Monitoring Committee independently monitors performance, compliance and financial transparency. The CEO is responsible for daily management and directly supervises all the operational units include Production, Accounting, Marketing and Procurement as indicated by the solid lines, which represent direct management and oversight relationships within the organisation. In contrast, the Consultant, connected through dotted lines, serves in an advisory and supportive capacity, offering technical and strategic guidance to the Board of Directors and the CEO without directly managing the cooperative's operations. This structure reflects MAFF's intent to balance participatory governance with professional management, ensuring both accountability and operational efficiency within the MAC framework.

(3) Financial Situation

i/- Average Annual Income, Expenses and Profit: The most crucial aspect determining how MACs are growing is the financial angle, which tell us how efficient and effective MACs are with regards to their daily operation. Table 4 shows the average annual income, expenses and profits for four key agricultural commodities. The findings indicate that pepper production generated the highest financial performance, with an average annual income of KHR 2.20 billion, average expenses of KHR 1.39 billion and a resulting profit of approximately KHR 814.64 million. This substantial profit margin reflects the high market value and export potential of pepper as a premium cash crop. Paddy rice followed with an average annual income of KHR 1.71 billion and expenses of KHR 1.34 billion, yielding a profit of around KHR 368.09 million. This relatively moderate profitability aligns with its position as a staple commodity with high production costs but stable domestic demand. Cashew nut production recorded an average annual income of KHR 876.54 million and expenses of KHR 672.43 million. Even though in 2024 there was a selling price drop with regards to the cashew nut market, resulting a slight loss during mid-2024, MACs still managed

to generate an average annual profit of KHR 204.11 million, indicating moderate returns with potential for value chain improvement through processing and export linkages despite the unpredictable circumstances. Vegetable cultivation exhibited the lowest average income at KHR 700 million and profit at KHR 126 million, largely owing to smaller production scales and the perishable nature of produce, which increases post-harvest losses and market risk.

Table 4: Average Annual Income, Expenses and Profit by Commodity
(In million KHR, 2024)

Commodities	Average Annual Income		Average Annual Expense		Average Annual Profit	
Vegetable	KHR	700.00	KHR	574.00	KHR	126.00
Paddy Rice	KHR	1,711.98	KHR	1,343.90	KHR	368.09
Pepper	KHR	2,202.61	KHR	1,387.98	KHR	814.64
Cashew Nut	KHR	876.54	KHR	672.43	KHR	204.11

Source: Authors' Calculation

Building on the overall financial performance analysis of the surveyed MACs, it is also essential to examine productivity and profitability at the land-use level to understand how efficiently different crops generate returns. Evaluating income, expenses and profits on a per-hectare basis provides a clearer picture of comparative performance across commodities and the economic efficiency of MAC operations. As shown in Table 5, the analysis reveals that MACs with higher production intensity generally achieve greater income and profit levels; however, the degree of profitability varies significantly across crop types. Vegetable cultivation recorded the highest financial return per hectare, generating an average annual income of KHR 15.12 million against expenses of KHR 12.39 million, resulting in a profit of approximately KHR 2.72 million per hectare. A similar trend is observed for pepper production, which reported an income of KHR 7.34 million and a profit of KHR 2.72 million per hectare, reflecting its strong market demand and high commercial value despite relatively elevated production costs.

In contrast, cashew nut cultivation yielded a moderate income of KHR 1.96 million and profit of KHR 0.46 million per hectare, indicative of its longer maturation period and dependence on post-harvest processing for value addition. Paddy rice, while representing a major crop within MAC activities, exhibited the lowest profitability, with an average income of KHR 0.55 million and profit of only KHR 0.12 million per hectare, primarily owing to high input costs and limited price competitiveness.

Table 5: Annual Income, Expenses and Profit per Hectare by Commodity
(In million KHR, 2024)

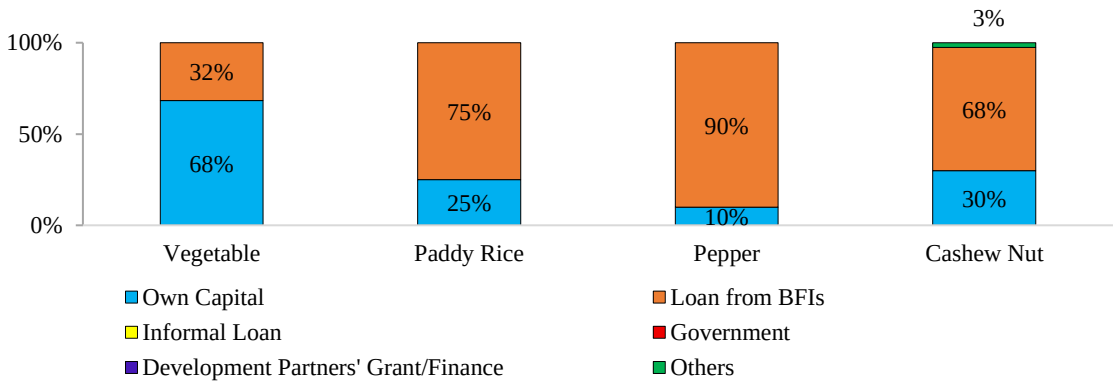
Commodities	Annual Income per Hectare		Annual Expense per Hectare		Annual Profit per Hectare	
Vegetable	KHR	15.12	KHR	12.40	KHR	2.72
Paddy Rice	KHR	0.55	KHR	0.43	KHR	0.12
Pepper	KHR	7.34	KHR	4.63	KHR	2.72
Cashew Nut	KHR	1.96	KHR	1.50	KHR	0.46

Source: Authors' Calculation

Thus, the findings suggest that while production scale contributes positively to income generation, profitability among MACs is determined more by the nature of the crop, input efficiency and market dynamics, rather than scale alone.

ii/- Source of Funds: Understanding the composition of funds by source provides valuable insights into how MACs utilise capital, manage their finances and access formal financial systems. This section examines the structure of MAC financing across different agricultural commodities, highlighting variations in reliance on own capital, credit and external support.

Figure 24: Share of Source of Funds



Source: Authors' Calculation

Figure 24 illustrates the varying degrees of financial dependence and self-capitalisation among MACs across different agricultural commodities. The data indicate that loans from BFIs serve as the dominant funding source for most MACs, particularly for pepper (90%), paddy rice (75%) and cashew nut (68%), reflecting the increasing reliance on formal financial channels to support large-scale or high-value crop production.

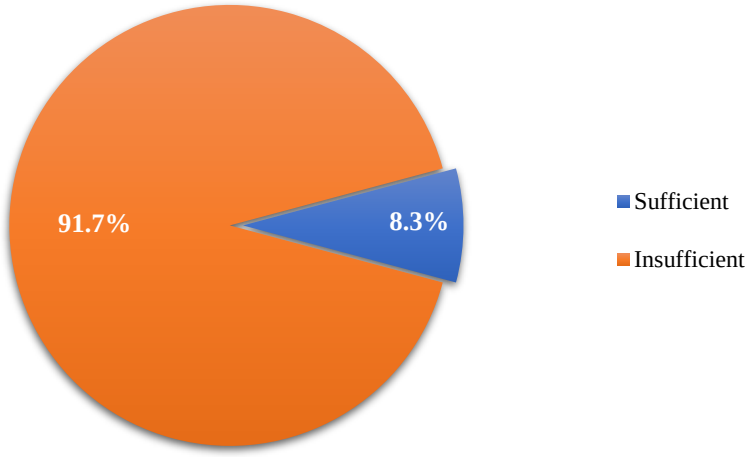
In contrast, vegetable MACs exhibit a stronger reliance on own capital, which accounts for 68% of their total funding. This indicates that vegetable producers primarily depend on internal resources and member contributions rather than external borrowing. Such reliance is largely attributed to their status as newly established communities, reflecting an ongoing stage of institutional development. This early-stage profile poses challenges for BFIs to extend credit, unlike the paddy rice and pepper MACs, which already possess stronger operational backgrounds and financial foundations.

Moreover, cashew nut MACs present a mixed funding structure, comprising 30% own capital alongside a small share (3%) derived from initial instalment payments under contract farming arrangements. This composition reflects a moderate level of external engagement, particularly during the formative stages of MAC development, where partnerships with buyers or intermediaries play a role in facilitating early financial mobilisation.

Overall, the distribution of funding sources underscores a clear trend that MACs engaged in capital-intensive or strategic crops such as pepper and paddy rice depend heavily on financing from BFIs, while those operating in short-cycle crops such as vegetables rely more on self-financing. This pattern highlights the differentiated access to finance within the MAC system and emphasises the importance of tailored financial mechanisms to meet the diverse funding needs of Cambodia's agricultural communities.

iii/- Capital Status: Despite the diversified source of funds across different communities, it is also crucial to understand their capital adequacy status to assess the extent to which existing financial resources are sufficient to meet their daily operation and investment.

Figure 25: Capital Adequacy Status



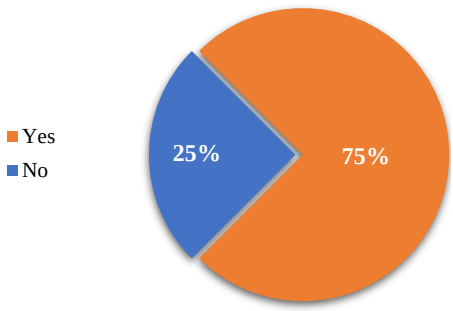
Source: Authors' Calculation

Figure 25 indicates that an overwhelming majority (91.7%) of MACs reported having insufficient capital, reflecting a financial limitation that constrains their capacity to expand production, invest in machinery and enhance value-added activities. Conversely, only 8.3% of MACs reported having sufficient capital, indicating that a very limited number of communities hold adequate financial resources to sustain current operations without the need for additional external funding or credit support. Hence, these findings highlight a critical structural challenge within the MAC system and emphasise the need for improved access to affordable credit, targeted financial instruments and institutional capacity-building to strengthen the long-term financial viability of MACs.

iv/- Access to Finance: The financial sector plays an important role in fostering financial stability and sustainable growth for MACs. Thus, examining their ability to obtain financing provides critical insight into how effectively these communities integrate into the financial system.

a) Credit Assess

Figure 26: Assess to Credit



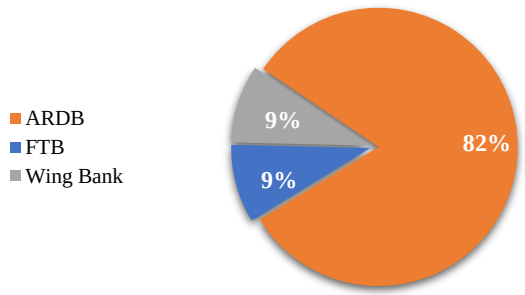
Source: Authors' Calculation

Figure 26 illustrates the credit access status of MACs, providing further insight into their financial inclusion and ability to mobilise external funding. Consistent with the earlier finding on limited capital sufficiency, the results show that while 75% of MACs have access to credit, a notable 25% still encounter challenges such as lack of a standard financial report and a strong and reliable business plan, and an unclear purpose behind utilising their funds, which restricts their eligibility for obtaining finance from BFIs. Thus, although a majority of communities are beginning to establish financial linkages with BFIs, a significant proportion remains excluded from formal financial systems.

b) Share of Bank Financing

Building on the analysis of MAC access to finance, it is also essential to examine which financial institutions are actively providing credit to the communities, as this reflects the structure and inclusiveness of agricultural financing in practice.

Figure 27: Share of Bank Financing to MACs



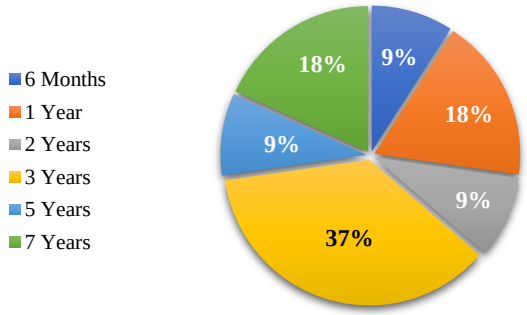
Source: Authors' Calculation

Figure 27 indicates that ARDB accounts for the largest share of financing, providing 82% of total loans to MACs. This dominance reflects ARDB's policy mandate to promote agricultural development and facilitate access to credit for rural enterprises. In contrast, the FTB and Wing Bank each contribute 9% of total financing, indicating more limited but emerging participation from commercial and digital banks even though ARDB is the main policy bank specialising in promoting rural development as well as the agricultural sector.

c) Share of Credit by Tenor

The structure of loan tenor is essential in identifying how credit terms are aligned with the production cycles and long-term investment needs of agricultural communities.

Figure 28: Share of Credit by Tenor



Source: Authors' Calculation

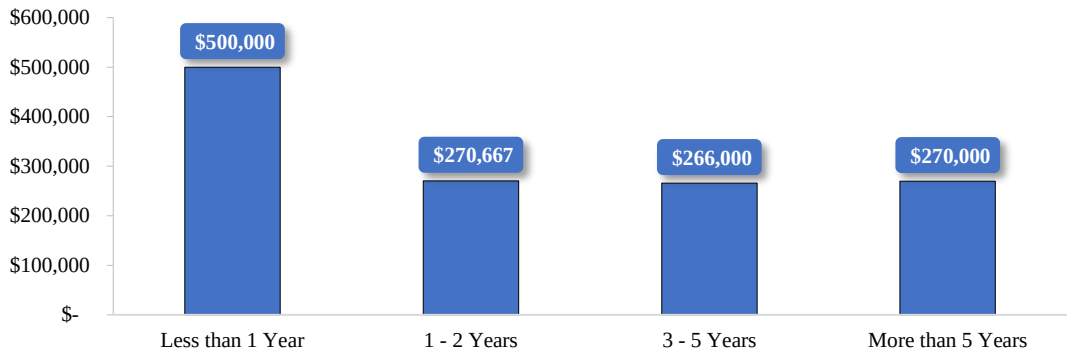
According to the survey, medium-term loans dominate the portfolio, with three-year tenor accounting for the largest share at 37%, reflecting the need for sufficient repayment periods to support agricultural production cycles and investment activities. One-year and seven-year tenor each represent 18%, suggesting that some MACs rely on short-term financing for working capital and others on longer-term credit for asset acquisition and infrastructure development. Meanwhile, other tenors such as 6 months, 2 years and 5 years each comprise 9%, indicating a smaller portion of diversified credit terms.

d) Average Credit Amount

The overall volume of financing available in the market for the agricultural sector significantly influences MACs' ability to access formal external funding, which is essential for sustaining their operations and supporting long-term growth. As shown in Figure 29, the data reveal that short-term loans (less than one year) have the highest average loan amount at USD 500,000, suggesting that financial institutions tend to issue larger short-term credits, possibly to address immediate working capital or seasonal production needs. In contrast, the average loan amounts for medium and long-term loans are relatively smaller and more uniform, with USD 270,667, USD 266,000 and USD 270,000 for loans of 1–2 years, 3–5 years and exceeding 5 years, respectively. This implies that while shorter-term financing is provided at higher volumes, likely reflecting quicker turnover and lower risk for lenders, longer-term credit remains limited

in size, potentially owing to the perceived higher risk and longer repayment horizon associated with agricultural investments.

Figure 29: Average Credit Amount by Tenor Type

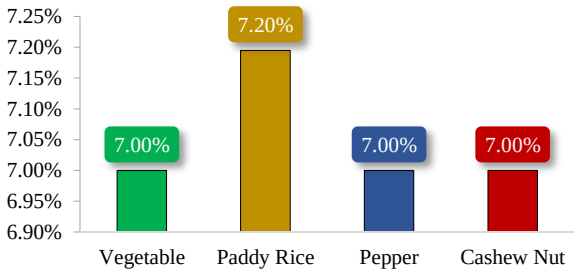


Source: Authors' Calculation

e) Interest Rates

Interest rates play a crucial role in determining MACs' ability to access affordable credit, as borrowing costs directly affect their financing accessibility. Lower interest rates enable MACs to mobilise funds more efficiently for daily operations, enhance liquidity and strengthen their capacity to invest in productive activities that drive community growth and long-term success.

Figure 30: Weighted Average Interest Rate by Commodity



Source: Authors' Calculation

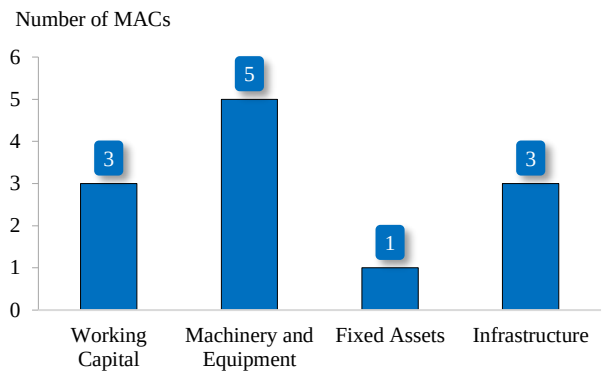
Results from the field survey emphasise that paddy rice communities face the highest average interest rate at 7.20%, slightly above the 7.00% rate applied to vegetable, pepper and cashew nut communities. This marginal difference suggests that paddy rice, which typically requires larger financing and longer repayment periods, is perceived by financial institutions as carrying slightly higher credit risk compared to other commodities. The relatively narrow range of interest rates (between 7.00% and 7.20%) indicates a fairly uniform lending environment for MACs. However, even small differences in borrowing costs can significantly affect financial sustainability, particularly for newly established communities with limited working capital and lower cash flow stability. This confirms the importance of access to affordable credit as a key factor enabling MACs to sustain production, invest in value-added activities and strengthen their long-term economic resilience.

f) Credit Purpose

The purpose of financing is considered another critical factor determining how effectively and efficiently MACs manage or utilise funds. It also serves as a key criterion in credit assessments conducted by BFIs, as a clearly defined loan purpose allows lenders to better evaluate associated risks; therefore, the clearer the financing purpose, the greater the likelihood of successful credit access.

As shown in Figure 31, the most common purpose of financing is for machinery and equipment, reported by five MACs, indicating a strong emphasis on improving productivity and operational efficiency through mechanisation. Working capital and infrastructure[5] development each account for three MACs, reflecting the need for liquidity to support day-to-day operations and investment in essential facilities such as storage or processing centres. In contrast, only one MAC reported using financing for fixed assets,[6] suggesting that long-term asset investment remains limited. It is important to note that several MACs use their credit for more than one purpose, which explains why the total number of purposes exceeds the number of MACs surveyed. This pattern underscores the diverse financial needs within the communities, as many seek to balance short-term operational demands with longer-term development goals to strengthen their overall sustainability.

Figure 31: Financing Purposes



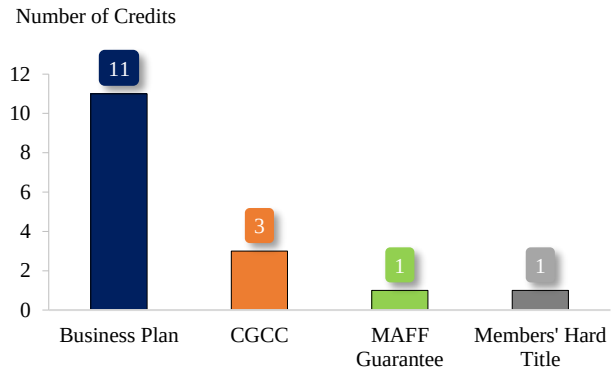
Source: Authors' Calculation

g) Collateral Conditions

It is important to note that collateral plays a crucial role in determining the conditions under which BFIs extend financing to MACs. Stronger collateral positions enhance lenders' confidence and improve the likelihood of favourable credit assessment and loan approval.

The findings highlight that all MACs relied on their business plans as the primary form of collateral, accounting for 11 credit cases, indicating that BFIs place significant trust in the financial and operational feasibility outlined in MAC business proposals as this is the formal document authorised by MAFF, which gives BFIs more confidence in financing MACs. In addition to business plans, some MACs also utilised asset-based collateral. Specifically, three credit cases were supported by the CGCC, while one case was backed by a MAFF guarantee and another by members' hard titles. This distribution suggests that while business plans remain the dominant collateral form, the use of formal guarantees and tangible assets is emerging as a complementary approach. Overall, these results underscore the heavy reliance on policy-bank financing, which provides loans to MACs with little to no collateral.

Figure 32: Collateral Types



Source: Authors' Calculation

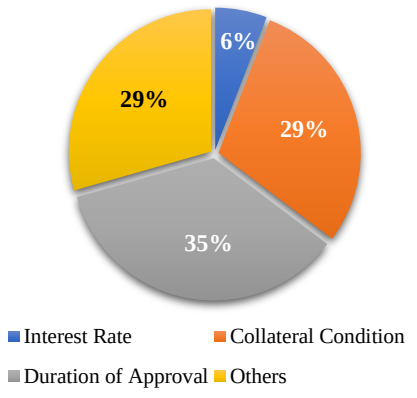
h) Challenges in Assessing Finance

While the majority of MACs have successfully accessed financing from BFIs, several challenges persist during the credit assessment process. Some MACs were unable to meet the

[5] Infrastructure refers to setting up an irrigation system and solar panels for water pumps.
[6] Fixed assets refer to warehouses and net-houses.

evaluation criteria and thus did not qualify for financing, largely owing to these underlying obstacles.

Figure 33: Share of Challenges in Accessing Credit



Source: Authors' Calculation

The findings show that the most frequently reported issue relates to the duration of approval, accounting for 35% of total responses. This suggests that lengthy credit assessment and disbursement processes create delays that affect MACs' ability to respond to time-sensitive agricultural activities. Collateral conditions and other factors each represent 29%, highlighting persistent difficulties in meeting collateral requirements and additional administrative or operational constraints during the financing process. The low reporting of challenges deriving from interest rates (cited by only 6%) indicates that while borrowing costs are a concern, they are less critical than procedural and collateral-related barriers. Notably, the 'other' category encompasses several practical financing obstacles identified during the field study. These include situations where MACs are required to withdraw the full loan amount immediately after approval even when funds are not yet needed, compelling some to deposit unused funds into a bank to earn temporary interest. Additionally, extra service fees and transaction costs often raise the effective interest rate from 7% to approximately 9%, while interest charges on undisbursed funds further increase the financial burden. These findings underscore the need for more flexible credit conditions, improved loan disbursement mechanisms and tailored financial products to better accommodate the operational realities of MACs.

v/- Benefits

Based on the survey findings, the study classifies the observed advantages of MACs into overall benefits that contribute to the collective development of the cooperatives and the improvements they offer for their members, as outlined below.

(1) Overall Benefits to MACs

a) **Government Support:** The government, through MAFF, provides extensive and multifaceted support to MACs, serving as both a policy enabler and an operational partner in advancing agricultural sector. One of the most significant contributions is market facilitation, whereby MAFF helps secure ready markets before MACs begin operation. This is often achieved through Memorandums of Understanding (MoUs) and contract farming arrangements, ensuring that MACs have predetermined buyers and price stability, and thereby minimised market risk and enhanced income predictability. Such arrangements not only foster confidence among producers but also attract private-sector engagement in the agricultural value chain. Beyond market linkages, MAFF places strong emphasis on capacity-building and soft skill development. Through structured training programs, MAC members gain practical knowledge in financial management, cooperative operations and standard agricultural techniques, equipping them to manage resources more efficiently, and productivity-enhancing practices. These initiatives also strengthen MACs' institutional governance, accountability and long-term sustainability. Moreover, MAFF also assists MACs in recruiting CEOs to ensure the communities will continuously sustain market operations, enhance the

financial performance of both the MACs and their member communities as well as drive the communities towards sustainable growth. Another major area of support involves credit facilitation. MAFF assists communities in preparing necessary documentation, developing business plans and interacting with BFIs to improve access to formal financing. In certain cases, MAFF also acts as a guarantor, reducing perceived lending risks and enabling MACs to obtain loans at more favourable terms. Moreover, MAFF provides in-kind assistance, including raw materials and quality seeds, particularly for paddy rice production, as indicated in the survey data. These inputs are complemented by technical guidance on fertiliser utilisation, crop maintenance and pest management, which enhance productivity and ensure sustainable farming practices. Importantly, MAFF also plays a proactive role in market negotiation and buyer coordination. By connecting MACs directly with potential purchasers, facilitating contract discussions and offering price advisory support, MAFF helps stabilise market relations and promote equitable trade terms. Collectively, these interventions demonstrate MAFF's crucial role in strengthening the entire agricultural community's ecosystem bridging production and finance, linking farmers to markets and building the managerial and technical capacity necessary for MACs to thrive as self-sustaining, market-oriented agricultural communities.

b) **International Development Program:** International Development Partners (IDPs) have also played a vital role in supporting MACs through targeted initiatives aimed at strengthening agricultural productivity, improving infrastructure and reducing financial burdens associated with capital investment. Two major programs—namely, the CASDP, supported by the World Bank, and the Agricultural Services Programme for an Inclusive Rural Economy and Agricultural Trade (ASPIRE-AT) under the International Fund for Agricultural Development (IFAD), processed by the European Investment Bank (EIB)—have provided substantial benefits to MACs across multiple operational dimensions. Under the CASDP, MACs have gained access to co-financing mechanisms that significantly reduce their overall investment costs. The program covers up to 40% of total investment expenses, particularly for infrastructure and equipment such as net-houses, which are essential for expanding high-value crop production and enhancing productivity through climate-resilient farming practices. This cost-sharing arrangement alleviates the financial burden on communities, allowing them to channel their own resources into complementary activities such as input procurement, training and market expansion. Similarly, the ASPIRE-AT program provides direct support to MACs by investing in warehouse construction and upgrading storage facilities for selected communities. These warehouses play a critical role in post-harvest management, enabling MACs to store, preserve and manage their products efficiently, thereby reducing post-harvest losses and improving product quality for market distribution. By minimising infrastructure investment costs, this program enhances the operational capacity of MACs and contributes to more stable income generation and long-term financial sustainability. Collectively, these programs demonstrate a strong commitment from international partners to foster inclusive agricultural development in Cambodia. By lowering investment barriers, strengthening production infrastructure and promoting efficient resource utilisation, CASDP and ASPIRE-AT directly empower MACs to become more competitive, resilient and capable of sustaining growth within an increasingly market-driven agricultural economy.

(2) Benefits to MAC Members: MACs offer a range of tangible and long-term benefits that enhance both the economic and technical capacity of individual farmers. One of the most significant advantages is the reduction in production costs, which on average reaches 19%

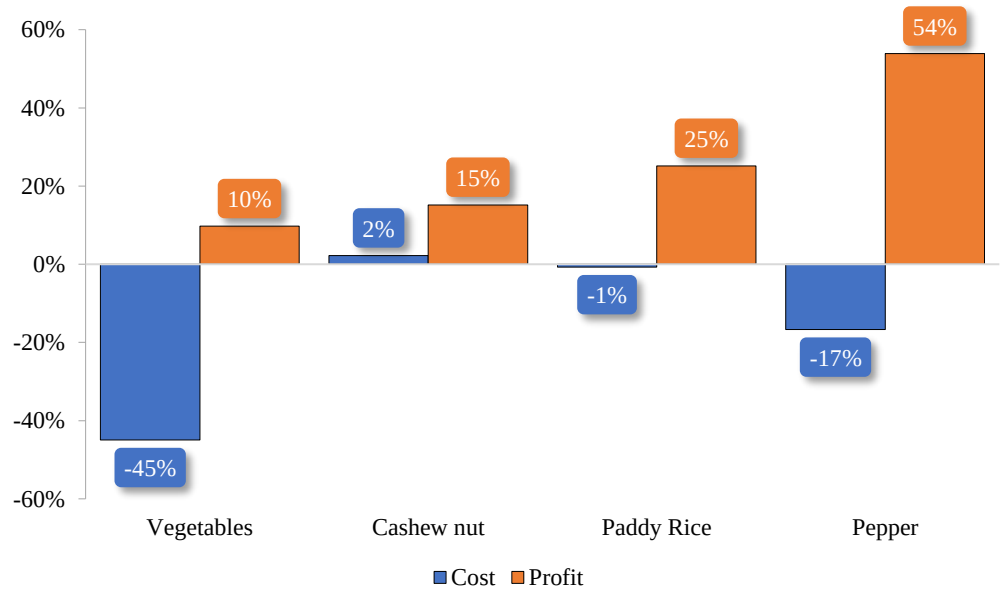
across all agricultural commodities. This reduction primarily results from collective purchasing mechanisms, whereby MACs procure fertilisers and pesticides in bulk quantities, enabling members to benefit from discounted input prices compared to individual purchases. Additionally, members are exempted from prepaid input requirements, which improves cash flow management and reduces the financial burden typically associated with seasonal production cycles.

Beyond cost efficiency, MAC membership also enhances income stability and profitability through structured market mechanisms such as contract farming arrangements. These agreements protect members against price volatility by securing predetermined selling prices and guaranteed market outlets, thereby increasing profit margins and reducing income uncertainty. Members further benefit from dividend distributions, ensuring that profits generated by the community are shared equitably and reinvested to strengthen collective growth.

Moreover, MACs play an instrumental role in capacity-building and knowledge dissemination. Through training programs, study visits and technical support, members are continuously exposed to modern and standard agricultural practices, including new farming techniques and updated information on pest and disease management. This technical support not only improves productivity but also enhances resilience against environmental and market-related risks.

Overall, MACs provide farmers with economic efficiency, income stability, technical advancement and secure market access, collectively empowering them to achieve sustainable growth and greater resilience within Cambodia's agricultural economy.

Figure 34: Economic Comparison after Becoming MAC Members



Source: Authors' Calculation

The findings show that vegetable producers experienced the largest cost reduction of 45%, primarily because of collective purchasing of inputs, while achieving a 10% increase in profit margin, reflecting efficiency gains despite moderate price pressures. In contrast, cashew nut producers reported a slight 2% increase in production cost, which can be attributed to their adoption of more standardised and higher-quality agricultural practices. Although this led to marginally higher costs, it also contributed to a 15% rise in profit

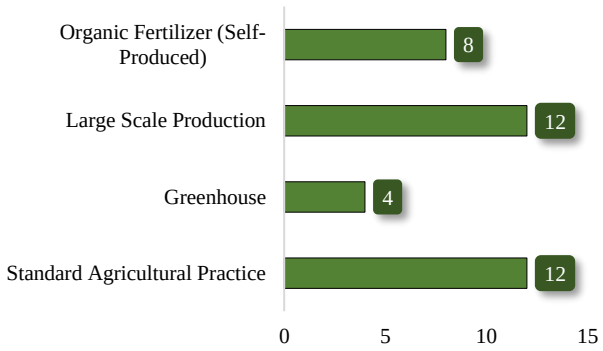
margin, demonstrating that investment in improved production standards yields positive financial returns.

For paddy rice producers, costs remained largely unchanged , while profit margins grew by 25%, reflecting the benefits of contract farming and better market coordination. Meanwhile, pepper producers saw both a 17% cost reduction and the highest profit increase of 54%, indicating strong demand and efficient value chain integration.

Overall, these results suggest that joining MACs enables members to enhance profitability through economies of scale, improved production practices and stronger market linkages, even when certain investments temporarily increase operational costs. Collectively, these benefits demonstrate that participation in MACs provides a comprehensive framework for improving farm-level efficiency, boosting profitability and strengthening members' competitiveness within Cambodia's evolving and increasingly market-driven agricultural sector.

vi/- Agricultural Modernisation: To ensure productivity, quality and sustainability, MACs have increasingly adopted modern and environmentally responsible farming techniques suited to their local conditions and market needs. MACs employ a combination of standard and safe vegetable farming practices, emphasising quality, sustainability and efficiency within their specific agricultural commodities.

Figure 35: Farming Technique



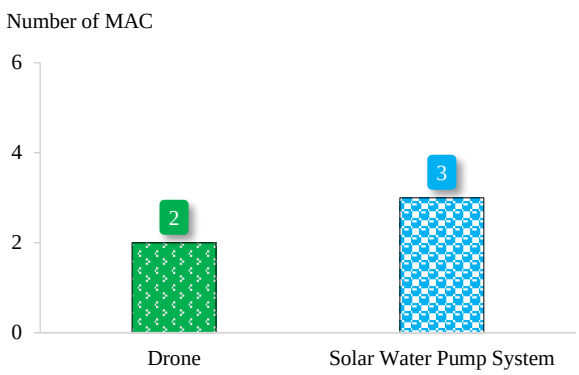
Source: Authors' Calculation

Figure 35 shows that standard agricultural practices and large-scale (collective) production are the most common techniques, each applied by 12 MACs, reflecting their emphasis on improving productivity through coordinated cultivation, harvesting and marketing. Meanwhile, organic fertiliser is self-produced by eight MACs, demonstrating an increasing shift towards environmentally friendly and cost-efficient input use. A smaller number (four) utilise net-house farming, indicating a growing but still limited adoption of climate-controlled technologies aimed at improving crop quality and enabling year-round production. Collectively, these findings highlight MACs' gradual transition towards modern, safe and sustainable agricultural methods that balance productivity with environmental stewardship.

Moreover, some MACs have already adopted the technology into their daily operations to promote sustainable development as well as enhance climate resilience.

The findings indicate that solar water pump systems are the most commonly adopted technology, utilised by three MACs, mainly to enhance irrigation efficiency and reduce reliance on conventional energy sources. Meanwhile, drone technology has been adopted by two MACs, primarily for crop monitoring, pest control and field mapping. While the number of adopters remains relatively small compared to the total surveyed communities, it represents an important step towards agricultural modernisation as well as demonstrates the growing interest among MACs in leveraging digital and renewable technologies to improve productivity, sustainability and resource management within the agricultural sector.

Figure 36: Agri-Tech Adoption



Source: Authors' Calculation

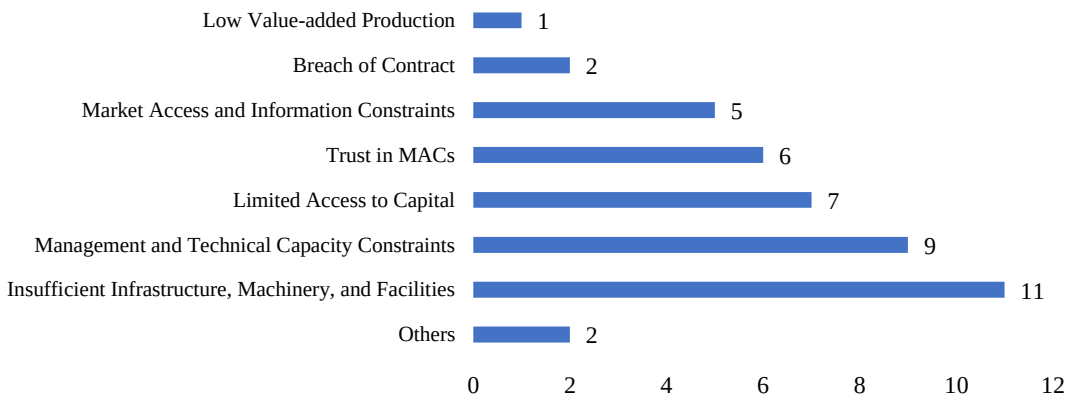
In addition to these technological initiatives, one cashew nut MAC among all survey communities has implemented the Geographical Indication (GI) Scan standard, which supports traceability and market differentiation, while one pepper MAC has achieved GAP certification for most of its members, ensuring compliance with sustainable and safe production standards.

In overall, MACs are progressively adopting modern and sustainable farming practices aimed at improving productivity, efficiency and environmental awareness. Common techniques such as standard production methods, collective farming and the use of self-produced organic fertilisers highlight a shift towards more coordinated and eco-friendly operations. Although the adoption of agri-technologies such as solar water pump systems and drones remains limited, these efforts mark an important step towards agricultural modernisation and climate resilience. Moreover, the implementation of GI Scan for cashew nuts and GAP certification for pepper demonstrates MACs' growing commitment to quality assurance, sustainability and competitiveness in both domestic and international markets.

vii/- Challenges

Understanding the challenges faced by MACs across various agricultural commodities is crucial for informing policymakers and enabling the design of more effective and evidence-based strategies to strengthen the sector's development and sustainability.

Figure 37: Challenges of MACs



Source: Authors' Calculation

Figure 37 illustrates the key challenges faced by MACs across surveyed provinces, highlighting both financial and operational constraints that limit their development. The results indicate that MACs encounter a combination of structural, financial, institutional and market-related barriers, with physical and organisational capacity constraints emerging as the most binding.

The most prominent challenge relates to insufficient infrastructure, machinery and facilities. Deficiencies in production and post-harvest infrastructure, such as limited access to machinery, inadequate storage and office facilities and weak supporting infrastructure, restrict MACs' ability to undertake efficient production, processing, storage and coordination activities. As a result, many MACs remain dependent on rented equipment and third-party facilities, increasing operating costs and limiting opportunities for upgrading and value addition.

Management and technical capacity constraints represent another major challenge. This category reflects both the shortage of technical expertise in production, processing and quality control and the absence of formal management and administrative structures. Weak managerial capacity and limited professional skills constrain planning, decision-making, accountability and the overall institutional development of MACs, reducing their ability to scale operations and respond effectively to market demands.

Limited access to capital also constitutes a significant barrier. Financial constraints limit MACs' ability to finance production cycles, procure inputs and invest in machinery and facilities. Liquidity shortages further affect cash flow management, including the capacity to make timely payments to farmers, which has important implications for trust, member participation and the sustainability of contractual arrangements.

Challenges related to trust in MACs remain substantial. Limited awareness and understanding of MACs among members, together with concerns over reliability and transparency, weaken collective participation and loyalty. These issues undermine coordination within MACs and reduce the effectiveness of collective marketing and contract farming arrangements.

Market-related constraints are captured under market access and information constraints. Difficulties in securing stable buyers and limited access to reliable information on demand and prices reduce MACs' bargaining power and increase marketing risks. These constraints limit MACs' capacity to plan production and to integrate more effectively into value chains.

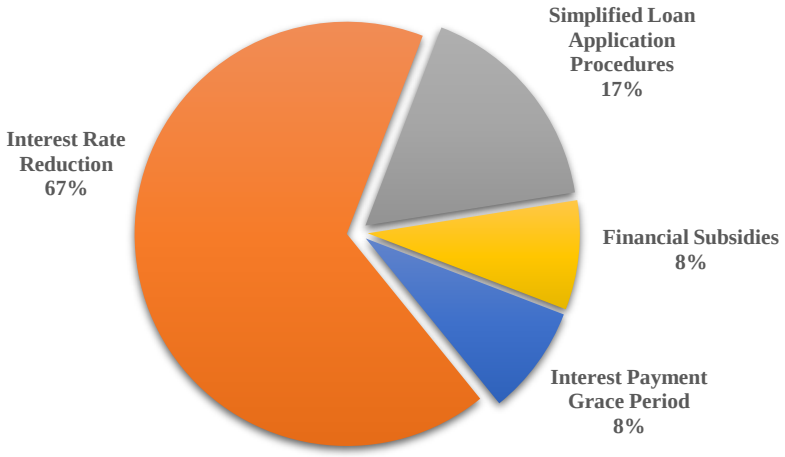
Issues related to breach of contract persist, reflecting challenges in enforcing contractual agreements and ensuring consistent supply. These problems are often intertwined with liquidity pressures, weak trust and limited institutional capacity. Low value-added production and other challenges, such as unfavourable weather conditions, lack of quality seeds and delayed payments, were reported less frequently but further compound existing constraints.

Overall, the findings suggest that MACs remain at an early stage of development, where infrastructure deficits and institutional capacity constraints form the core bottlenecks, reinforced by limited access to finance, weak trust and imperfect market linkages. Addressing these interrelated challenges through coordinated investment in infrastructure, strengthened management and technical capacity, improved access to finance and enhanced market information systems is critical to improving the operational performance, credibility and long-term sustainability of MACs.

viii/- Suggestions

(1) Financing: Understanding MACs' perspectives on financing is vital for shaping policies that promote equitable access to credit and foster sustainable agricultural development. By integrating these perspectives into policy design, financial institutions and regulators can develop more responsive credit mechanisms that empower MACs to expand production, enhance value chains and contribute to inclusive rural growth.

Figure 38: MACs' Suggestions on Financing



Source: Authors' Calculation

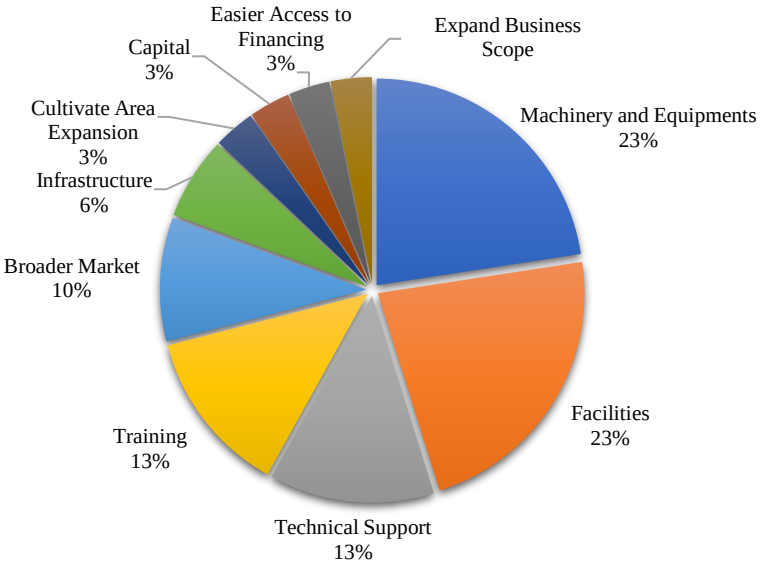
Figure 38 illustrates the key preferences expressed by MACs regarding loan conditions and financial support measures. The dominant preference among respondents is interest rate reduction, reflecting strong demand for lower borrowing costs to ease financial pressure. Many MACs indicated that high interest rates constrain their ability to expand operations and invest in productive assets and facilities, while some expressed interest in very low or interest-free lending arrangements as part of a more supportive financing framework.

A second area of emphasis relates to simplified loan application procedures. MACs highlighted the need to reduce documentation requirements and to make credit approval processes faster and more transparent, suggesting that administrative complexity represents a significant barrier to accessing formal finance. These procedural constraints can delay investment decisions and discourage MACs from applying for loans, even when credit is available.

Other forms of support were cited less frequently but remain important. These include financial subsidies to help offset operating or input costs and the provision of an interest payment grace period, particularly during the initial years of operation, to support cash flow management and early-stage business growth. Overall, the findings suggest that MACs are seeking more affordable and accessible financing arrangements, combining lower borrowing costs with streamlined procedures and targeted financial support to strengthen their operational capacity and long-term sustainability.

(2) Other Improvements: Identifying the priority support needs of MACs is crucial for guiding policymakers and development partners in designing targeted interventions that address their most pressing constraints.

Figure 39: Priority Support Needs of MACs



Source: Authors' Calculation

Figure 39 illustrates the priority areas where MACs seek further support and investment to strengthen their operations. The largest shares of responses highlight the need for machinery and equipment (23%) and facilities (23%), showing that most MACs require better tools and physical infrastructure to enhance production, processing and storage efficiency. Many cooperatives mentioned the need for agricultural machinery, post-harvest equipment, warehouses, office spaces and net-houses to modernise their operations and reduce dependency on rented facilities.

Equally important are technical support (13%) and training (13%), emphasising the cooperatives' interest in building members' capacity in cultivation, processing and management. Some MACs requested training in modern farming and pest management techniques, alongside study visits to successful communities to learn best practices. Additionally, broader market access (10%) emerged as a key goal, with several cooperatives seeking to explore new buyers, strengthen marketing channels and improve price negotiations through government and institutional support.

Smaller shares of responses focus on infrastructure improvement (6%), particularly for road and irrigation systems, as well as cultivation area expansion (3%), business scope diversification (3%), capital investment (3%) and easier access to financing (3%).

Overall, the findings suggest that MACs aim to move towards modernised, market-driven and sustainable operations, requiring coordinated support in financing, technology, infrastructure and capacity-building to achieve long-term competitiveness.

6.4. Comparison Between MACs and Traditional ACs

6.4.1. Economic Comparison Between ACs and MACs

The economic comparison in Table 6 demonstrates stronger financial performance and cost efficiency in MACs compared with traditional ACs in both rice and vegetable production. For rice, MACs incur significantly lower start-up costs than ACs[7] (about 3.4 times lower) and slightly reduced operating expenses (3.2% lower), while achieving 54.4% higher annual profits at the same production scale. A similar pattern is observed in vegetable

[7] Start-up cost refers to initial expenses including facilities, machineries and other agricultural inputs etc.

production, where MACs operating under 400 m² net-house systems record 27.6% lower start-up costs and 46.8% higher profits than ACs, even though their annual expenses are 6.2% higher because of higher input and operating costs. These results suggest that MACs are more efficient in capital utilisation and better positioned for profitability and scalability, largely owing to improved collective organisation, market linkages and stronger internal governance. It is important to note that the term 'Modern Agricultural Community' does not necessarily imply specialisation in advanced agricultural technologies. Rather, 'modern' refers to a reformed governance structure and principles that emphasise joint management, financial transparency, member accountability and collective disciplined decision-making under a more coordinated institutional model, which forms creditworthiness that adds to the assessment criteria for more scalable and affordable financing.

Table 6: Economic Comparison between MACs and ACs in Rice and Vegetables

Commodity	Metric	Unit	MACs	ACs	Comparison (MACs vs ACs)
Rice 	Average start-up cost	KHR/ha	920,000	4,047,800	**3.4 time lower than ACs**
	Average expenses	KHR/ha	7,843,892,923	8,095,600,000	**3.2% lower than ACs**
	Annual profits	KHR/ha	886,107,077	404,400,000	**54.4% higher than ACs**
	Annual production	KHR/ha	10	10	**Same production scale**
Vegetable (400m² net-house) 	Average start-up cost	KHR/net-house	9,600,000	12,254,000	**27.6% lower than ACs**
	Average expenses	KHR/net-house/Y	752,515,200	705,800,000	**6.2% higher than ACs**
	Annual profits	KHR/net-house/Y	647,484,800	344,200,000	**46.8% higher than ACs**
	Annual production	Kg/net-house	700,000	700,000	**Same production scale**

Source: General Department of Agriculture, MAFF

MACs engaged in rice production operate with significantly lower start-up costs per hectare compared to ACs, indicating lower initial capital requirements and reduced barriers to entry. Their operating expenses are also slightly lower, suggesting efficient day-to-day cost management. Despite producing at the same scale, rice-producing MACs achieve substantially higher annual profits per hectare, reflecting stronger production efficiency, improved input use and more effective market engagement driven by modern management and organisational practices.

In vegetable net-house production, MACs similarly face lower start-up costs per net-house, reducing the upfront investment burden. Although their annual operating expenses are marginally higher than those of ACs, vegetable-producing MACs generate considerably higher annual profits at the same production scale. This suggests that MACs are more effective in converting higher operating inputs into greater value, likely owing to improved production techniques, better input quality and stronger access to markets.

Overall, the analysis demonstrates that MACs consistently outperform ACs in terms of profitability and capital efficiency across both rice and vegetable production. The ability of MACs to translate comparable production capacity into higher financial returns underscores the importance of modernised management, production systems and market linkages, reinforcing the case for policies that support the scaling up of MAC models through targeted financing and capacity-building interventions.

6.4.2. Member Economic Comparison: Before and After Joining ACs vs. Before and After Joining MACs

Comparison across Figures 40 and 41 shows that joining a cooperative—whether a regular AC or a MAC—can generate economic benefits for farmers, particularly through cost reductions and improved profit margins. In both models, vegetables and cashew nut farmers experience some degree of improvement after joining, demonstrating that cooperative membership generally strengthens farmers' bargaining power, access to inputs and market opportunities. This indicates that the cooperative structure, in principle, provides an initial platform for farmers to reduce costs and expand profitability compared to operating individually.

Figure 40: Comparison Before and After becoming a Member of a Regular AC

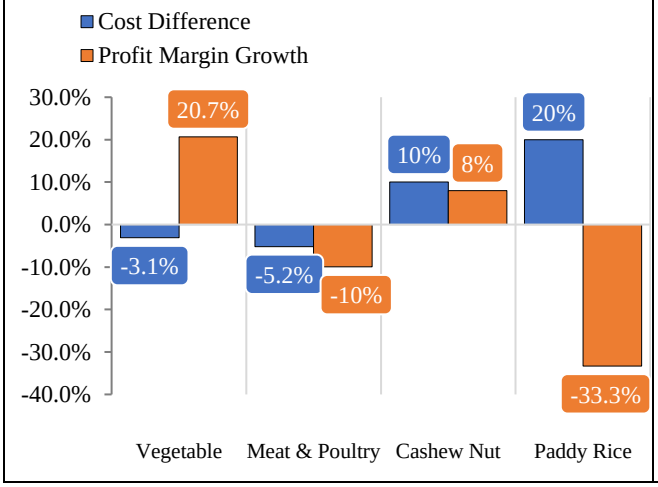
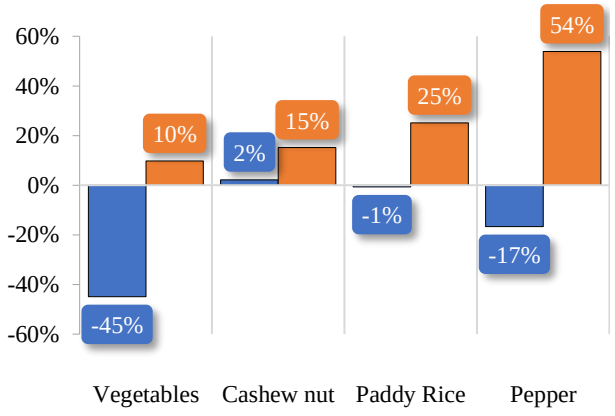


Figure 41: Comparison Before and After becoming a Member of a MAC



Source: Authors' Calculation

However, the magnitude and consistency of improvements differ significantly between regular ACs and MACs. The data show that regular ACs offer only modest and uneven cost savings and yield mixed profit outcomes, with some commodities—even major ones such as paddy rice and meat & poultry—experiencing worsened profitability after joining. In contrast, MAC members show a far more consistent positive shift, with substantial cost reductions (particularly –45% for vegetables) and strong profit growth across all commodities, including a remarkable +54% for pepper and +25% for paddy rice. Even where costs rise in MACs (e.g. pepper), this increase reflects quality upgrading and standardisation, which leads to significantly higher returns.

Overall, the evidence indicates that MACs hold far greater economic potential than regular ACs. While both models help farmers, MACs clearly outperform ACs in driving production efficiency, enhancing value addition and enabling farmers to achieve higher profit margins after membership. The consistency of positive outcomes across commodities, combined with MACs' focus on modern practices, governance and market integration, positions MACs as a more effective institutional mechanism for improving farmer livelihoods and transforming Cambodia's agricultural sector.

6.5. Stakeholder Analysis

This section presents a stakeholder analysis based on Mendelow's (1991) Power–Interest Matrix, evaluating the influence and engagement of institutions involved in expanding access to finance for MACs in Cambodia. The analysis captures the perceived power and interest levels of each stakeholder as expressed during the KIIs, reflecting empirical insights from the study rather than secondary assumptions. Each stakeholder was scored on a five-point scale (1 = low, 5 = high) for both power and interest, helping identify engagement priorities and coordination mechanisms for future policy action.

Scoring Framework and Criteria

The scoring framework translates qualitative insights from desk review and key findings from the survey with relevant stakeholders into quantifiable values (1–5) for both Power and Interest dimensions. Each score reflects the perceived strength and engagement level of stakeholders in influencing and supporting access to finance for MACs in Cambodia.

Table 7: Power Scoring Criteria

Score	Description	Key Indicators
5 (Very High Power)	National-level institution with decision-making authority over fiscal, monetary or sectoral financial policies.	Budget control, regulatory authority, credit program design, inter-ministerial coordination.
4 (High Power)	Institution with strong implementation or financial leverage, capable of influencing outcomes through funding, regulation or partnerships.	Credit allocation, concessional loan management, technical regulation, donor financing capacity.
3 (Moderate Power)	Sub-national or sectoral agency with partial influence; implements but does not design financial or policy frameworks.	Provincial coordination, extension support, local training and outreach.
2 (Low Power)	Operational entity with limited capacity to influence finance policy or resource distribution beyond its membership.	Cooperative-level decision-making, internal management, non-policy role.
1 (Very Low Power)	Beneficiary or end-user with no formal influence on credit policy or financial decisions.	Individual farmers or MAC members; reliant on external policy and credit access.

Table 8: Interest Scoring Criteria

Score	Description	Key Indicators
5 (Very High Interest)	Core mandate or institutional priority is to enhance agricultural finance, rural credit or cooperative development.	Policy alignment, direct program implementation, continuous stakeholder engagement.
4 (High Interest)	Demonstrates consistent but not primary focus on agricultural finance; participates actively when incentives or policy alignment exist.	Project-based involvement, blended finance participation, partial resource allocation.
3 (Moderate Interest)	General institutional awareness but limited engagement; interest depends on partnership opportunities or funding availability.	Occasional participation, non-prioritised agenda.

2 (Low Interest)	Indirect or minimal interest in agriculture or financial inclusion.	Passive involvement, limited project relevance.
1 (Very Low Interest)	No visible involvement or commitment to agricultural financing activities.	Outside the agricultural finance domain.

Application of Scoring Criteria

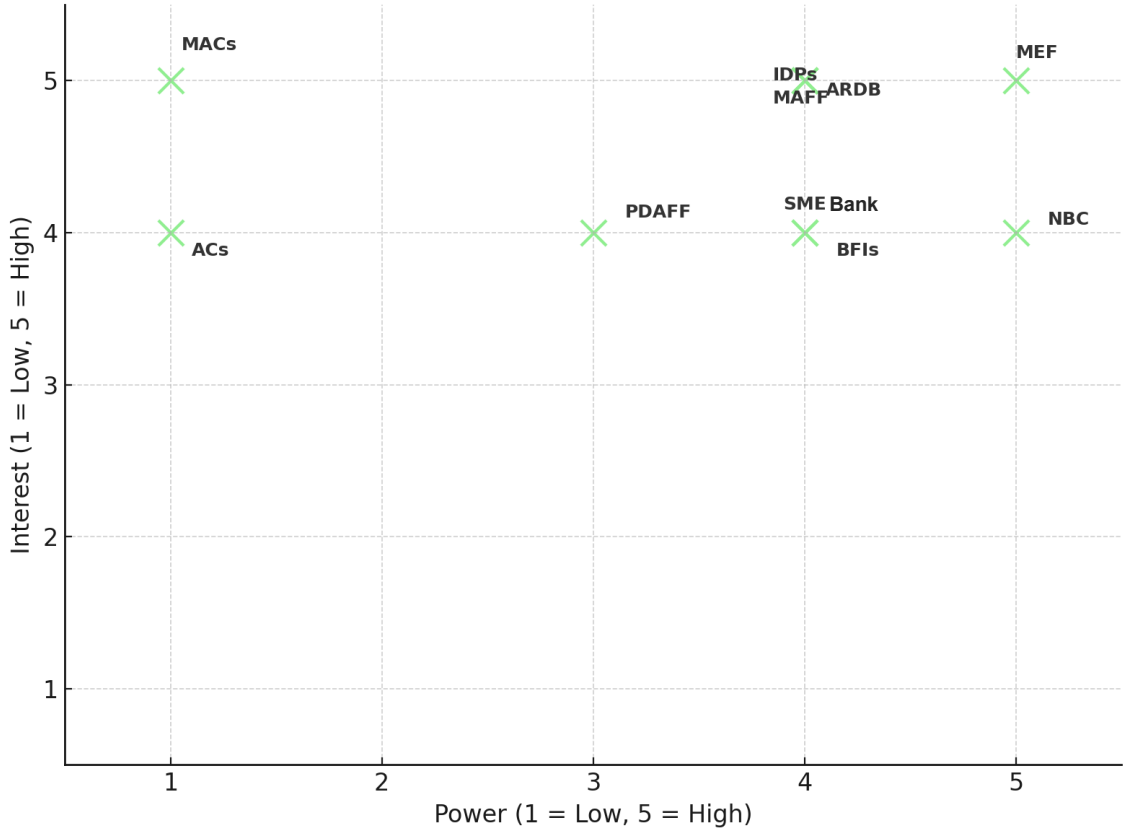
This section applies the scoring criteria described above to evaluate each stakeholder's relative power and interest in promoting access to finance for MACs. The scores are derived from KIIs and reflect how stakeholders influence financial policy, resource allocation and institutional engagement in MAC financing.

Table 9: Stakeholder Scoring Application

Stakeholder	Power Justification	Power Scoring	Interest Justification	Interest Scoring
Ministry of Economy and Finance (MEF)	**Very high power:** Holds fiscal authority and policy coordination mandate, national budget plan decision-making authority.	5	**Very high interest:** A central driver of agricultural financing programs and fiscal incentives.	5
Ministry of Agriculture, Forestry and Fisheries (MAFF)	**High power:** Leads agricultural modernisation and MAC regulation but depends on MEF for budget allocations.	4	**Very high interest:** Agricultural sector policy design and support from farm to folk and an initiator of MAC development.	5
National Bank of Cambodia (NBC)	**Very high power:** Regulates financial institutions and drives financial inclusion policy.	5	**High interest:** But indirect interest focused on financial stability and inclusion.	4
SME Bank of Cambodia	**High power:** Policy bank with commercial leverage and capital allocation power to priority sectors.	4	**High interest:** But mainly depends on credit risk and focus on SME or MSME financing in priority sectors.	4
Agricultural and Rural Development Bank (ARDB)	**High power:** Specialised policy bank dedicated to agriculture based on government or IDP financing support.	4	**Very high interest:** Mandate focuses on rural and agricultural financing.	5
Provincial Department of Agriculture, Forestry and Fisheries (PDAFF)	**Moderate power:** Implements MAFF policies at provincial level, provides technical support and facilitates all requests from agricultural communities.	3	**High interest:** Owing to direct engagement with farmers and agricultural communities and benefit gain from local development.	4

International Development Partners (IDPs)	**High power:** Financially powerful through grants and concessional loans, influence via agricultural-related projects but needs to work closely with MEF and MAFF to implement projects.	4	**Very high interest:** Aligned with agricultural or rural development objectives.	5
Banking and Financial Institutions (BFIs)	**High power:** Significant financial capacity but guided by profit motives and risk mitigation.	4	**High interest:** But with conditions or dependent on guarantees or incentives from government.	4
Modern Agricultural Communities (MACs)	**Very low power:** End-beneficiaries with no policy power but critical to implementation success of government initiatives.	1	**Very high interest**: Directly affected by financing access and conditions.	5
Agricultural Cooperatives (ACs)	**Very low power** Similar to MACs but weak institutional influence.	1	**High interest:** Eager to learn and transform into MACs, mostly to improve current cooperative business growth, but already resilient and sustainable owing to its multi-year experience and existence.	4

Figure 42: Power-Interest Matrix Graph (Mendelow, 1991)



Source: Authors' Calculation

Analysis of Stakeholder Power–Interest

The analysis captures the perceived power and interest levels of each stakeholder as expressed during the KIIs, reflecting empirical insights from the study rather than secondary assumptions. Each stakeholder was scored on a five-point scale (1 = low, 5 = high) for both power and interest, helping identify engagement priorities and coordination mechanisms for future policy action based on four main quadrants, as specified below.

i. High Power–High Interest (Manage Closely)

The MEF and the NBC emerged from the interviews as the most influential and highly engaged institutions. MEF, as the fiscal authority, shapes agricultural finance through budget allocations, guarantee schemes and coordination across line ministries. NBC plays a pivotal regulatory and supervisory role in sustaining financial stability, promoting digital and inclusive finance and overseeing banking operations that support rural credit markets. MAFF and ARDB also fall within this quadrant. MAFF leads the technical aspects of agricultural modernisation and MAC regulation, while ARDB acts as a dedicated policy bank providing concessional credit lines to MACs and cooperatives. Together, these institutions form the backbone of Cambodia's agricultural finance architecture.

ii. High Power–Moderate Interest (Keep Satisfied)

Interviews revealed that the SME Bank of Cambodia and BFIs possess considerable financial capacity but only moderate developmental interest in agriculture, mainly owing to risk concerns and collateral limitations. Policy incentives, credit guarantees and blended finance schemes can strengthen their engagement. IDPs—notably the World Bank, IFAD and ADB—hold significant influence and strategic

interest in agriculture and rural development, often co-financing national programs and providing technical support for inclusive financial ecosystems.

iii. Moderate Power–High Interest (Keep Informed)

At the sub-national level, Provincial Departments of Agriculture, Forestry and Fisheries (PDAFFs) act as local facilitators connecting policy frameworks to farmers and cooperatives. Interviewees highlighted their proactive involvement but limited authority to influence credit allocation or policy direction. MACs, as the principal beneficiaries, show very high motivation to obtain finance but limited institutional leverage. Their growing organisational structure and production capacity underscore the need for stronger linkages with policy banks and digital finance providers.

iv. Low Power–High Interest (Monitor)

ACs generally display low institutional power but high interest in financial access. Interviews suggest that many ACs remain in early stages of formalisation, lacking financial literacy and credit readiness. Capacity-building initiatives are thus essential to enhance their participation in the financial ecosystem.

To conclude, findings from the interview-based stakeholder assessment indicate that MEF, MAFF, NBC and ARDB are the most influential and committed actors, requiring close coordination and policy coherence. SME Bank, BFIs and IDPs should be kept satisfied through tailored incentive frameworks and risk-sharing mechanisms, while PDAFFs and MACs need to be kept informed via technical support, policy dialogues and ongoing capacity-building. A multi-layered engagement framework integrating policy leadership, financial innovation and grassroots empowerment will be essential to enhance access to finance for MACs and to sustain Cambodia's agricultural modernisation.

7. Conclusion and Policy Suggestions

7.1. Conclusion

This study demonstrates that expanding access to finance is fundamental to accelerating Cambodia's transition towards a more productive, resilient and commercially oriented agricultural sector. Although agriculture remains vital for national growth and rural livelihoods, the share of credit flowing to the sector remains limited, constrained by structural issues such as varying interest rate regimes, collateral requirements and repayment structures that do not always align with agricultural production cycles. MACs, in particular, face significant financing gaps despite their strong motivation to access credit and scale production. Survey findings reveal that MACs continue to struggle with low financial literacy, limited governance systems and minimal visibility among banks—all of which undermine their credit readiness and formal engagement with financial institutions.

International experiences offer critical insights for shaping Cambodia's agricultural finance architecture. Thailand's specialised BAAC illustrates the value of a dedicated policy bank that can deliver concessional and targeted credit. Vietnam's large-scale credit programs and tax incentives show how government-led financing can stimulate high-tech agriculture. Indonesia demonstrates the effectiveness of interest rate subsidies, credit guarantees and large public capital injections in de-risking agricultural lending. China highlights the importance of strong cooperative legislation paired with diversified financial products, while India's Kisan Credit Card (KCC) model provides an adaptable framework for farmer-level credit access. South Australia underscores the role of formal cooperative law, producer-owned value chain organisations and resilience-oriented financial instruments. Together, these cases highlight that successful agricultural financing systems combine concessional capital, risk-sharing mechanisms and strong institutional governance—elements that can be adapted to Cambodia's MAC model.

Survey results—from government agencies, financial institutions and MACs themselves—further confirm the central role of finance in enabling MACs to function as engines of rural transformation. Yet, lending interest in agriculture remains conditional on risk mitigation, reliable credit information and effective guarantee mechanisms.

Meanwhile, MACs continue to face notable challenges in accessing formal finance. These include weak governance structures, inadequate accounting and record-keeping, lack of collateralisable assets, limited exposure to financial institutions and the absence of standardised credit-readiness benchmarks. These internal constraints are compounded by external gaps, such as banks' limited understanding of the MAC model and risk perceptions associated with smallholder-based production. Without addressing these constraints comprehensively, MACs may struggle to attract the long-term investment required to modernise production, upgrade value chains and strengthen climate resilience.

The policy recommendations emerging from this study reflect both survey insights and the authors' analysis. In the short term, priority should be given to developing a MAC financial literacy curriculum, implementing credit-readiness certification, strengthening MAC governance, digitalising financial records and contract compliance to improve transparency and lender confidence. In the medium term, expanding blended finance programs, risk-sharing framework, enhancing the use of credit guarantees, incentivising agricultural lending through interest rate subsidies and deepening coordination among MEF, MAFF, NBC, ARDB, SME Bank and IDPs will be essential. Over the long term, Cambodia should consider establishing a dedicated MAC financing window or agricultural credit scheme—drawing lessons from BAAC, KCC and other international models—while strengthening cooperative legislation, promoting producer-owned marketing structures and integrating MACs into broader agricultural modernisation and climate resilience strategies.

Overall, the findings affirm that finance is more than a supporting component—it is a strategic driver of MAC development and a new source of agricultural growth for Cambodia. By aligning financial instruments with the institutional realities of MACs, enhancing cooperative governance and drawing from successful regional and international models, Cambodia can build a more inclusive, competitive and resilient agricultural economy capable of contributing meaningfully to national development.

7.2. Policy Suggestions

This policy framework draws on insights from the stakeholder analysis and KIIs, emphasising how financial inclusion, digital transformation and institutional cooperation can strengthen access to finance for MACs. The framework outlines a phased implementation plan—short term, medium term and long term—to progressively improve MACs' financial literacy, institutional credibility and integration into Cambodia's modernising financial systems.

i. Immediate Plans: Strengthening MAC Capacity and Awareness

In the immediate term, policy interventions should focus on building the financial capacity and operational readiness of MACs to engage effectively with banks and other financial institutions. This phase addresses the root challenges identified during interviews—limited financial literacy, weak governance, lack of formal credit records and low visibility among financial institutions. In addition, short-term measures should prioritise credit-readiness certification, awareness-raising among banks and early digitalisation of MAC financial data through collaboration with financial technology firms.

Table 10: Immediate Policy Plans for Financial Access Improvement for MACs

Policy Focus	**Action Plans**	**Responsible Institutions**	**Expected Outcome**
Financial Literacy, Credit and Governance Readiness Framework	Establish a Financial Literacy, Credit and Governance Readiness Curriculum and certification system for MACs, covering accounting, credit documentation and governance, with certified MACs eligible for financial instruments, interest rates and loan tenors.	MAFF, PDAFF, ARDB	Improved financial literacy and governance; certified 'credit-ready' MACs eligible for formal lending.
MAC Financial Profiling System	Establish a *Digital MAC Profile Database* with standardised data on production, assets and governance linked to ARDB and NBC systems.	MAFF, NBC, ARDB	Enhanced credit transparency and data-sharing between MACs and banks.
Private-sector Partnerships for Data Collection	Collaborate with private firms to digitise MAC transaction records and develop simple digital financial dashboards.	NBC, MAFF, private firms	Improved record-keeping of MACs to lenders.
Awareness-raising among BFIs	Conduct *MAC–BFI Awareness Forums* and *Business-matching Events* to present MAC success stories, repayment records and production data to commercial banks.	NBC, MEF, MAFF	Increased awareness and confidence of banks in lending to MACs.
Pilot Short-term Liquidity Facility	Launch a *MAC Working Capital Fund* through ARDB and SME Bank to provide seasonal loans with flexible repayment cycles.	ARDB, SME Bank, MEF	Immediate liquidity support for MAC operations during production cycles.

ii. Short and Medium-Term Plans: Scaling Access, Risk-sharing and Modernisation Integration

In the medium term, focus should shift from foundational capacity-building to scaling MACs' access to finance through structured instruments, credit guarantees and digital integration. Interviews underscored the importance of de-risking agricultural lending, enhancing credit transparency and incentivising commercial banks to participate. This period aims to institutionalise financial linkages between MACs, policy banks, BFIs and private firms for cost-effective, traceable and sustainable lending.

Table 11: Short and Medium-Term Policy Framework for Financial Access Improvement for MACs

Policy Focus	**Key Actions**	**Responsible Institutions**	**Expected Outcome**
Credit Guarantee Mechanism for MACs	Establish a *MAC Credit Guarantee Facility* co-financed by MEF and IDPs to de-risk agricultural lending and encourage BFIs to extend medium-term credit to MACs.	MEF, NBC, IDPs	Reduced credit risk for banks, leading to higher loan approval rates for MACs.
Blended Finance and risk-sharing framework for MAC Development	Develop *Blended Finance Packages* and risk-sharing framework combining concessional (ARDB) and commercial (BFIs) lending with fintech-based monitoring for transparency.	ARDB, SME Bank, NBC	Increased investment in MAC infrastructure and modernisation.
Digital Lending Platform	Expand *Digital MAC Financing Platform* integrating loan applications, credit scoring and verification to effectively link MAC data to BFI credit systems.	NBC, MAFF, private firms	Streamlined loan processes and improved credit assessment through digital data.
Incentives for BFI Participation	Introduce tax incentives, interest subsidies or lending targets for BFIs that achieve loan disbursement targets to certified MACs.	MEF, NBC	Increased participation of commercial banks and diversification of loan sources.
Promotion and Communication Campaign	Implement a '*Finance for MACs Awareness Drive*' to promote MAC creditworthiness and success stories through national and provincial media.	NBC, MAFF, BFIs	Enhanced public awareness and reputation of MACs as reliable borrowers.

iii. Long-Term (5–10 Years): Institutionalising Sustainable and Digitally Integrated MAC Finance

In the long run, MAC financing should evolve into a sustainable, digitally integrated and market-driven system. The focus is on transforming MACs into investment-ready, autonomous entities capable of mobilising resources through capital markets and green finance. This phase envisions a self-sustaining ecosystem where MACs, fintech firms and financial institutions cooperate to deliver climate-smart, inclusive and resilient agricultural financing.

Table 12: Long-Term Policy Framework for Financial Access Improvement for MACs

Policy Focus	**Action Plans**	**Responsible Institutions**	**Expected Outcome**
MAC Investment and Development Fund	Create a *National MAC Investment Fund* pooling capital from MEF, IDPs and private investors to finance mechanisation, post-harvest infrastructure and technology adoption.	MEF, NBC, MAFF	Sustainable long-term funding base for MAC expansion and modernisation.
Green and Climate-Smart Financing	Design *Green Credit Lines* rewarding MACs adopting sustainable practices (solar irrigation, organic input use, waste reduction).	ARDB, SME Bank, IDPs	Increased adoption of green technologies and climate-resilient production systems.
Fintech–MAC Integration	Institutionalise fintech firms as *credit data intermediaries* to standardise digital profiles, scoring and e-payment systems linked to MAC operations.	NBC, fintech firms, ARDB	Fully digital MAC finance ecosystem with enhanced data reliability.
Value Chain Credit Ecosystem	Facilitate *Tripartite Value Chain Agreements* among MACs, buyers and banks—allowing purchase contracts or inventory receipts to serve as loan collateral.	MAFF, BFIs, NBC	Strengthened market linkages and lower collateral requirements for MACs.
Performance Monitoring and Analytics	Establish a *MAC Finance Observatory* to track credit flows, performance and policy impact using real-time analytics.	NBC, MAFF, MEF	Evidence-based policy monitoring and improved financial sector accountability.

Box 1: Summary Table of Policy Framework for Financial Access Improvement for MACs

Timeframe	Core Objective	Key Mechanisms	Expected Outcomes
Immediate Plans	Build MAC financial capacity and awareness	Financial literacy, MAC registry, digital data tools, awareness forums	MACs become credit-ready and visible to banks
Short & Medium-Term Plans	Expand credit access and reduce risk	Credit guarantees, blended finance, digital lending platform, bank incentives	Increased MAC lending and transparency in digital credit flows
Long-Term Plans	Institutionalise sustainable MAC finance	Investment fund, green credit lines, digital financing integration, observatory	Digitally connected, resilient and investment-ready MAC network

References

1. ABARES. 2024. *Agricultural Commodities: September Quarter 2024*. September 3. https://doi.org/10.25814/FFGS-MX60.

2. ADB, Asian Development. 2015. *Operational Plan for Agriculture and Natural Resources: Promoting Sustainable Food Security in Asia and the Pacific in 2015-2020*. Asian Development Bank.

3. Agricultural Bank of China. 2025. 'Agricultural Production Trusteeship Loan'. Agricultural Bank of China, April 21. https://www.abchina.com/cn/RuralSvc/otherProduct/nysctgd/.

4. Alibhai, Salman, Hillary C. Johnson, Cecile Thioro Niang, and Francesco Strobbe. 2024. *Can Public Credit Schemes Improve Access to Finance for Small Businesses? Evidence from Indonesia*. Policy Research Working Paper No. 10894. Policy Research Working Paper Series. World Bank. https://doi.org/10.1596/1813-9450-10894.

5. ALMONDCO Australia. 2025. *ALMONDCO Australia*. June 24. https://www.almondco.com.au/about.

6. Andoko, Effendi, and Andriyono Kilat Adhi. 2025. 'National Agricultural Development Planning of Indonesia 2025-2029: Economic Transformation Strategies, Inclusive Institutions, and Sustainable Pollicies Toward Indonesia's Golden Future 2045'. *FFTC Agricultural Policy Platform (FFTC-AP)*, September 22. https://ap.fftc.org.tw/article/3821.

7. ANTARA News. 2025. *July 21 Launch for 80,000 Red and White Village Co-Ops: Minister*. July 16. https://en.antaranews.com/news/366813/july-21-launch-for-80000-red-and-white-village-co-ops-minister.

8. ASEAN Briefing. 2022. 'Indonesia's Omnibus Law: New Protection and Empowerment Measures for Small Businesses'. *ASEAN Briefing*, January 14. https://www.aseanbriefing.com/news/indonesias-omnibus-law-new-protection-and-empowerment-measures-for-small-businesses/.

9. ASQI. 2024. *Sustainable Agriculture In India: Tips To Use Modern Technology In Agriculture*. November 5. https://asqi.in/sustainable-agriculture-in-india-tips-to-use-modern-technology-in-agriculture/.

10. BAAC. 2025. *Annual Report 2024*. Bank for Agriculture and Agricultural Cooperatives.

11. Bank Indonesia. 2021. *Bank Indonesia Annual Report 2020*. Annual Report. Bank Indonesia. https://www.bi.go.id/en/publikasi/laporan/Documents/2020_LTBI.pdf.

12. Bank Indonesia. 2022. 'Republic of Indonesia: Strengthening Policy Synergy to Maintain Stability and Accelerate Recovery amid Heightened Global Uncertainty'. Presentation Book. July. https://www.bi.go.id/en/iru/presentation/Documents/Republic-of-Indonesia-Presentation-Book-Jul-2022.pdf.

13. Bijman, Jos, and Dinghuan Hu. 2011. *The Rise of New Farmer Cooperatives in China; Evidence from Hubei Province*. https://doi.org/10.22004/AG.ECON.114252.

14. CGCC. 2024. 'Rice Export Guarantee Scheme (REGS)'. Credit Guarantee Corporation of Cambodia (CGCC), Credit Guarantee Corporation of Cambodia (CGCC), May. https://www.cgcc.com.kh/en/rice-export-guarantee-scheme/#:~:text=The%201st%20Tranch%20of%20REGS,to%20produce%20rice%20for%20exports.

15. Chen, Aiqi, Huaxiang He, Jin Wang, Mu Li, Qingchun Guan, and Jinmin Hao. 2019. 'A Study on the Arable Land Demand for Food Security in China'. *Sustainability* 11 (17): 4769. https://doi.org/10.3390/su11174769.

16. Chen, Rui, Nawab Khan, and Shemei Zhang. 2022. 'Policy Evaluation of Demonstration Cooperative Construction: Evidence from Sichuan Province, China'. *International Journal of Environmental Research and Public Health* 19 (19): 12259. https://doi.org/10.3390/ijerph191912259.

17. CLT. n.d. 'Agricultural Cooperatives'. *CO-OPERATIVE LEAGUE OF THAILAND*. Accessed 4 August 2025. https://www.cltcoop.com/17624370/agricultural-cooperatives.

18. COOP. 2021a. *Thailand Key Figures National Report*. International Co-operative Alliance. https://coops4dev.coop/sites/default/files/2021-07/Thailand%20Key%20Figures%20National%20Report.pdf.

19. COOP. 2021b. *Vietnam Key Figures National Report*. International Co-operative Alliance. https://coops4dev.coop/sites/default/files/2021-02/Vietnam%20Key%20Figures%20National%20Report.pdf.

20. Co-Operatives National Law (South Australia) Act 2013 (2018). https://www.legislation.sa.gov.au/_legislation-documents/lz/c/a/co-operatives-national-law-south-australia-act-2013/current/2013.14.auth.pdf.

21. CPI. 2025. *Sustainable Finance Flows to India's Agriculture Sector*. Climate Policy Initiative (CPI). https://www.climatepolicyinitiative.org/wp-content/uploads/2025/01/Sustainable-Agriculture-Finance-in-India.pdf.

22. David, Rachel. 2024. 'Agricultural Loans Fall to 31% from 36% in 5 Years'. *Khmer Times*, May 20. https://www.khmertimeskh.com/501490959/agricultural-loans-fall-to-31-from-36-in-5-years/.

23. Department of Primary Industries and Regions. 2024. *South Australian Primary Industries Scorecard 2024-25*. Government of South Australia. https://pir.sa.gov.au/__data/assets/pdf_file/0009/496521/sa-primary-industries-scorecard-2024-25.pdf.

24. Faysse, Nicolas. 2018. 'The Differing Strategies of Agricultural Cooperatives in Thailand: From Managing Market Links to Self-Reliance'. *Journal of Community Development Research (Humanities and Social Sciences)* 11: 3. https://doi.org/10.14456/JCDR-HS.2018.14.

25. Heng, Bomakara, and Helyda Sarun. 2016. 'Agriculture Financing'. *National Bank of Cambodia* (Phnom Penh), September.

26. Hiep, Le Tuan. 2024. *Factors Affecting the Performance of Cooperatives: A Case Study in Vietnam*. November 7. https://doi.org/10.5281/ZENODO.14049549.

27. Hu, Zhanping, Qian Forrest Zhang, and John A. Donaldson. 2017. 'Farmers' Cooperatives in China: A Typology of Fraud and Failure'. *The China Journal* 78 (July): 1–24. https://doi.org/10.1086/691786.

28. Iconic Research. n.d. *Thailand Agriculture Industry Guide 2026*.

29. Law of the People's Republic of China on Specialized Farmers Cooperatives, Pub. L. No. Order of the President of the People's Republic of China No. 57 (2006). https://natlex.ilo.org/dyn/natlex2/natlex2/files/download/76948/CHN76948%20Eng.pdf.

30. Le, Dahlia. 2025. 'Agtech in Vietnam: Driving Modern Solutions for Agricultural Growth'. *InCorp Vietnam*, January 3. https://vietnam.incorp.asia/agtech-in-vietnam/.

31. Lenswood Apples. 2025. *Australia's Finest Apples*. June 24. https://lenswoodcoop.com.au/.

32. Li, Sixian, Yaodong Zhou, and Chengjiang Li. 2024. 'The Impact of Demonstration Cooperatives on the "Empty Shell" of Farmer Professional Cooperatives in China'. *Land* 13 (7): 950. https://doi.org/10.3390/land13070950.

33. Liu, Guoqiang, Chaoyue Chen, Xinhong Fu, Yuying Liu, Nawab Khan, and Lei Luo. 2024. 'Has the Agricultural Cooperatives Served Each Member Fairly? A New Perspective Based on Utilization Level of Member Services'. *PLOS ONE* 19 (1): e0294439. https://doi.org/10.1371/journal.pone.0294439.

34. Liu, Yuxin, Lihan Cao, Yijia Wang, and Eryang Liu. 2024. 'Viability, Government Support and the Service Function of Farmer Professional Cooperatives—Evidence from 487 Cooperatives in 13 Cities in Heilongjiang, China'. *Agriculture* 14 (4): 616. https://doi.org/10.3390/agriculture14040616.

35. Ly, Sodeth, Claire Honore Hollweg, Sarah Waltraut Hebous, et al. 2021. *Cambodia Economic Update : Restrained Recovery - Special Focus Adapting to COVID-19 in an Uncertain World*. No. 155058. Cambodia economic update. World Bank Group. http://documents.worldbank.org/curated/en/209441612933318296.

36. MAFF. 2015. *Agricultural Extention Policy in Cambodia*. Ministry of Agriculture, Forestry, and Fisheries.

37. MDBA. 2025. *River Murray Annual Operating Outlook*. No. 18/25. The Murray–Darling Basin Authority. https://www.mdba.gov.au/sites/default/files/publications/river-murray-system-annual-operating-outlook-2025-26.pdf.

38. Metta, Kongphan-apirak. 2024. *GIZ-BAAC Strengthens Collaboration on Climate-Smart Agriculture in Thailand*. (Bangkok), January 18. https://www.thai-german-cooperation.info/en_US/giz-baac-strengthens-collaboration-on-climate-smart-agriculture-in-thailand/.

39. National Geograpic. 2024. *The Art and Science of Agriculture*. https://education.nationalgeographic.org/resource/the-art-and-science-of-agriculture/.

40. Nguyen, Long Gia, and Thao Thanh Nguyen Tran. 2025. 'Vietnam Extends Exemption Period for Agricultural Land Use Tax'. *Tilleke & Gibbins*, July 23. https://www.tilleke.com/insights/vietnam-extends-exemption-period-for-agricultural-land-use-tax/?utm_source=mondaq&utm_medium=syndication&utm_content=sourceoriginal&utm_campaign=.

41. Nguyen, Xuan Dinh, and Mau Dung Nguyen. 2021. 'Incentive Policies For High-Tech Agriculture In Vietnam: Current Situation And Implications'. *INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH* 10 (08). https://www.ijstr.org/final-print/aug2021/Incentive-Policies-For-High-tech-Agriculture-In-Vietnam-Current-Situation-And-Implications.pdf.

42. Oxford Business Group. 2025. 'How Technology Can Help Small-Scale Farmers in Indonesia'. *Oxford Business Group*, May 20. https://oxfordbusinessgroup.com/reports/indonesia/2020-report/economy/deeply-rooted-improving-sustainability-and-enabling-greater-access-to-technology-for-small-scale-farmers.

43. PIRSA. 2025. *South Australian Crop and Pasture Report: 2024-25 Crop Performance Summary*. Government of South Australia. https://pir.sa.gov.au/__data/assets/pdf_file/0007/473938/sa-crop-pasture-report-2024-25-crop-performance-summary.pdf.

44. Postal Savings Bank of China. 2025. 'Quick Loan'. Postal Savings Bank of China, June 18. https://www.psbc.com/cn/snfw/sngrfw/wdt/202506/t20250618_341664.html.

45. Press Information Bureau. 2022. 'Kisan Credit Card (KCC)'. *International Year of Cooperatives*, January 17. https://www.pib.gov.in/FactsheetDetails.aspx?Id=148600&reg=3&lang=2.

46. Press Information Bureau. 2026. *India's Resilient Production Systems in Agriculture*. PIB Headquarters. https://static.pib.gov.in/WriteReadData/specificdocs/documents/2026/mar/doc2026326833901.pdf.

47. Puspasari, Novita, and Yudha Aryo Sudibyo. 2021. 'The Journey to Reinvent Indonesian Rural Cooperatives'. (Monash University Caulfield campus, Melbourne, Australia). https://www.monash.edu/__data/assets/pdf_file/0019/3119500/Novita-Puspasari.pdf.

48. Reuters. 2025. 'Indonesian Government Plans to Place Funds in State Banks to Provide Liquidity'. *Reuters*, July 28. https://www.reuters.com/markets/asia/indonesian-government-plans-place-funds-state-banks-provide-liquidity-2025-07-28/.

49. Reuters. 2026. 'Indonesia Official Says Launch of B50 Biodiesel Depends on Crude Oil, Palm Oil Prices'. January 13. https://www.reuters.com/sustainability/climate-energy/indonesias-launch-b50-biodiesel-subject-prices-crude-oil-cpo-minister-says-2026-01-13/.

50. RIC. 2025. 'Loan Funding Available'. Regional Investment Corporation (RIC), May 29. https://www.ric.gov.au/.

51. SA Drought Hub. 2025. *SOUTH AUSTRALIAN DROUGHT RESILIENCE ADOPTION AND INNOVATION HUB*. April 22. https://sadroughthub.com.au/.

52. Savelli, Adam, Mary Atieno, James Giles, et al. 2021. *CLIMATE SMART AGRICULTURE IN INDONESIA*. CSA Country Profiles for Asia Series. The Alliance of Bioversity and The International Center for Tropical Agriculture; The World Bank Group. https://documents1.worldbank.org/curated/en/752291622632903770/pdf/Climate-Smart-Agriculture-in-Indonesia.pdf.

53. Simoes, AJG, and CA Hidalgo. 2025. 'Cocoa Butter in Indonesia'. The Economic Complexity Observatory, December 19. https://oec.world/en/profile/bilateral-product/cocoa-butter/reporter/idn.

54. SME Bank. n.d. 'SME Co-Financing Scheme I (SCFS I)'. Small and Medium Enterprise Bank of Cambodia, Small and Medium Enterprise Bank of Cambodia. Accessed 20 May 2025. https://www.smebankcambodia.com.kh/sme-co-financing-scheme-i-scfs-i/.

55. The Phnom Penh Post. 2020. 'Can Cambodia's Fragmented Agriculture Sector Save the Econom'. *The Phnom Penh Post*, August 13. https://www.phnompenhpost.com/special-reports/can-cambodias-fragmented-agriculture-sector-save-economy.

56. Utomo, Raden Priyo, Yohanes Kuleh, and Dio Caisar Darma. 2023. 'Conventional vs Modern: Which Approach Is Better for the Success of Agricultural Cooperatives?' *Agricultural and Resource Economics: International Scientific E-Journal* 9 (4). https://doi.org/10.22004/ag.econ.341540.

57. Viet Nam News. 2024. 'Around 2,000 Agricultural Cooperatives Apply High Technology in Production'. Viet Nam News, August 8. https://vietnamnews.vn/economy/1660850/around-2-000-agricultural-cooperatives-apply-high-technology-in-production.html.

58. World Bank. 2015. *Cambodia: The Agriculture, Irrigation, and Rural Roads Sectors -- Public Expenditure Review*. Washington, DC. https://doi.org/10.1596/22509.

59. World Bank. 2023. *Indonesia Economic Prospects, December 2023: Climate Action for Development*. Indonesia Economic Prospects. The World Bank. https://documents1.worldbank.org/curated/en/099121223055535475/pdf/P1795560392d6007309c360819c51cc5979.pdf.

60. World Bank Group. 2022. 'The World Bank Supports Indonesia's Agriculture Sector to Become More Resilient and Inclusive'. *World Bank Group*, September 9. https://www.worldbank.org/en/news/press-release/2022/09/09/the-world-bank-supports-indonesia-agriculture-sector-to-become-more-resilient-and-inclusive.

61. World Integrated Trade Solution. 2025. ‘Cocoa Butter, Fat and Oil Exports by Country in 2024’. February 8. https://wits.worldbank.org/trade/comtrade/en/country/ALL/year/2024/tradeflow/Exports/partner/WLD/product/180400.

62. World Population Review. 2026. ‘Vegetable Production by Country 2026’. World Population Review, February 3. https://worldpopulationreview.com/country-rankings/vegetable-production-by-country.

63. Zhang, Yushuo. 2025. ‘Over Three-Quarters of Crops in China Are Planted, Harvested Using Machines, Crop Production Chief Says’. Economy. *Yicai Global*, July 18. https://www.yicaiglobal.com/news/over-three-quarters-of-crops-in-china-are-planted-harvested-using-machines-crop-production-chief-says.

Annex

i. Questionnaire for ARDB

QUESTIONNAIRE FOR THE STUDY ON "UNLOCKING NEW SOURCE OF AGRICULTURAL GROWTH: ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE"

Stakeholder: Agricultural and Rural Development Bank

This questionnaire was structured to support the study "Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture" aiming to understand the role of financial institutions in supporting Modern Agricultural Cooperatives (MACs) to inform policy and promote sustainable growth. All information provided will be kept strictly confidential and internally used by the project team granted by the Australia Awards Cambodia. Data and information will be anonymized, securely stored, and not used for any commercial purpose.

<table>
<tr><td colspan="3">Part 1: Profile Overview</td></tr>
<tr><td>1</td><td>Date of Establishment:</td><td></td></tr>
<tr><td>2</td><td>Total Employees:</td><td></td></tr>
<tr><td>3</td><td>Number of Female Staffs:</td><td></td></tr>
<tr><td>4</td><td>Ownership:</td><td>1. ☐ Private-owned
2. ☐ State-owned</td></tr>
<tr><td>5</td><td>Please provide major progress and achievement of your institution in the recent year.</td><td></td></tr>
<tr><td>6</td><td>What are your current loan products? Provide to which sectors? Please explain.</td><td></td></tr>
<tr><td>7</td><td colspan="2">Please provide information about funding sources:
☐ 1. Own capital: .....% equivalent to ..... USD
☐ 2. Government grant: .....% equivalent to ..... USD
☐ 3. Customer deposits: .....% equivalent to ..... USD
☐ 4. Others (.....): .....% equivalent to ..... USD</td></tr>
<tr><td colspan="3">Part 2: Loan to Agriculture</td></tr>
<tr><td>1</td><td colspan="2">How many types of loan products your bank provided to agricultural sector? (Please fill in the data in the table)
<table>
<tr><th>Loan Products/Name
(e.g. Farmer Loan, Rice Loan, SME Loan, Wholesale-Retail Loan, …)</th><th>Range of Interest Rate</th><th>Loan Size (USD) (min-max)</th><th>Loan Tenor
(min-max)</th><th>Purpose</th><th>Collateral Type</th><th>Targeted Customers</th><th>Repayment Methods</th></tr>
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</table></td></tr>
<tr><td>2</td><td colspan="2">What are the proportion of loans disbursed to agricultural sector and Modern Agricultural Cooperatives (MACs) among all approved loan yearly from 2020 to 2024 and the forecast for 2025? (Please fill in the data in the table)</td></tr>
</table>

Loan amount and proportion		2020	2021	2022	2023	2024	2025 (F)
Agricultural Sector	Amount (Million USD)						
	Percentage %						
	Number of applications submitted						
	Approval Rate						
	Average Interest Rate						
MACs	Amount (Million USD)						
	Percentage %						
	Number of applications submitted						
	Approval Rate						
	Average Interest Rate						

3 What is the average rate of loans approved by the institution compared to the total loan requests of the customers and its approved rate for agriculture and MACs?

Year	Total Number of Loan Applications	Total loan approval rate (%)	Approval rate for agriculture (%)	Approval Rate for MACs (%)
2020				
2021				
2022				
2023				
2024				
2025 (Forecast)				

4 What are the component conditions of loan to agricultural sector/ MACs by July 2025? *(Select all that apply and express proportion in percentage*)

	Agricultural Sector	MACs
Collateral Type	……. % ☐ Hard Title, Community ……. % ☐ Hard Title, Agriculture ……. % ☐ L-Map receipt ……. % ☐ Soft Title	……. % ☐ Hard Title, Community ……. % ☐ Hard Title, Agriculture ……. % ☐ L-Map receipt ……. % ☐ Soft Title
Average Tenor	……. % ☐ Less than 1 year	……. % ☐ Less than 1 year

		……. % ☐ 1 – 3 years ……. % ☐ 3 – 5 years ……. % ☐ more than 5 years	……. % ☐ 1 – 3 years ……. % ☐ 3 – 5 years ……. % ☐ more than 5 years
	Disbursement Method	……. % ☐ One-off drawdown ……. % ☐ Drawdown on demand ……. % ☐ Others	……. % ☐ One-off drawdown ……. % ☐ Drawdown on demand ……. % ☐ Others
	Purposes	……. % ☐ Crops cultivation ……. % ☐ Fisheries ……. % ☐ Livestock ……. % ☐ Milling/ Processing ……. % ☐ Forestry ……. % ☐ Others	……. % ☐ Crops cultivation ……. % ☐ Fisheries ……. % ☐ Livestock ……. % ☐ Milling/ Processing ……. % ☐ Forestry ……. % ☐ Others
	Repayment Method	……. % ☐ Annuity ……. % ☐ Monthly interest payment, bullet principle ……. % ☐ Bullet payment ……. % ☐ Irregular payment: (Please specify)	……. % ☐ Annuity ……. % ☐ Monthly interest payment, bullet principle ……. % ☐ Bullet payment ……. % ☐ Irregular payment: (Please specify)

5 Who are the target customers/beneficiaries of your agricultural loan? What is the share of each customer category to total loan to agriculture of your institution by July 2025?

Please choose and fill in the percentage share of loan to each beneficiary to the total loan to agriculture:

Agriculture Loan Beneficiaries	Share to Total Loan to Agricultural Sector (%)
☐ 1. Individual farmers (crops, poultry, and fishermen)	…%
☐ 2. Associations/Communities/Federations	…%
☐ 3. Middlemen (aggregators)	…%
☐ 4. Milling/Drying and Processing Enterprises	…%
☐ 5. Agri-food SMEs (e.g., fish sauce, dried meat producers)	…%
☐ 6. Others (……..)	…%

6 Besides agriculture sector, does your institution provide loan to other sectors?

1. ☐ NO
2. ☐ YES

6.1. If YES, please provide information below by July 2025:

Sector	**Total Amount of Loan** (USD)	**Average Interest Rate**	**Loan Tenor**	**Collateral Type**	**Purpose**	**Repayment Method**

7	Has your institution provided loans to modern agricultural cooperatives (MACs)?	1. ☐ NO 2. ☐ YES

7.1. If yes, please provide:

Cooperative Name	Agricultural Activity	Total Loan Disbursement (Million USD)	Average Rate	Loan Tenor	Collateral Type	Repayment Method	Loan Purpose

8	What are the key evaluation criteria used when assessing applications for the agricultural sector, especially for MACs?	
9	Does your institution have non-performing loans (NPL) in the agricultural sector, especially for MACs?	1. ☐ NO 2. ☐ YES

9.1. If YES, please provide the following information:

Sector	Annual NPL Rate (%)					Total NPL Amount (USD)				
	2021	2022	2023	2024	2025f	2021	2022	2023	2024	2025f
Agricultural Sector										
MACs										

10 What are the agricultural special financing programs/schemes has your institution participated in or implemented? Please explain and provide information below.

No.	Program/Scheme	Budget Allocation (USD)	Implementation Duration (YYYY-YYYY)	Beneficiaries (Who are eligible to benefit from the program/scheme)	Roles of Your Institution
1					
2					
3					
4					
5					

<table>
<tr><td>11</td><td>What is your perspective towards MACs on following aspects? Please explain below.<table>
<tr><td>1. Practice of MACs</td><td></td></tr>
<tr><td>2. MACs advantages</td><td></td></tr>
<tr><td>3. Financing to MACs</td><td></td></tr>
<tr><td>4. MACs potential growth in the future</td><td></td></tr>
<tr><td>5. Challenges of MACs</td><td></td></tr>
</table></td></tr>
<tr><td rowspan="3">12</td><td>Does your institution have a plan to expand financing to MACs?</td><td>1. ☐ NO
2. ☐ YES</td></tr>
<tr><td>12.1. If YES, please explain (amount, what agriculture activities, interest rate, tenure, …)</td><td></td></tr>
<tr><td>12.2. If NO, what are the main reasons or challenges that prevent the provision of loan to MACs?</td><td></td></tr>
<tr><td>13</td><td>What are key factors your institution think MACs could improve to receive better financing from FIs? Please explain.</td><td></td></tr>
<tr><td>14</td><td colspan="2">Would you consider MACs as a more potential target customers than others? If so, what are factors that MACs outperform than other groups? Please elaborate and select all that apply.
a. ☐ No potential: ……...
b. ☐ MACs are well developed: ……
c. ☐ MACs have more creditability: ……
d. ☐ MACs received any type of supports: ……
e. ☐ MACs have more solid collateral: ……
f. ☐ Others: ……</td></tr>
<tr><td>15</td><td>What are your suggestions or comments to promote financing to the agricultural sector through MACs? Please explain.</td><td></td></tr>
</table>

16	Do you think boosting loan to agriculture via MACs is the main concentration to promote the development of MACs and boost new source of growth for Agriculture? Please explain.	
17	What do you think government, private sector and other key stakeholders should contribute to the development of modern agricultural cooperatives?	

Thank you for your valuable contribution to this research project. You may download the questionnaire document using the following link or by scanning the QR code provided below.

Download Link: https://tinyurl.com/ardb2025

For more information, please contact:

Mr. Ang Chheanghak *011 361 196 (telegram)*
Mr. Mr. Heng Sereymanuth *096 904 4249 (telegram)*

ii. Questionnaire for SME

QUESTIONNAIRE FOR THE STUDY ON "UNLOCKING NEW SOURCE OF AGRICULTURAL GROWTH: ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE"

Stakeholder: Small and Medium Enterprise Bank of Cambodia Plc.

This questionnaire was structured to support the study "Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture" aiming *to understand the role of financial institutions in supporting Modern Agricultural Cooperatives (MACs) to inform policy and promote sustainable growth. All information provided will be kept strictly confidential and internally used by the project team granted by the Australia Awards Cambodia. Data and information will be anonymized, securely stored, and not used for any commercial purpose.*

Part 1: Profile Overview

1	Date of Establishment:	
2	Total Employees:	
3	Number of Female Staffs:	
4	Ownership:	3. ☐ Private-owned 4. ☐ State-owned
5	Please provide major progress and achievement of your institution in the recent year.	
6	Please provide information about funding sources: ☐ 1. Own capital: .....% equivalent to ..... USD ☐ 2. Government grant: .....% equivalent to ..... USD ☐ 3. Customer deposits: .....% equivalent to ..... USD ☐ 4. Others (.....): .....% equivalent to ..... USD	

Part 2: Loan to Agriculture

1 What types of loan products does your institution offer to the agriculture sector? Please describe the terms for each loan product as follows:

Loan Products (e.g. Farmer Loan, Rice Loan, SME Loan, Wholesale-Retail Loan, …)	**Range of Interest Rate**	**Loan Size** (USD) (min-max)	**Loan Tenor** (min-max)	**Purpose**	**Collateral Type**	**Targeted Customers**	**Repayment Methods**

2 What are the proportion of loans disbursed to agricultural sector and Modern Agricultural Cooperatives (MACs) among **all approved loan** yearly from 2020 to 2024 and the forecast for 2025? *(Please fill in the data in the table)*

Loan amount and proportion		**2020**	**2021**	**2022**	**2023**	**2024**	**2025 (F)**
Agricultural Sector	Amount (Million USD)						

		Percentage %						
		Number of applications submitted						
		Approval Rate						
		Average Interest Rate						
	MACs	Amount (Million USD)						
		Percentage %						
		Number of applications submitted						
		Approval Rate						
		Average Interest Rate						

3 What average loan approval rate compared to total loan applications?

Year	Total Number of Loan Applications	Total loan approval rate (%)	Approval rate for agriculture (%)	Approval Rate for MACs (%)
2020				
2021				
2022				
2023				
2024				
2025 (forecast)				

4 What are the component conditions of loan to agricultural sector/ MACs by July 2025? *(Select all that apply and express proportion in percentage*)

	Agricultural Sector	MACs
Collateral Type	……. % ☐ Hard Title, Community ……. % ☐ Hard Title, Agriculture ……. % ☐ L-Map receipt ……. % ☐ Soft Title	……. % ☐ Hard Title, Community ……. % ☐ Hard Title, Agriculture ……. % ☐ L-Map receipt ……. % ☐ Soft Title
Average Tenor	……. % ☐ Less than 1 year ……. % ☐ 1 – 3 years ……. % ☐ 3 – 5 years ……. % ☐ more than 5 years	……. % ☐ Less than 1 year ……. % ☐ 1 – 3 years ……. % ☐ 3 – 5 years ……. % ☐ more than 5 years
Disbursement Method	……. % ☐ One-off drawdown ……. % ☐ Drawdown on demand	……. % ☐ One-off drawdown ……. % ☐ Drawdown on demand

	……. % ☐ Others	……. % ☐ Others
Purposes	……. % ☐ Crops cultivation ……. % ☐ Fisheries ……. % ☐ Livestock ……. % ☐ Milling/ Processing ……. % ☐ Forestry ……. % ☐ Others	……. % ☐ Crops cultivation ……. % ☐ Fisheries ……. % ☐ Livestock ……. % ☐ Milling/ Processing ……. % ☐ Forestry ……. % ☐ Others
Repayment Method	……. % ☐ Annuity ……. % ☐ Monthly interest payment, bullet principle ……. % ☐ Bullet payment ……. % ☐ Irregular payment: (Please specify)	……. % ☐ Annuity ……. % ☐ Monthly interest payment, bullet principle ……. % ☐ Bullet payment ……. % ☐ Irregular payment: (Please specify)

5 Who are the target customers/beneficiaries of your agricultural loan? What is the share of each customer category to total loan to agriculture of your institution by July 2025?

Please choose and fill in the percentage share of loan to each beneficiary to the total loan to agriculture:

Agriculture Loan Beneficiaries	Share to Total Loan to Agricultural Sector (%)
☐ 1. Individual farmers (crops, poultry, and fishermen)	…%
☐ 2. Associations/Communities/Federations	…%
☐ 3. Middlemen (aggregators)	…%
☐ 4. Milling/Drying and Processing Enterprises	…%
☐ 5. Agri-food SMEs (e.g., fish sauce, dried meat producers)	…%
☐ 6. Others (……..)	…%

6 What sectors does your institution disburse loan to? Please provide information below by July 2025:

Sector	**Total Amount of Loan** (USD)	**Average Interest Rate**	**Loan Tenor**	**Collateral Type**	**Purpose**	**Repayment Method**

7	Which sector do you consider has the highest potential for your institution? Please explain.	
8	Has your institution provided loans to modern agricultural cooperatives (MACs)?	3. ☐ NO 4. ☐ YES

8.1. If yes, please provide:

Cooperative Name	Agricultural Activity	Total Loan Disbursement (Million USD)	Average Rate	Loan Tenor	Collateral Type	Repayment Method	Loan Purpose

9	What are the key evaluation criteria used when assessing applications for the agricultural sector, especially for MACs?	
10	Does your institution have non-performing loans (NPL) in the agricultural sector, especially for MACs?	1. ☐ NO 2. ☐ YES

10.1. If YES, please provide the following information:

Sector	Annual NPL Rate (%)					Total NPL Amount (USD)				
	2021	2022	2023	2024	2025f	2021	2022	2023	2024	2025f
Agricultural Sector										
MACs										

11 What are the agricultural special financing programs/schemes has your institution participated in or implemented? Please explain and provide information below.

No.	Program/Scheme	Budget Allocation (USD)	Implementation Duration (YYYY-YYYY)	Beneficiaries (Who are eligible to benefit from the program/scheme)	Roles of Your Institution
1					
2					
3					
4					
5					

12 What is your perspective towards MACs on following aspects?

1. Practice of MACs	
2. MACs advantages	
3. Financing to MACs	
4. MACs potential growth in the future	

	5. Challenges of MACs	
13	Does your institution plan to expand the financing to MACs?	3. ☐ NO 4. ☐ YES
	13.1. If yes, please specify:	
	13.2. If no, what are the main reasons or challenges preventing from financing to MACs?	
14	What are key factors your institution think agricultural sector/ MACs could improve to receive better financing from FIs? Please explain.	
15	Would you consider MACs as a more potential target customers than others? If so, what are factors that MACs outperform than other groups? Please elaborate and select all that apply. g. ☐ No potential: ……... h. ☐ MACs are well developed: …… i. ☐ MACs have more creditability: …… j. ☐ MACs received any type of supports: …… k. ☐ MACs have more solid collateral: …… l. ☐ Others: ……	
16	What are your suggestions or comments to promote financing to the agricultural sector through MACs? Please explain.	
17	Do you think boosting loan to agriculture via MACs is the main concentration to promote the development of MACs and boost new source of growth for Agriculture? Please explain.	

Thank you for your valuable contribution to this research project. You may download the questionnaire document using the following link or by scanning the QR code provided below.

Link: https://tinyurl.com/sme2x25

For more information, please contact:

Mr. Ang Chheanghak *011 361 196 (telegram)*
Mr. Mr. Heng Sereymanuth *096 904 4249 (telegram)*

iii. Questionnaire for FIs

QUESTIONNAIRE FOR THE STUDY ON "UNLOCKING NEW SOURCE OF AGRICULTURAL GROWTH: ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE"

Stakeholder: Financial Institutions

This questionnaire was structured to support the study "Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture" aiming *to understand the role of financial institutions in supporting Modern Agricultural Cooperatives (MACs) to inform policy and promote sustainable growth. All information provided will be kept strictly confidential and internally used by the project team granted by the Australia Awards Cambodia. Data and information will be anonymized, securely stored, and not used for any commercial purpose.*

<table>
<tr><td colspan="3">Part 1: Profile Overview</td></tr>
<tr><td>1</td><td>Name:</td><td></td></tr>
<tr><td>2</td><td>Date of Establishment:</td><td></td></tr>
<tr><td>3</td><td>Country of origin:</td><td></td></tr>
<tr><td>4</td><td>Total Employees:</td><td></td></tr>
<tr><td>5</td><td>Number of Female Staffs:</td><td></td></tr>
<tr><td>6</td><td>Ownership:</td><td>5. ☐ Private-owned
6. ☐ State-owned</td></tr>
<tr><td>7</td><td>Please provide major progress and achievement of your institution in the recent year.</td><td></td></tr>
<tr><td>8</td><td colspan="2">Please explain your source of fund as provided below:
☐ 1. Own capital:…….% equal to……..……...USD
☐ 2. Government:..…...% equal to……...….USD
☐ 3. Customer Deposit:……% equal to…..……USD
☐ 4. Others (……):..….% equal to…….……USD</td></tr>
<tr><td colspan="3">Part 2: Loan to Agriculture</td></tr>
<tr><td>1</td><td colspan="2">How many types of loan products your bank provided to agricultural sector? (Please fill in the data in the table)
<table>
<tr><th>Loan Products/Name (e.g. Farmer Loan, Rice Loan, SME Loan, Wholesale-Retail Loan, …)</th><th>Range of Interest Rate</th><th>Loan Size (USD) (min-max)</th><th>Loan Tenor (min-max)</th><th>Purpose</th><th>Collateral Type</th><th>Targeted Customers</th><th>Repayment Methods</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table></td></tr>
</table>

2 What are the proportion of loans disbursed to agricultural sector and Modern Agricultural Cooperatives (MACs) among **all approved loan** yearly from 2020 to 2024 and the forecast for 2025? *(Please fill in the data in the table)*

Loan amount and proportion		**2020**	**2021**	**2022**	**2023**	**2024**	**2025 (F)**
Agricultural Sector	Amount (Million USD)						
	Percentage %						
	Number of applications submitted						
	Approval Rate						
	Average Interest Rate						
MACs	Amount (Million USD)						
	Percentage %						
	Number of applications submitted						
	Approval Rate						
	Average Interest Rate						

3 What are the component conditions of loan to agricultural sector/ MACs by July 2025? *(Select all that apply and express proportion in percentage*)

	Agricultural Sector	**MACs**
Collateral Type	……. % ☐ Hard Title, Community ……. % ☐ Hard Title, Agriculture ……. % ☐ L-Map receipt ……. % ☐ Soft Title	……. % ☐ Hard Title, Community ……. % ☐ Hard Title, Agriculture ……. % ☐ L-Map receipt ……. % ☐ Soft Title
Average Tenor	……. % ☐ Less than 1 year ……. % ☐ 1 – 3 years ……. % ☐ 3 – 5 years ……. % ☐ more than 5 years	……. % ☐ Less than 1 year ……. % ☐ 1 – 3 years ……. % ☐ 3 – 5 years ……. % ☐ more than 5 years
Disbursement Method	……. % ☐ One-off drawdown ……. % ☐ Drawdown on demand ……. % ☐ Others	……. % ☐ One-off drawdown ……. % ☐ Drawdown on demand ……. % ☐ Others
Purposes	……. % ☐ Crops cultivation ……. % ☐ Fisheries ……. % ☐ Livestock ……. % ☐ Milling/ Processing ……. % ☐ Forestry ……. % ☐ Others	……. % ☐ Crops cultivation ……. % ☐ Fisheries ……. % ☐ Livestock ……. % ☐ Milling/ Processing ……. % ☐ Forestry ……. % ☐ Others
Repayment Method	……. % ☐ Annuity ……. % ☐ Monthly interest payment, bullet principle ……. % ☐ Bullet payment ……. % ☐ Irregular payment: (Please specify)	……. % ☐ Annuity ……. % ☐ Monthly interest payment, bullet principle ……. % ☐ Bullet payment ……. % ☐ Irregular payment: (Please specify)

4 Who are the target customers/beneficiaries of your agricultural loan? What is the share of each customer category to total loan to agriculture of your institution by July 2025?

Please choose and fill in the percentage share of loan to each beneficiary to the total loan to agriculture:

Agriculture Loan Beneficiaries	Share to Total Loan to Agricultural Sector (%)
☐ 1. Individual farmers (crops, poultry, and fishermen)	…%
☐ 2. Associations/Communities/Federations	…%
☐ 3. Middlemen (aggregators)	…%
☐ 4. Milling/Drying and Processing Enterprises	…%
☐ 5. Agri-food SMEs (e.g., fish sauce, dried meat producers)	…%
☐ 6. Others (……..)	…%

5 Please rate loan to agricultural sector and MACs that went default (NPL) in percentage.

Sector	Annual NPL Rate (%)					Total NPL Amount (USD)				
	2021	2022	2023	2024	2025f	2021	2022	2023	2024	2025f
Agricultural Sector										
MACs										

6	What are key assessments on loan applications from agricultural sectors/ MACs?	

7 What are the main reasons and proportion that your FI rejects loan applications from customers in agricultural sector/MACs? (*Select all that apply)*

……. % ☐ Lack of repayment ability
……. % ☐ Not in guarantee supporting scope/scheme provided CGCC
……. % ☐ Lack of solid supporting documents
……. % ☐ Lack of creditability (e.g. CBC credit history, …)
……. % ☐ Others (please explain): …….

8 What are the feedbacks your FI received from customers towards any part or structure of your agricultural loan criteria? Please select all the feedbacks that apply by providing its proportion and explaining each of them.

……. % ☐ Fee charge rate: ……
……. % ☐ Guarantee proportion: ……
……. % ☐ Scope of products and services: ……
……. % ☐ PFIs Partners: ……
……. % ☐ Tenor: ……
……. % ☐ Required documents: ……
……. % ☐ Processing period: ……
……. % ☐ Others: ……

9	What are key factors do you think agricultural sector/ MACs could improve to receive more financing from FIs?	

10 What is your perspective towards MACs on following aspects?

1. Practice of MACs	
2. MACs advantages	

	3. Financing to MACs	
	4. MACs potential growth in the future	
	5. Challenges of MACs	

11	Does loan to MACs are more successful than other group of customers?	

12 What is the average rate of loans approved by the institution compared to the total loan requests of the customers and its approved rate for agriculture and MACs?

Year	Rate of total loan requests approved	Rate of loan requests for agriculture approved	Rate of loan requests for MACs approved
2020			
2021			
2022			
2023			
2024			
2025 (Forecast)			

13 What are the agricultural special financing programs/schemes has your institution participated in or implemented? Please explain and provide information below.

No.	Program/Scheme	Budget Allocation (USD)	Implementation Periods (YYYY-YYYY)	Beneficiaries (Who are eligible to benefit from the program/scheme)	Roles of Your Institution
1					
2					
3					
4					
5					

14 Would you consider MACs as a more potential target customers than others? If so, what are factors that MACs outperform than other groups? Please elaborate and select all that apply.

m. ☐ No potential: ……...
n. ☐ MACs are well developed: ……
o. ☐ MACs have more creditability: ……
p. ☐ MACs received any type of supports: ……
q. ☐ MACs have more solid collateral: ……
r. ☐ Others: ……

15	Do you think boosting loan to agriculture via MACs is the main concentration to promote the development of MACs and boost new source of growth for Agriculture?	
16	What do you think the government and relevant stakeholders should do to promote MAC development?	

Thank you for your valuable contribution to this research project. You may download the questionnaire document using the following link or by scanning the QR code provided below.

Download Link: https://tinyurl.com/fis2x25

For more information, please contact:

Mr. Ang Chheanghak *011 361 196 (telegram)*
Mr. Mr. Heng Sereymanuth *096 904 4249 (telegram)*

iv. Questionnaire for CGCC

QUESTIONNAIRE FOR THE STUDY ON "UNLOCKING NEW SOURCE OF AGRICULTURAL GROWTH: ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE"

Stakeholder: Credit Guarantee Corporation of Cambodia

This questionnaire was structured to support the study "Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture" aiming *to understand the role of financial institutions in supporting Modern Agricultural Cooperatives (MACs) to inform policy and promote sustainable growth. All information provided will be kept strictly confidential and internally used by the project team granted by the Australia Awards Cambodia. Data and information will be anonymized, securely stored, and not used for any commercial purpose.*

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<tr><td>5</td><td>Ownership:</td><td>7. ☐ Private-owned
8. ☐ State-owned</td></tr>
<tr><td>6</td><td>Please provide major progress and achievement of your institution in the recent year.</td><td></td></tr>
<tr><td colspan="3">Part 2: Loan Guarantee Progress</td></tr>
<tr><td>1</td><td>What are the procedures of reviewing guarantee application?</td><td></td></tr>
<tr><td>2</td><td>What would happen to loan application after guarantee has been rejected by CGCC?</td><td></td></tr>
<tr><td>3</td><td>What are your key assessments on guarantee to agricultural sector/Modern Agriculture Cooperatives (MACs)?</td><td></td></tr>
<tr><td>4</td><td colspan="2">Please provide proportion of guarantees to agricultural sector and MACs among all approved guarantees from 2021 to 2024 and forecast for 2025.
<table>
<tr><th colspan="2">Guaranteed amount and proportion</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th><th>2025 (F)</th></tr>
<tr><td rowspan="4">Agricultural Sector</td><td>Amount (Million USD)</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Percentage %</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Number of applications submitted</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Approval Rate</td><td></td><td></td><td></td><td></td><td></td></tr>
</table></td></tr>
</table>

	MACs	Amount (Million USD)					
		Percentage %					
		Number of applications submitted					
		Approval Rate					

5 What are CGCC guarantee products provided to agricultural sector/MACs? Please provide data in the table below by July 2025.

Agricultural Sector				**MACs**		
Product Type/Names	Share to Total Guarantee Amount for Agriculture (%)	Guarantee Amount	Beneficiaries (Who receives guarantee?)	Product Type/Names	Share to Total Guarantee Amount for Agriculture (%)	Guarantee Amount

6 What is the average fee charge for guarantee to agricultural sector/MACs?

Average fee charge	**2021**	**2022**	**2023**	**2024**	**2025 (F)**	**Average**
Agricultural Sector						
MACs						

7 How guarantee fee is charged? Please also specify selection proportion in percentage. Select all that apply.

……. % ☐ 1. One-off payment once guarantee is approved but before loan drawdown

……. % ☐ 2. One-off payment when guarantee is approved and after loan has been drawn

……. % ☐ 3. Monthly payment

……. % ☐ 4. Bullet payment

……. % ☐ 5. Others (please explain): ……

8 What are the main reasons and proportion that CGCC rejects guarantee supports to its customers in agricultural sector/MACs? Select all that apply.

……. % ☐ Lack of repayment ability

……. % ☐ Not in guarantee supporting scope/scheme provided CGCC

……. % ☐ Lack of solid supporting documents

……. % ☐ Lack of creditability (e.g. CBC credit history, …)

……. % ☐ Others (please explain): …….

9 What is the default rate of guaranteed loans each year from 2021 to 2024 and the forecast for 2025?

Sector	**Annual Default Loan Rate (%)**					
	2021	**2022**	**2023**	**2024**	**2025f**	**Total**
Agricultural Sector						
MACs						

10 What are your actions towards NPL?

11 Can you assess customer satisfaction? Please rate the level of satisfaction.

Customer Satisfaction level	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
Agricultural Sector	☐	☐	☐	☐	☐
MACs	☐	☐	☐	☐	☐

12 What are the feedbacks CGCC received from customers towards any part or structure of the guarantee scheme to agriculture/MACs? Please select all the feedbacks that apply by providing its proportion and explaining each of them.

……. % ☐ 1. Fee charge rate: ……

……. % ☐ 2. Guarantee proportion: ……

……. % ☐ 3. Scope of products and services: ……

……. % ☐ 4. PFIs Partners: ……

……. % ☐ 5. Tenor: ……

……. % ☐ 6. Required documents: ……

……. % ☐ 7. Processing period: ……

<table>
<tr><td></td><td colspan="2">……. % ☐ 8. Others (please explain): ……</td></tr>
<tr><td>13</td><td>What do you think are key points that CGCC could improve to better support agricultural sector/MACs?</td><td></td></tr>
<tr><td>14</td><td>What are key factors CGCC think agricultural sector/MACs could improve to be eligible to receive more guarantee?</td><td></td></tr>
<tr><td>15</td><td colspan="2">What is your perspective towards MACs.
<table>
<tr><td>1. Practice of MACs</td><td></td></tr>
<tr><td>2. MACs advantages</td><td></td></tr>
<tr><td>3. Financing to MACs</td><td></td></tr>
<tr><td>4. MACs potential growth in the future</td><td></td></tr>
<tr><td>5. Challenges of MACs</td><td></td></tr>
</table></td></tr>
<tr><td>16</td><td colspan="2">Does guarantee scheme to MACs are more successful than other group of obligors?
<table>
<tr><th>Obligors</th><th>Approval rate</th></tr>
<tr><td>MACs</td><td></td></tr>
<tr><td>Others</td><td></td></tr>
</table></td></tr>
<tr><td>17</td><td colspan="2">Would you consider MACs as a more potential target customers than others? If so, what are factors that MACs outperform than other groups? Please elaborate and select all that apply.
a. ☐ Not potential: ……
b. ☐ MACs are well developed: ……
c. ☐ MACs have more creditability: ……
d. ☐ MACs received any type of supports: ……
e. ☐ MACs have more solid collateral: ……
f. ☐ Others (please explain): ……</td></tr>
</table>

18	Do you think boosting loan to agriculture via MACs is the main concentration to promote the development of MACs and new source of growth for Agriculture?	
19	What do you think the government and relevant stakeholders should do to promote MACs development?	

Thank you for your valuable contribution to this research project. You may download the questionnaire document using the following link or by scanning the QR code provided below.

Download Link: https://tinyurl.com/cgcc2x25

For more information, please contact:

Mr. Ang Chheanghak *011 361 196 (telegram)*
Mr. Mr. Heng Sereymanuth *096 904 4249 (telegram)*

v. Questionnaire for MEF

QUESTIONNAIRE FOR THE STUDY ON
"UNLOCKING NEW SOURCE OF AGRICULTURAL GROWTH: ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE"

Stakeholder: Ministry of Economy and Finance

This questionnaire was structured to support the study "Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture" aiming to understand the role of financial institutions in supporting Modern Agricultural Cooperatives (MACs) to inform policy and promote sustainable growth. All information provided will be kept strictly confidential and internally used by the project team granted by the Australia Awards Cambodia. Data and information will be anonymized, securely stored, and not used for any commercial purpose.

No.	Questions	Answer
1	What key policies has the Royal Government, through the Ministry of Economy and Finance, introduced to promote financing to the agricultural sector? What programs/projects exist and what are their budgets?	

No.	Program/Scheme	Allocated Budget (USD)	Responsible Stakeholders	Implementation Period	Beneficiaries
1					
2					
3					
4					
5					

2	Has the Ministry provided support to Modern Agricultural Communities (MACs)?	a. ☐ Yes b. ☐ NO

2.1. If yes, please specify details of programs/projects, budget, implementing agencies, duration, and target beneficiaries.

No.	Program/Scheme	Allocated Budget (USD)	Responsible Stakeholders	Implementation Period	Beneficiaries
1					
2					
3					

3 Please provide data on total government budget expenditure to the agricultural sector and to MACs (if any) for the years 2020–2025 (estimated).

Year	Allocated Budget to Agricultural Sector (Million USD)	Allocated Budget to MACs (Million USD)	Implementation Institutions
2020			
2021			

	2022			
	2023			
	2024			
	2025 (Estimate)			

4	what are the key criteria used by the Ministry in approving budget allocations to the agricultural sector and modern agricultural cooperatives (if any)?
5	What monitoring, evaluation, and control mechanisms are used for the implementation and use of government budget in the agricultural sector and MACs (if any)?
6	. In the Ministry's view, what benefits have modern agricultural cooperatives brought to agriculture, economic growth, and the environment?

Agricultural Development	**Economic Development**	**Environmental Improvement**
- - -	- - -	- - -

7	What challenges does the Ministry observe in implementing MACs? • Management? • Access to Finance? • Awareness? • Others?
8	What measures does the Ministry have to promote development of MACs in the short, medium, and long term?

Short-Term Measures	Medium-Term Measures	Long-Term Measures
- - -	- - -	- - -

9	Is financing a key factor in promoting the development of MACs? Please explain.	
10	What is the Ministry's vision regarding the implementation of MACs?	

vi. Questionnaire for MAFF

QUESTIONNAIRE FOR THE STUDY ON

"UNLOCKING NEW SOURCE OF AGRICULTURAL GROWTH: ASSESSING THE ROLE OF FINANCE IN MODERN AGRICULTURE"

Stakeholder: Ministry of Agriculture, Forestry and Fisheries

This questionnaire was structured to support the study "Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture" aiming to understand the role of financial institutions in supporting Modern Agricultural Cooperatives (MACs) to inform policy and promote sustainable growth. All information provided will be kept strictly confidential and internally used by the project team granted by the Australia Awards Cambodia. Data and information will be anonymized, securely stored, and not used for any commercial purpose.

<table>
<tr><th>No.</th><th>Questions</th><th>Answer</th></tr>
<tr><td>1</td><td>Please provide information on the progress of modern agricultural community (MAC) development.</td><td></td></tr>
<tr><td>2</td><td>When were modern agricultural communities first established?</td><td></td></tr>
<tr><td>3</td><td>Currently, how many MAC exist? How many are operational and non-operational?</td><td></td></tr>
<tr><td>4</td><td colspan="2">Please provide updated information of MACs as following:
<table>
<tr><th>No.</th><th>MAC Name</th><th>Location</th><th>Contact</th></tr>
<tr><td>1</td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td><td></td></tr>
<tr><td>4</td><td></td><td></td><td></td></tr>
<tr><td>5</td><td></td><td></td><td></td></tr>
<tr><td>6</td><td></td><td></td><td></td></tr>
<tr><td>7</td><td></td><td></td><td></td></tr>
<tr><td>8</td><td></td><td></td><td></td></tr>
<tr><td>9</td><td></td><td></td><td></td></tr>
<tr><td>10</td><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>5</td><td colspan="2">What key measures has the Ministry implemented and plans to implement to promote the development of MAC?
<table>
<tr><th>Existing Measures</th><th>New Measures</th></tr>
<tr><td>-
-
-</td><td>-
-
-</td></tr>
</table></td></tr>
</table>

6	Please assess the benefits of implementing MACs compared to traditional/regular agricultural cooperatives.

Assessment Criteria	Unit	MACs	Traditional/Regular ACs	Difference (%)
Average Startup Cost	USD/Hectare			
Average Annual Expense	USD/Hectare			
Average Annual Income	USD/Hectare			
Average Annual Profit	USD/Hectare			
Annual Productivitiy	Ton/Hectare			
Average Annula Increase of Income for Each Member	USD/Hectare			
Access to Modern Facilities				
Access to Finance				
Access to Capacity Building Program	Time/Year			
Climate Resilience				

7	What challenges does the Ministry observe in implementing modern agricultural communities? • Management? • Access to Finance? • Awareness? • Others?	
8	What key measures does the Ministry have to address these challenges?	
9	Are there plans to expand MACs? If yes, how many and what products?	

10	Is financing an important factor in promoting the development of MACs? Please explain.	
11	Is promoting credit to MAC a key mechanism for agricultural growth? Please explain.	
12	How should financial institutions design financing conditions to support MAC?	
13	How should the ministry and stakeholders collaborate to promote the development of MAC?	

vii. Consent Form

PARTICIPATION CONSENT FORM

RESEARCH TITLE:

"Unlocking New Source of Agriculture's Growth: Assessing Roles of Finance to Modern Agriculture"

PURPOSE OF THE STUDY:

You are invited to participate in a research study that aims to explore the roles of finance in supporting modern agricultural communities and cooperatives in Cambodia. Your insights will contribute to a better understanding of financing gaps, challenges and opportunities, thereby contributing to the development of more effective policy recommendations for the Royal Government of Cambodia.

PARTICIPATION & CONFIDENTIALITY:

Your participation in this study is voluntary. You may decline to answer any questions or withdraw at any time without any consequences. All information and data you provide will be kept strictly confidential and used internally among the research team for the research study only. All data will be anonymized. No names or organizational identities will be disclosed without explicit permission.

AUDIO RECORDING CONSENT:

To ensure accurate data collection, we kindly request your consent to audio record the interview or discussion. These recordings will be used solely for transcription and analysis by the research team and will be securely stored.

CONTACT INFORMATION:

If you have any questions about this research or how your data will be used, you may contact:

Ms. Sok Monirattana
(+855) 12 510 253 | sokmonirattana@gmail.com
Project Lead, Australian Alumni

CONSENT STATEMENT:

By signing this form, I confirm that I have read and understood the information above. I voluntarily agree to participate in this study.

Name of Participant: _____
Community Name (if applicable): _____
Signature: _____
Date: _____