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Cambodia Agriculture Review

Final Report

Over the last two trienniums (2018-2023) New Zealand has invested almost NZD24 million in agriculture Activities in Cambodia. The portfolio includes three key Activities and several smaller investments. This document reviews the portfolio, focusing on its relevance, coherence, accomplishments and contribution to MFAT's development objectives in Cambodia. It also identifies lessons learned and recommendations for future programming in this sector.

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Evaluation Document

Review Team:

The Review was conducted by the Mazi Group.

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Fouzia Nasreen has 20 years of experience in Market Systems Development (MSD) in agriculture sectors across multiple countries in South and Southeast Asia, and Africa. She has held key leadership positions in MSD flagship projects in Bangladesh and has hands-on experience of managing agriculture portfolios based on systems thinking. In the role of MSD adviser, Fouzia has also been providing Gender Equality and Social Inclusion (GESI) support to projects to ensure inclusiveness in private sector business models.

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Abbreviations

AC	Agricultural Cooperative
ADB	Asian Development Bank
ADRA	Adventist Development and Relief Agency
APSARA	Authority for the Protection and Safeguarding of Angkor and the Region of Angkor
ASPIRE	Agricultural Services Programme for Innovation, Resilience and Extension
AWR	Angkor Water Resilience
BKK	Bangkok
CADF	Cambodia Agribusiness Development Facility
CANZ	Caritas Aotearoa New Zealand
CAPRED	Cambodia Australia Partnership for Resilient Economic Development
CASIC	Conservation Agriculture and Sustainable Intensification Consortium
CQHI	Cambodia Quality Horticulture Initiative
CSmart	Cambodia Climate Smart Commercial Horticulture
DCI	Development, Capacity and Insights (MFAT)
DEVECO	Development Economy Division (MFAT)
DFAT	Department of Foreign Affairs and Trade, Australia
DP	Development Partner
DRR	Disaster Risk Reduction
EAC	Eco-Agri Center
ERECON	Institute of Environmental Rehabilitation and Conservation
EU	European Union
FAO	Food and Agriculture Organization of the United Nations

FGD	Focus Group Discussion
GDA	General Directorate of Agriculture
GDS	Global Development and Scholarships Division
iDE	International Development Enterprises
IDI	In-depth Interview
IFAD	International Fund for Agricultural Development
KII	Key Informant Interview
MAFF	Ministry of Agriculture, Forestry and Fisheries
MERL	Monitoring, Evaluation, Research and Learning
MFAT	Ministry of Foreign Affairs and Trade (New Zealand)
MOE	Ministry of Environment
MSD	Market Systems Development
NGO	Non-governmental Organisation
NZ	New Zealand
NZD	New Zealand Dollar
ODA	Official Development Assistance
PD	Provincial Department
PDG	Pacific and Development Group (MFAT)
PDAFF	Provincial Department of Agriculture, Forestry and Fisheries
PFR	Plant and Food Research
Pro-Market	Sustainable Produce to Market Value Chain Enhancement Project
PROSAFE	Promoting Safe Food for Everyone
R&D	Research and Development
RGC	Royal Government of Cambodia
SAC	Svay Rieng Agro-Product Cooperative

SCI	Save the Children International
STEER	Cambodia Systems Approach to Transformative Economic Empowerment and Resilience
TAG	Technical Advisory Group
USAID	United States Agency for International Development
USD	United States Dollar

Abstract

The purpose of the Cambodia Agriculture Review, conducted for the Ministry of Foreign Affairs and Trade (MFAT) by the Mazi Group from February to May 2024, is to understand the trajectory of New Zealand's official development assistance to support agriculture in Cambodia, and its contribution to MFAT's development objectives there. The Review primarily focuses on the horticulture sector, particularly three Activities in the portfolio: the Cambodia Quality Horticulture Initiative, the Cambodia Climate Smart Commercial Horticulture, and the Cambodia Systems Approach to Transformative Economic Empowerment and Resilience. It also considers four other smaller investments.

The Review shows that MFAT's portfolio of Activities aligns with trends in horticulture in Cambodia and supports the priorities of the Royal Government of Cambodia (RGC) and MFAT's ASEAN Four-Year Plan. All three main Activities in the portfolio have achieved their targets in increasing farmer incomes and resilience. Interventions have led to better connections and trust among market actors within local value chains, resulting in improved commercial mindsets and technical capacity among the actors they have reached. However, evidence shows limited sustainability of key services necessary to support continued expansion and resilience of value chains, particularly the provision of updated technical and business advice, certification and market information. Consequently, changes at the systems level were modest. Recommendations for MFAT's future agriculture portfolio in Cambodia are to a) integrate MSD principles from the onset of Activity designs to increase the likelihood of scale and sustainability, b) develop a country strategy to ensure coherence within the portfolio, c) continue the focus on climate change adaptation and food safety, d) develop a targeted approach to inclusion, and e) redesign MERL to support systemic change and adaptive management.

Executive Summary

The New Zealand Ministry of Foreign Affairs and Trade (MFAT) has invested nearly NZD24 million in its current agriculture Activities in Cambodia. This report discusses the relevance and coherence of the portfolio of Activities, summarises the achievements of the portfolio, analyses the strengths and weaknesses of the portfolio and provides recommendations and programming options for the future. It focuses on the three main Activities in the Portfolio, all working in horticulture: the Cambodia Quality Horticulture Initiative (CQHI), the Cambodia Climate Smart Commercial Horticulture (CSmart) and the Cambodia Systems Approach to Transformative Economic Empowerment and Resilience (STEER). It also considers four other Activities.

Context

Cambodia's strong growth over the last two decades has fuelled urbanisation, a rising middle class and increasing demand for horticultural products. Consumers prefer local produce because it is perceived as 'safer' than imported produce; the proportion of vegetables consumed in Cambodia that are locally grown has increased substantially over the last decade. Cambodian horticulture farmers have increasingly adopted a market mindset. Those producing horticultural products of sufficient quality to sell have seen rising incomes, particularly over the last five years.

Despite the positive shifts, Cambodian farmers still face higher costs of production than their counterparts in neighbouring countries. During and since the COVID 19 pandemic, Cambodia's growth has slowed, and consumers have become more price-conscious. Domestic farmers and wholesalers are facing pressure to increase efficiency to compete with inexpensive imports. Key supporting functions for horticulture in Cambodia are underdeveloped, such as logistics and storage, and there is a shortage of some essential skills. There is concern among all market actors that improvements in technology and practices to adapt to climate change are not keeping pace with the intensification of climate change effects.

Relevance and Coherence

Against the backdrop of trends in the horticulture sector, MFAT's portfolio of agriculture Activities in Cambodia has been very relevant. The portfolio is aligned with the Cambodian Government's key strategies in agriculture and MFAT's ASEAN Four-Year plan. The Activities have supported farmers to meet market demand with safe produce and to adapt to some of the effects of climate change. They have also contributed to the development, diversification and increasing commercialisation of local horticultural value chains.

However, the portfolio lacks coherence. Activities were designed independently and are not guided by a common vision and strategy to ensure that each contributes to broader changes in the horticulture system. While there was some collaboration among the main Activities, opportunities for greater cross-learning and adaptive management across the portfolio were missed.

Portfolio Effectiveness

The following Table presents an overview of portfolio performance using traffic light colours to summarise the progress towards expected outputs and outcomes.

	CQHI	CSmart	STEER
Long-term outcomes			
Medium-term outcomes			
Short-term outcomes			
Outputs			

Across the portfolio, interventions to enhance production were strong. Farmers used safer practices, increased productivity and improved their resilience. The Activities also strengthened local or pilot value chains. They improved capacity and built links among local market actors, such as input suppliers, collectors and farmers' organisations as well as selected wholesalers. However, the sustainability of services for farmers and other market actors is a concern, and links to market actors outside of local or pilot value chains remain relatively weak. With limited exceptions, the portfolio did not benefit farmers or other market actors beyond those reached directly.

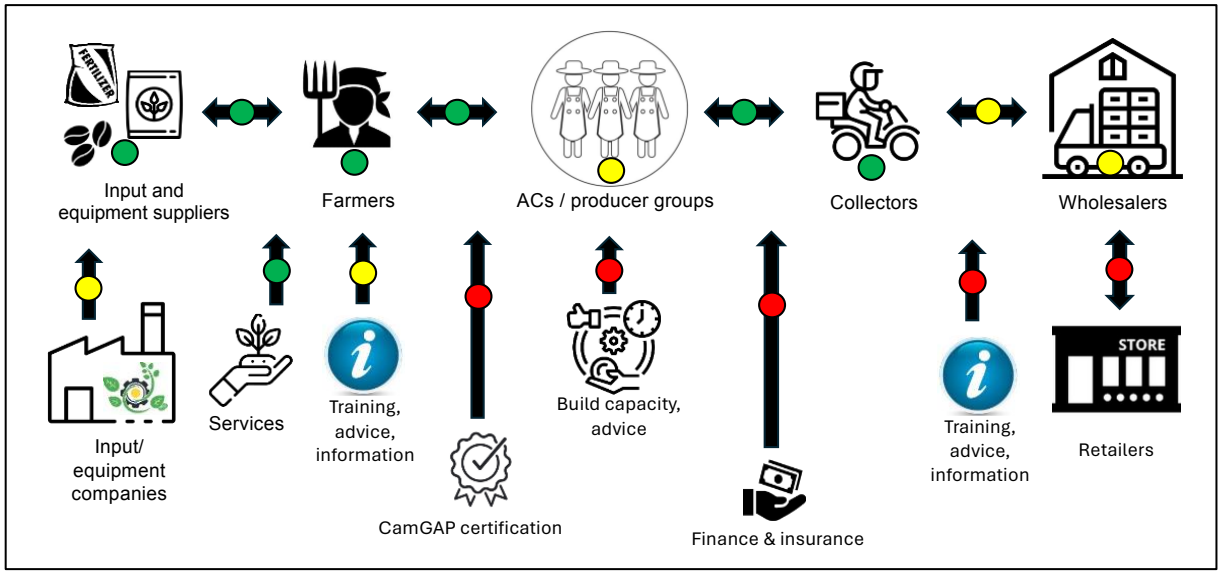
The most effective technical approaches employed by the Activities were:

- Technical training and advice on production
- Introduction of climate smart and labour-saving technologies
- Advice on food safety systems
- Developing links among local market actors
- Selected government partnerships that encouraged ownership and responsively addressed challenges
- Selected digital innovations to increase the flow of information and advice to farmers.

> *"We are now more knowledgeable about the identification of diseases, as well as the harvesting methods to reduce crop loss. The sprinkler system for irrigation has saved time that can be used for other tasks."*
>
> Vegetable farmers reached by CSmart

Portfolio Sustainability and Efficiency

The Diagram below summarises the sustainability of market functions and relationships improved by the portfolio Activities, using traffic light colours.



The transactions in local and pilot value chains among **input suppliers, farmers and collectors** facilitated by the Activities are likely to be sustainable. However, not all **farmers' organisations** supported by the Activities will be able to operate independently or sustain wholesale functions in the future. Some **wholesalers** supported by the Activities will sustain, and even expand, improvements, while others are struggling financially. Links to **input companies and equipment suppliers** are likely to continue; relationships between **retailers** and other market actors favour the retailers and may not be sustainable. Activities did not enhance the model of interaction among big companies and local value chain actors.

The sustainability of supporting functions is a concern. **Local services** are small-scale but likely to be sustainable. The market actors meant to continue **training, advice and information for farmers** all have limitations and weak links to sources of updated advice on farming practices. There are no mechanisms to sustain **services that the Activities provided directly to other market actors**, such as advice and finance. The General Directorate of Agriculture (GDA) has improved its capacity to provide CamGAP **certification services**, but currently farmers do not receive premium prices for being certified. The weak sustainability of these supporting functions threatens the continued growth and resilience of local and pilot value chains.

The Review analysed the extent to which **Activity implementation approaches** supported effectiveness and efficiency. Those that detracted from effectiveness and efficiency are:

- A lack of sustainable and scalable models for supporting functions
- Narrowly defined 'systems' that focused only on influencing local value chains
- Limited strategies to promote inclusion
- Partnerships with government that did not encourage ownership, with one exception
- Results frameworks that did not support effective and adaptive management
- Insufficient adaptation in response to reviews.

The implementation approaches that contributed to effectiveness and efficiency were:

- Strong technical inputs that built credibility and encouraged behaviour changes
- Responsive partnerships with market actors that addressed their challenges
- The testing of innovations to improve local and pilot value chains
- Adaptations to specific challenges, such as the COVID-19 pandemic, and working in remote locations
- Passionate implementing teams who inspired stakeholders' involvement and built trust with public and private market actors.

The Review also analysed the extent to which **MFAT management approaches** detracted from, or contributed to, effectiveness and efficiency. Those that detracted are addressed in the recommendations. Those that contributed follow.

- MFAT's flexibility supported partners' adaptive management.
- MFAT's approachability built rapport and supported problem solving.
- Regular communication ensured smooth management of the portfolio.
- MFAT's willingness to support innovation enabled Activities to test promising ideas.
- Long-term thinking in MFAT opened opportunities for programming that is essential but can take time, and which other donors may not be willing to fund.

With relatively modest resources, the portfolio has clearly resulted in important benefits for farmers and other market actors in local and pilot value chains. Many of these benefits are likely to continue in the short-term but are threatened over the longer-term as the context changes and practices introduced become outdated. The portfolio has missed opportunities to achieve greater scale and wider influence.

Recommendations and Programming Options

The Review team identified eight lessons and associated recommendations relevant to any future agriculture portfolio in Cambodia. They are summarised in the Table below.

Lesson	Recommendation
The portfolio's lack of coherence and low profile limited its systemic influence.	Develop and publicise a country strategy to guide the portfolio design and management.
The portfolio is inefficient, reducing the results from resources expended.	Strategically concentrate available resources on fewer Activities, with a focus that is either geographic or on specific market functions.
Limited use of market systems development (MSD) principles constrained scale and sustainability.	Integrate MSD principles into the design and implementation of the portfolio, using relevant lessons from recent MSD experience.
The misalignment of roles with core competencies reduced effectiveness.	Outline core competencies required in the country strategy and use this to guide the choice of implementing partners and capacity building for them.
Insufficient technical oversight reduced effectiveness.	Provide regular technical support and supervision to the Activities; build missing competencies early in the Activity implementation.

Lesson	Recommendation
The focus on climate change adaptation and food safety is relevant and effective.	Continue the portfolio focus on climate change adaptation and food safety.
The portfolio had modest effects on inclusion due to a limited strategy.	Develop a more targeted approach to increase inclusion sustainably, informed by robust analysis.
MERL has not supported effective portfolio and Activity management.	Redesign MERL to encourage management focused on maximising sustainable results from the portfolio.

The Review considered in which agriculture subsectors MFAT should work in the future. While both horticulture and aquaculture are promising, the Review team recommends that MFAT continues to focus on horticulture. Most other development partners working in agriculture have pivoted to export crops leaving relatively limited support for value chains serving domestic markets. Continuing to work in horticulture would allow MFAT to build on the progress, relationships and learning gained over the last 20 years.

The Review team recommends that MFAT's future portfolio focuses either on inclusion or on growth. Options are presented below.

A future programme focused on **inclusion** could enable remote and marginalised people to effectively engage with horticultural markets as farmers or labourers. In this option, MFAT would manage a single Activity in one or two provinces that works vertically across value chains and supporting functions, while bridging local and national horticultural systems. The Activity could build on current approaches with an emphasis on working with Cambodian market actors to reach marginalised farmers and labourers sustainably.

A future programme focused on **growth** could enhance the competitiveness of Cambodian horticulture by building selected, essential supporting functions and technical capacities in the horticulture system. This option would be managed through delegated cooperation with one of the development partners supporting a large horticulture programme in Cambodia. MFAT's support would fill gaps in its partner agency's strategy, ideally taking advantage of New Zealand expertise.

Within either of these options, MFAT could integrate attention to **digital innovation** and business models for agri-tech solutions in horticulture. Based on the experience of neighbouring countries and early efforts in Cambodia, digital innovation has considerable potential to support both inclusion and growth in agriculture.

As an independent option, MFAT could improve **Cambodia's capacity in research and development** (R&D), particularly relating to climate change adaptation, through an institutional partnership between an NZ institution and one or several Cambodian institutions.

1 Background

The New Zealand Ministry of Foreign Affairs and Trade (MFAT) has invested nearly NZD24 million in its current agriculture Activities in Cambodia. Most of the investment is programmed through three key Activities in horticulture, all of which are due to close before March 2025. These coordinated closures presented an opportunity to review the achievements of recent years and to take stock of the opportunities for future investments in agriculture in Cambodia with the aim of maximising programming effectiveness. Thus, MFAT contracted the Mazi Group to conduct a Review of the agriculture portfolio from February through May, 2024.

1.1 MFAT's Agriculture Portfolio in Cambodia

MFAT's agriculture portfolio in Cambodia consists of three main Activities and several smaller investments. The main and Tier 2 Activities covered by the Review are outlined in Table 1.

Table 1: Activities covered by the Review

Activity Name	Abbreviation	Implementer	Timeframe	Budget (NZD)
Main Activities				
Cambodia Quality Horticulture Initiative	CQHI	Plant and Food Research (PFR)	January 2017 – April 2025	9.8m
Cambodia Climate Smart Commercial Horticulture	CSmart	International Development Enterprises (iDE)	October 2019 - September 2024	8.5m
Cambodia Systems Approach to Transformative Economic Empowerment and Resilience	STEER	Save the Children International (SCI)	May 2019 – April 2024	5.6m
Tier 2 Activities				
Sustainable Produce to Market Value Chain Enhancement Project	Pro-Market	Adventist Development and Relief Agency (ADRA)	January 2019 – December 2023	3m
He Oranga Taurikura (A Thriving Life)	-	Catholic Agency for Justice, Peace and Development (Caritas)	2021-2026	1.6m
Promoting Safe Food for Everyone	PROSAFE	The Mekong Institute	June 2018 – October 2023	5.2 m
Angkor Water Resilience	-	Live and Learn	June 2023 – November 2028	14.3m

Brief descriptions of the three main Activities in the Cambodia Agriculture portfolio are provided below.

CQHI focuses on increasing safety in horticulture production and post-harvest practices, particularly improved pest management and produce handling. The Activity has connected wholesalers to farmers and retail markets and has also supported the General Directorate of Agriculture (GDA) to operationalise its local certification standard called CamGAP.

CSmart is applying a market systems approach to improve smallholders' adoption of climate-smart and sound pest and disease management and profit-enhancing horticultural practices and inputs. The Activity has engaged with a range of local actors including input suppliers, collectors, and agricultural cooperatives (ACs) as well as Provincial Departments of Agriculture Forestry and Fisheries (PDAFFs) in target locations.

STEER aimed to improve the economic empowerment, household wellbeing and resilience of target communities in Koh Kong through a market-based approach. The focus crop sectors of the Activity were banana, cashew nuts and vegetables. The Activity engaged with local value chain actors as well as with provincial government departments, particularly the Koh Kong PDAFF.

1.2 Review Purpose and Scope

1.2.1 Purpose and Objectives

The Review's broad objectives are shown in the box. MFAT will use its outcomes to understand the trajectory of New Zealand's official development assistance (ODA) to support agriculture in Cambodia, and its contribution to MFAT's development objectives there. This will include understanding the key drivers behind areas of success or shortcomings. The Review will also be used to evaluate the effectiveness and sustainability of the Activities, particularly focusing on the ways in which MFAT has been working with smallholder farmers in Cambodia. Finally, the Review will be used to identify opportunities for shared learning about how MFAT and its implementing partners can improve the impacts, sustainability and inclusiveness of future programming in this sector.

Review Objectives

Objective 1: Assess to what extent the Cambodia Agriculture portfolio programme is fit-for-purpose *(Relevance, Coherence)*

Objective 2: Identify to what extent the Cambodia Agriculture portfolio programme Activities are making a difference *(Effectiveness)*

Objective 3: Assess the value of the Cambodia Agriculture portfolio programme Activities delivery model *(Efficiency, Sustainability)*

Objective 4: Identify the key learnings to increase its positive impact in the future *(Lessons learned for improvement)*

1.2.2 Scope

The Review focused on the current contracted phases of the three main Activities in MFAT's current portfolio. It evaluated these Activities with respect to all four of the Review objectives. Previous phases of these Activities or support for these organisations working in Cambodian agriculture were considered but not reviewed. The Review considered the Tier 2 Activities only in relation to the relevance and coherence of the portfolio (Objective 1), as well as lessons relevant for future programming (Objective 4).

The geographic scope of the Review covered key areas where the three main Activities are operating - in the central, north-west and south-west regions of Cambodia - while also taking into account the markets for agricultural crops targeted by the Activities in these regions. For the contextual analysis and lessons learned for improvement, the Review broadened its focus to the whole of Cambodia, reflecting the importance of approaching investments in agricultural systems at the national level.

Within the agriculture sector, the Review focused on horticulture as this is the primary subsector in which all three main Activities have been working. To help to inform future programming, the Review team also sought the opinions of key informants about the opportunities and trends in other crops and aquaculture, as well as integrated food systems, particularly in relation to food security, climate change adaptation and the potential to reach vulnerable households.

1.3 Review Design

The Review was conducted in two phases. Phase 1 (Planning) started in early January 2024 and continued until mid-February with the finalisation of the Review Plan. The planning phase included a review of public literature (see Appendix B for a literature review summary of Cambodian Agriculture) as well as documents from the Cambodia Agriculture portfolio's main Activities and Tier 2 Activities. Appendix H provides a list of documents reviewed. The Review team engaged with the MFAT Review Steering Group, MFAT staff in Wellington and the Bangkok post, and managers of the implementing partners of the three main Activities. These exchanges enabled the team to gain deeper insights into the objectives and utility of the Review, and also helped with scheduling and planning for the logistics of the remote and field research for the Review.

Phase 2 (Implementation) of the Review started with developing question guides based on the Review questions, and aligning them with the list of key stakeholder categories for interviews. Information collection occurred from mid-February through March 2024. The Review team held discussions with MFAT technical and managerial staff, and conducted workshops with the implementing partner teams for the three main Activities. These provided valuable insights and also supported the preparation for the field research. For each of the main Activities, the Review team conducted interviews and focus group discussions with key stakeholders, including market actors and farmers.

Appendix A contains the Review Plan, which provides comprehensive insights into the Review design. It includes: the principles guiding the assessment; the overarching research questions; the methodology used; the specific information gathered from various stakeholders; the sampling methods employed; and an explanation of how the information was analysed by the Review team across both phases. Appendix G presents the schedule of the interviews conducted for the Review. Appendix H provides a list of primary and secondary sources for the Review.

2 Portfolio Relevance and Coherence

This section addresses Objective 1: Assess to what extent the Cambodia Agriculture portfolio programme is fit-for-purpose. It covers the following Review questions:

- To what extent is the MFAT Cambodia Agriculture investment portfolio aligned with key trends in the real economy of the Cambodian agriculture sector?
    - What are key features of Cambodia's agriculture sector currently, particularly within the private sector, and what are key trends in regard to the maturation process of the agricultural market system?
    - What are key donor trends in terms of investment in Cambodian agricultural markets?
    - What are the main types of support, services and delivery models provided by NGOs targeting Cambodia's agriculture sector?
- To what extent are the outputs of Cambodia Agriculture portfolio programme Activities aligned with Cambodia's government priorities and the ASEAN Four-Year Plan?

2.1 Trends in Agriculture in Cambodia

Cambodia's strong growth over the last two decades has fuelled urbanisation, a rising middle class and increasing demand for horticultural products. Revenues from vegetables in Cambodia increased 6-8% per year from 2019-2023, rising from USD560 million in 2018 to USD778 million in 2023.[1] While the COVID 19 pandemic was damaging to many economic sectors, it actually boosted domestic horticulture. Cambodian consumers prefer local produce as it is perceived to have been subjected to fewer chemicals and is, therefore, 'safer' than imported produce. This preference was magnified during the pandemic due to the emphasis on health and hygiene. It also became harder to import due to the border restrictions imposed during the pandemic, reducing competition from imported produce. While initially challenging, the temporary closure of wet markets triggered growth in retail alternatives such as neighbourhood mini-marts, and the emergence of new marketing models such as online order and delivery. Thus, Cambodian farmers producing horticultural products of sufficient quality to sell have seen rising incomes, particularly over the last five years.

Horticulture farmers have increasingly adopted a market mindset, cooperating to meet market demand rather than producing first and then looking for markets when crops are harvested. Horticulture farmers are shifting to hybrid and newer varieties of fruits and vegetables, adopting good agricultural practices and using new technologies such as net houses, rain shelters and drip irrigation as their finances allow. These changes not only increase productivity, improve safety and

[1] Statista (2024) Vegetables – Cambodia.

allow farmers to grow marketable produce for a greater portion of the year, but also, to some extent, mitigate increasingly volatile weather.

Development projects have been an important contributor in these shifts. For example, the Japan International Cooperation Agency (JICA) built the capacity of agriculture cooperatives, such as the Svay Rieng Agro-Product Cooperative (SAC), as well as supported infrastructure development and market linkages with wholesaling and input businesses. Various projects of the International Fund for Agricultural Development (IFAD), World Vision, Caritas, and others contributed to building capacity and linking smallholder farmers to markets in horticulture. At the same time, projects like HARVEST II worked across value chains and supporting functions to build the competitiveness of the sector. The RGC's initiatives (with support from development partners) also contributed to the positive shift. A number of development projects formed multi-stakeholder platforms – which include farmers, collectors, wholesalers and input suppliers – for better stakeholder coordination to meet market demand in target provinces. Public-private partnerships were forged where PDAFFs and private sector actors have coordinated to train farmers and meet quality requirements. PDAFFs also often facilitate the negotiations of contract terms and sign as a witness in the contractual documents between private firms and farmers.

Despite the positive shifts, Cambodian farmers still face higher costs of production than their counterparts in neighbouring countries such as Vietnam and Thailand. The main reasons are the high cost of imported agro-inputs and the lack of government subsidies in agriculture (which are available in neighbouring countries).

While there has been an increase in the proportion of horticultural produce consumed in Cambodia that is locally grown, there has also been an absolute increase in imports. Imports increase when retailers aim to fill gaps in year-round supply and in particular crops. Wet market retailers often favour imports when they are cheaper than local produce and supermarkets may favour the better packaging, and consistent volumes and deliveries that imports often provide. Post pandemic, some wealthier consumers are returning to supermarkets, rather than mini marts, where the requirements for quality control, food safety, volumes, on-time delivery, appropriate packaging and branding are stringent, and the payment terms typically range from 15-60 days. As a result, some smaller shops are closing. However, delivery services continue to thrive to individuals as well as to restaurants and hotels.

During and since the COVID 19 pandemic, Cambodia's growth has slowed. Many consumers are now going back to re-opened wet markets, and price is playing a stronger role in their purchasing decisions. This is putting pressure on domestic farmers to compete with inexpensive imports. Nevertheless, some domestic wholesalers of 'safe' produce are experimenting with sales of their low grade produce in wet markets to try to entice more cost-conscious consumers. The increasing pressure is driving a consolidation in the wholesale function, particularly among more 'socially conscious' wholesalers who provide technical support and

quick payment to their farmer suppliers. Those wholesalers who are not able to scale-up to increase efficiency and turnover are facing financial difficulties. Those who are scaling-up are typically diversifying into an increasingly wide range of produce and other agricultural products, and are serving a range of clients including supermarkets, mini marts, restaurants and hotels.

Key supporting functions for horticulture continue to be underdeveloped and/or expensive in Cambodia. These include logistics, storage, cold chain transport, laboratory services, packaging and labelling, and certification. There is also a shortage of skills in a variety of essential areas such as engineering for agricultural equipment and systems, international marketing, production and management systems and climate adaptation research. The cost of power and regulatory burdens also contribute substantially to making Cambodia less competitive than its neighbours in the horticulture sector. While these constraints have a larger impact on export crops, they also impact produce destined for domestic markets.

There is concern among all market actors about the intensifying effects of climate change on horticulture, including variable weather, natural disasters, a lack of water, and increasing pest outbreaks. New technologies that help farmers to adapt, particularly net houses, remain out of reach financially for many horticulture producers without subsidies from development projects. In addition, horticulture farmers want and need regular and updated technical training and advice to diversify into new crops that are in demand, and to manage the effects of climate change. Some farmers have access to this support through development projects but there are few, if any, models of sustainable provision at adequate scale and quality from the public or private sectors. The PDAFFs provide some essential support, and are generally trusted by farmers, but their contribution is not sufficient. The Ministry of Agriculture, Forestry and Fisheries (MAFF) is expanding the public provision of extension services. Both government and development projects are experimenting with digital provision of information, but they are at an early stage. Market actors voice concern that improvements are not keeping pace with the intensification of climate change effects. Experts note that Cambodia's research and development for climate change adaptation is inadequate and behind that of neighbouring countries.

2.2 Donor and NGO Trends in Cambodian Agriculture

According to Cambodia's ODA database, a total of 22 development partners (DPs) are funding 146 agriculture projects in Cambodia.[2] Those partners consist of five international organisations (the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations Industrial Development Organization (UNIDO), the International Atomic Energy Agency (IAEA), and the World Food Programme (WFP)), two banks (the Asian Development Bank (ADB) and the World Bank) and 14 countries

[2] Cambodian Development Cooperation Board – Council for the Development of Cambodia (2024) The Cambodian ODA Database.

including New Zealand plus the European Union. The projects are categorised into 14 sub-sectors as shown in Table 2.

Table 2: On-going agriculture projects in Cambodia

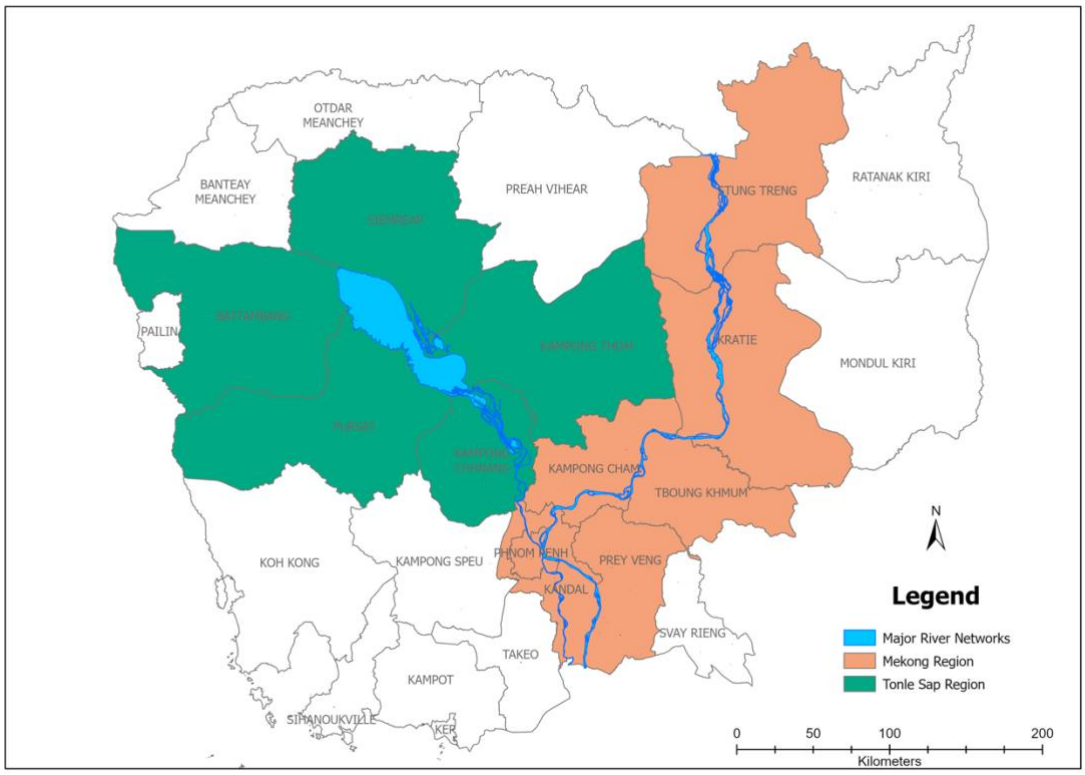
No.	Agriculture Sub-sectors	Number of Projects	Number of DPs	Leading DP
1	Agriculture water and irrigation	25	8	ADB
2	Agriculture sector policy and management	19	7	ADB
3	Fisheries	18	8	EU
4	Livestock and veterinary	17	4	FAO
5	Education and training	14	7	EU
6	Food security and nutrition	11	8	Germany, USA
7	Agro-industry	9	7	Australia
8	Food crops	7	5	NZ
9	Extension services	4	4	World Bank, IFAD
10	Agriculture inputs	4	3	World Bank
11	Forestry	4	3	Switzerland
12	Agriculture financial services	2	2	World Bank
13	Cash and export crops	2	2	France
14	Others	10	7	Australia

Source: Cambodia ODA database (accessed 22/02/2024)

The development partners are focusing primarily on rice and other high-value crops, water and irrigation, agriculture sector policy and management. Some also focus on fisheries and livestock.

In terms of socio-geographic zones, many projects are centred on the Tonle Sap and Mekong Plain (see Figure 1). Newly launched projects tend to focus on climate change technologies and adaptations, and on the export of agricultural crops.

Figure 1: Provinces with a concentration of development projects



The approaches of the development partners can be classified into two categories. First, most NGOs are building capacities and linkages at the local level in target locations. For instance, projects implemented by HEKS (the aid organisation of the Protestant churches of Switzerland), Caritas, and others that are funded by the Swiss Agency for Development and Cooperation (SDC), are working at the commune level to develop the capacities of value chain actors in terms of access to inputs (particularly irrigation), extension and markets. Second, larger projects such as the Cambodia Australia Partnership for Resilient Economic Development (CAPRED) funded by DFAT, and HARVEST II, funded by USAID, are working on system level changes at the national level. These include building export capacity and supporting the development of agro-processing, agricultural financing, R&D and quality testing initiatives. Projects under the FAO are focusing on cross-cutting themes relevant to agriculture that include digitisation, food system governance, the capacity building of agricultural cooperatives, certification and climate finance opportunities.

2.3 Portfolio Alignment and Relevance

MFAT's Agriculture portfolio in Cambodia is aligned with the country's priorities and key strategies for agriculture.

MAFF set out the National Strategic Development Plan (2019-2023),[3] upon which the Agricultural Sector Strategic Development Plan[4] was developed. Key priorities of this strategy include the promotion of small and medium enterprises and entrepreneurship, the promotion of sub-sectors within agriculture, ensuring environmental sustainability, pre-emptive responses to climate change, and improving digital connectivity. All Activities within MFAT's Cambodia Agriculture portfolio align with these priorities.

The National Agricultural Development Policy (NADP) 2022-2030 outlines four main focus areas: (1) Modernising and commercialising agricultural value chains; (2) Public and private investments in the agriculture sector; (3) Growing sustainably and increasing resilience to climate change; and (4) Institutional reforms and cross-cutting issues.[5] MFAT's portfolio in Cambodia strongly contributes to all of these areas of focus.

The portfolio is in line with the key priorities of the Pentagonal Strategy of Cambodia,[6] contributing to economic growth and poverty reduction, as well as strengthening the capacities of public institutions.

Cambodia imports high amounts of food for local consumption. Among the aims set out in the National Research Agenda 2025 is that 70% of food consumption will be locally produced by 2030.[7] All the Activities in the MFAT Cambodia Agriculture portfolio are focused on fostering growth in local production, and on enhancing the market access of horticulture products, thus contributing to the country's agenda for import substitution.

The key objectives of the Cambodia Climate Change Strategic Plan 2014-2023 include promoting technologies and practices designed to enhance climate resilience in food production.[8] There is also a focus on agricultural diversification, improving capacities/knowledge and awareness related to climate smart responses, and reducing the vulnerability of sectors and regions. MFAT's Agriculture portfolio has contributed to these objectives. For instance, CSmart has increased the adoption of net houses and rain sheds in the target locations, and STEER has promoted practices that have increased the resilience and productivity of vulnerable communities in Koh Kong.

From interviews with government agencies and other stakeholders, it was found that MAFF is currently working towards three key priorities.[9] These are: (1)

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[3] RGC (2019) National Strategic Development Plan 2019-2023.
[4] MAFF (2019) Agricultural Sector Strategic Development Plan.
[5] RGC (2022) National Agricultural Development Policy 2022-2030.
[6] RGC (2023) Pentagonal Strategy – Phase I.
[7] RGC (2023) National Research Agenda 2025.
[8] RGC National Climate Change Committee (2013) Cambodia Climate Change Strategic Plan 2014-2023.
[9] MAFF (2023) 5th and 6th Priority Policy Program of the 7th Mandate Government.

increasing agricultural productivity, market access, and price stabilisation through financing programmes; (2) deployment of commune agriculture officers; and (3) the development of modern ACs.

MFAT's agriculture portfolio in Cambodia aligns with the goals of its ASEAN Four-Year Plan,[10] supporting an increase in climate and economic resilience and inclusive development. All of MFAT Activities in Cambodia have contributed to increasing smallholder farmers' (women's and men's) capacity to adapt to climate change, and have also enhanced the capacity of farmers to engage in the production of new and high-value crops for better profits.

> *"Before the project came, the local production of vegetables did not meet local demand – in the past, 20 tons per day were imported while now this has been reduced to 10 tons per day. Farmers have learned how to adapt to climate change, listen to weather forecasts and have moved to safer production."*
>
> PDAFF Koh Kong, a partner of STEER

Against the backdrop of trends in the horticulture sector, MFAT's portfolio of agriculture Activities in Cambodia, including Main and Tier 2 Activities, has been very relevant (see Appendix F for a summary of the Tier 2 Activities). The focus on horticultural production, primarily for domestic markets, has supported the government's priority to increase the proportion of domestic consumption that is produced locally. The Activities' focus on building the capacity of farmers to enable the 'safe' production of crops, has not only addressed health issues for producers and consumers, but has also allowed farmers to tap into growing consumer demand. The emphasis on climate smart production has been essential to enable farmers to manage, to some degree, climate change impacts. For instance, farmers reached by CSmart have benefited from drip irrigation as it has not only saved costs and time, but has also improved productivity. Activities, such as Angkor Water Resilience, that include water management, are also addressing a problem exacerbated by climate change.

Finally, the input and market linkages facilitated by the Activities have enabled farmers to tap into growing local, provincial and Phnom Penh markets. The Review findings show that input sellers, supported by the Activities, have increased their portfolio of products and have also improved connections with their farmer clients. In addition, collectors in the target locations have increased aggregation of quality products from farmers, and are also benefiting from better connections with provincial and Phnom Penh buyers. All Activities have helped farmers and local actors to diversify and become more commercial in their operations.

[10] MFAT (2021) ASEAN Four Year Plan.

2.4 Portfolio Coherence

MFAT's Cambodia Agriculture portfolio Activities were designed to respond to needs in particular locations and/or among specific market actors, typically identified by MFAT partners. While Activities are all mostly focused on horticulture, the portfolio was not designed with broader aims for coherence.

In some cases, opportunities for Activities relied on long-standing relations with implementing partners such as iDE and PFR. For instance, MFAT has been supporting projects implemented by iDE for 20 years. iDE projects (in phases) have continued to work with the same market actors. For example, the Cambodia Agribusiness Development Facility (CADF) started working with the Melon Association in 2011, and iDE still continues to support that Association through the CSmart Activity.

The portfolio is not guided by a common vision and strategy that ensures that each of the Activities contributes to a broader change in the horticulture system with complementary and reinforcing interventions. While there was some collaboration among the main Activities, opportunities for greater cross-learning and adaptive management across the portfolio have been missed. For example, there were missed opportunities where iDE could have contributed to CQHI's intervention on net house design, or iDE could have learned from STEER on government ownership strategies. MFAT could have encouraged more exchanges among the Activities. There are good examples from other donors, such as SDC that invests in platforms for cross-learning among its projects. The platforms encourage implementing partners to engage with each other for synergy, and to have a coherent approach towards implementation.

3 Portfolio Effectiveness

This section addresses Objective 2: Identify to what extent the Cambodia Agriculture portfolio programme Activities are delivering a difference. It covers the following Review questions:

- To what extent have the Cambodia Agriculture portfolio programme Activities delivered their outputs and progressed towards their intended outcomes?
- Which approaches have been the most effective?
- What have been the key enablers and barriers for the Cambodia Agriculture portfolio programme achievements?
- What, if any, other results have programme stakeholders noted (beyond the stated Activity outcomes) from MFAT investments in Cambodian agriculture?

3.1 Progress towards Outputs and Outcomes

Table 3 presents an overview of portfolio performance, using traffic light colours to summarise the progress towards each Activity's expected outputs and outcomes. Appendices C, D and E have further elaborated the performance of each of the main Activities.

Table 3: Overview of the portfolio Activities' progress

	CQHI	CSmart	STEER
Long-term outcomes			
Medium-term outcomes			
Short-term outcomes			
Outputs			

CQHI: The interventions related to improving the capacity of production systems have generally been strong in CQHI. Review findings show that farmers have been improving their practices leading to greater productivity, resilience and incomes. However, there are some gaps in the Activity's extension-related outputs as some farmers have faced barriers to adopting the improvements introduced. This is due to missing functions in the market system, for example a lack of soil testing services, unavailability of recommended inputs, and a lack of perceived alternatives to plastics.

The short-term outcomes were mostly achieved. Post-harvest handling and quality assurance training, advice and equipment have resulted in farmers and ACs making improvements that have contributed to food safety. Growing companies have also made substantial improvements. But at least two of the companies CQHI worked with are struggling financially, and thus are not focused on making technical

improvements. Overall, the market linkage efforts of the Activity benefited farmers, ACs and companies in transacting volumes higher than those before CQHI interventions.

Progress towards the medium-term outcomes was moderate. While the Activity's work contributed to building food safety and resilience capacity among farmers and businesses, outcomes related to increased demand were mostly driven by other factors. Some respondents thought that CQHI could have done more on demand side/awareness-raising activities at the consumer level, which would have been beneficial for the market actors in the pilot supply chains.

The Activity has resulted in increased incomes for smallholder farmers in pilot supply chains as well as health benefits for farmers and consumers. The contributions to growth and employment in the horticulture sector have been modest.

CSmart: The outputs and outcomes related to on-farm productivity and production have largely been achieved. But target outputs and outcomes related to sustainable models for other market actors have been only partially realised. While local input suppliers and collectors are sustainably interacting with farmers, they continue to rely heavily on CSmart agronomists and other project staff for technical advice and market information. Commercial and more sustainable approaches to business models were not implemented, limiting the potential outreach of interventions.

The long-term outcomes of CSmart that relate to income increases have been strong. All farmers and market actors reached through the interventions benefited, and evidence shows that this has resulted in improvements in their confidence to do business, as well as better living conditions for their households. Some farmers and other market actors not directly reached by the Activity's work also benefited. However, the Activity's contribution to the growth of the sector has been modest as intervention results have been largely confined to those reached.

STEER: The Activity's outputs related to production and productivity among local value chain actors have been achieved, particularly those related to climate resilience, connecting to new markets in Koh Kong, and creating access to inputs.

In terms of the outcomes, evidence indicates mixed achievements. Input supply improved considerably, both in terms of products and advice available. Connecting input suppliers to companies outside of Koh Kong enabled them to better serve farmers. Collection and marketing improved significantly for vegetable farmers but much less for those producing cashews and bananas, as they continued to rely on existing connections. The links with new buyers from Phnom Penh did not work out for the most part, due to their requirements or late payments. The integration with the broader horticultural system outside of Koh Kong was only developed to a limited degree. While input suppliers gained useful links to input companies, these companies did not improve the way they interacted with input suppliers. While some products reached Phnom Penh markets, it was primarily through chains of traders rather than the buyers introduced by STEER. No links were developed

between Koh Kong market actors and service providers outside of Koh Kong, such as financial institutions or sources of updated information.

The inclusion of a child protection component as an outcome has resulted in benefits for children and families. During focus group discussions, farmers said that they appreciated the child rights training as it had helped to promote child health and access to school. Several emphasised that children should be allowed to speak out and express their ideas, and that there should not be any child labour or violence against children. A significant number of farmers specifically mentioned that they appreciated the positive parenting training.

The Activity achieved its long-term outcomes related to increased incomes, resilience and child well-being. Farmers reported a range of benefits as a result of involvement in the Activity. Some of these benefits included an increased ability to invest in their farms, easier decision-making as money was a less of a constraint, reduced debt, improved health and nutrition, and greater ability to send children to school. Overall, the Activity's contribution to the improved resilience of households in the target locations is evident, but it is limited to those reached directly through the interventions.

Overall: Across the Activities, interventions to enhance production were strong. Farmers used safer practices, increased productivity and improved their resilience. The Activities also strengthened local or pilot value chains. They improved capacity and built links among local market actors such as input suppliers, collectors and farmers' organisations as well as selected wholesalers. However, the sustainability of services for farmers and other market actors is a concern, and links to market actors outside of local or pilot value chains remains relatively weak. With limited exceptions, the Activities did not benefit farmers or other market actors beyond those reached directly.

3.2 Most Effective Technical Approaches

All Activities have applied multiple field strategies. The Review team's analysis showed that some of the strategies were more effective than others in achieving results. The most effective technical approaches are described below.

Technical training and advice provided by the Activities were commended by all the farmers and market actors reached. Advice and training content were reported to be thorough and helpful compared with those provided by other projects.

> *"CQHI built the capacity of our staff and farmers on soil management, CamGAP standards and post-harvest handling techniques. They also assisted us to develop an internal control system. We are continuing to use the knowledge and systems we developed based on the trainings, but also adapting our selling strategies to align with the market situation."*
>
> Wholesaler reached by CQHI

The **introduction of climate smart and labour-saving technologies** encouraged adoption of new practices and enabled farmers to address pressing challenges in production, particularly related to the effects of climate change. Farmers are facing multiple production risks related to variable weather, heat, drought, floods and pest outbreaks. Although the practices and technologies that were introduced were not sufficient to handle all the above challenges, the Activities' interventions enabled farmers to adapt to some degree, and to increase productivity and resilience.

> *"As a result of project support, we changed from planning our crop production according to seasons, to planning according to orders from collectors. We are now more knowledgeable about the identification of diseases, as well as harvesting methods to reduce crop loss. The sprinkler system for irrigation has saved time that can be used for other tasks."*
>
> Vegetable farmers reached by CSmart

The **focus on safe food production** among all the Activities was effective as it was in line with the demand from the market. The growth in demand also motivated farmers and market actors to make changes in their operations. All of this contributed to the health of end-consumers as well as to the safety and health of farmers and others involved in the sector.

The field strategies to create/strengthen **links among farmers, input suppliers and collectors** at the local level were very useful. They contributed to the growth in trust and relationships (social and commercial) among the actors within the community and nearby locations.

In terms of **relationship building with government agencies**, selected partnerships worked well. For example, STEER's work with the PDAFF in Koh Kong was effective as the latter was involved in every step of the Activity. This approach led to increased involvement and ownership from the PDAFF in STEER's activities. Also, CQHI's partnership with GDA worked well because CQHI identified the problem that CamGAP was not operational, and consequently supported the GDA with clear checklists and systems relevant to that. This built the capacity of GDA to scale-up certifications and provide concrete guidance on CamGAP to market actors.

Strengthening the **use of digital platforms** by farmers and market actors was important. Some interventions promoted the use of digital platforms such as Telegram groups. These are likely to be sustainable as they have encouraged fruitful interactions among farmers

> *"We are continuing our relationships with input retailers and collectors/buyers through Telegram groups, which are also joined by project staff. We communicate by individual calls and by sharing photos in the group to seek advice and to share experiences."*
>
> Vegetable farmers reached by STEER

and other market actors. The introduction of the *Chamkar* online application (supported by CSmart) has been effective in providing farmers and other market actors with useful information on agronomic practices, particularly pest and disease management. CQHI has been working with the GDA on interactive systems for their website. While it is too early to assess these, they show promise.

3.3 Key Enablers and Barriers

The trends in the Cambodia horticulture sector created some enabling conditions contributing to the results of the Activities in the MFAT portfolio.

The growth in demand for 'safe' produce from local sources motivated sellers to look for and strengthen supply chains from the key production locations of the country. This was enhanced by reduced imports during the COVID 19 pandemic, as well as the increased availability of seeds for new crop varieties. These further motivated horticulture sellers and farmers to shift to a more commercial mindset. For example, wholesalers in Phnom Penh were eager to source locally and this opportunity was harnessed through the Activities' market linkage. Input companies, eyeing the business opportunity for new seeds, started expanding their seed imports of high-value and climate-smart varieties from Thailand and Vietnam.

Other development projects contributed significantly to the advancement of the horticulture sector. Projects have provided direct support to farmers, improved the capacity of public agencies, and supported private sector actors in the input and output markets to strengthen their capacity to work with farmers and meet demand. This contributed to the commercial shift in the mindset of value chain actors.

For STEER, the focus on Koh Kong province, where no other development projects were working in horticulture, contributed to a greater uptake by the target value-chain actors of practices promoted by the Activity.

While the above enablers contributed to the Activities' success, there were a number of barriers faced during implementation that were beyond their control. While the COVID 19 pandemic slowed the progress of some interventions, the Activities were able to meet output targets by implementing alternative strategies. These included online training sessions, adjusting intervals on interactions in the field, and setting up remote help desks.

The continuous and changing effects of climate change are a great concern among all market actors in Cambodia. Farmers, in particular, are increasingly exposed to the risks of loss. For example, in the Sre Ambel district of Koh Kong, 70% of vegetable farmers in 2023 paused production due to the lack of a water source. Such issues impeded the extent of positive impacts on farmer income as a result of Activity interventions.

High costs of inputs and technologies (such as net houses) to mitigate the effects of climate change - with the reduced purchasing power of farmers (due to the

economic condition of the country) - has been a setback, too. For example, due to financial constraints, farmers are finding it difficult to install the net houses or rain sheds that they learned about from the lead farmers reached by CSmart.

The shifting of labour out of agriculture sectors is a barrier to the expansion of production. Some farmers mentioned that a shortage of labour was felt in some locations as people were looking for better opportunities in other sectors, particularly in those that pay higher than agriculture.

Limited government budgets for extension and infrastructure development, and also the absence of required investments in supporting functions such as access to finance, transportation, storage/cooling facilities, etc. limited farmers' and other market actors' growth in the sector.

The policies of horticulture retailers, particularly supermarkets, led to an unbalanced relationship between those and the local suppliers. This limited the access of local producers to high-end markets and urban consumers.

3.4 Results outside of Activity Theories of Change

Farmers and market actors reached by the Activities benefited from the interventions in the form of enhanced capacity, improved access and increased income. Beyond the results of Activities that relate to their respective theories of change, the Review team did not find significant results linked to the interventions. Field findings showed that some farmers copied the practices of the lead farmers, or their neighbours, who were directly reached through each Activity's interventions. Field interviews with input sellers suggested that new competitors were cropping up in the region to meet farmers' demand. However, the Activities' contribution to the crowding-in of new input suppliers could not be confirmed.

From an environmental perspective, some of the Activities' interventions promoted the use of plastic mulching and drip irrigation techniques, which use plastic products. These are not environmentally friendly in the long run. However, the Activities did promote the safe disposal of plastic mulch. It should be noted that CSmart recently conducted two assessments to determine more environmentally friendly alternatives for such practices. Findings of these studies were being analysed at the time of the Review.

4 Portfolio Sustainability and Efficiency

This section addresses Objective 3: Assess the value of the Cambodia Agriculture portfolio programme Activities delivery model. It covers the following Review questions:

- What have been some of the main challenges to efficient programme delivery and what could be done to overcome these in future?
- Do the outcomes achieved so far by Cambodia Agriculture portfolio programme Activities justify the delivery costs?
- To what extent has the Cambodia Agriculture portfolio programme built the capacity of different stakeholders (government, private sector, community) towards improved market function without on-going support?

4.1 Sustainability of Market Function Improvements

In order for improvements in a market function to be sustainable, there must be capacity, incentives and finances to support them after the Activity ends. This section analyses whether these exist for the improvements that the Activities facilitated in the horticulture market system. This section generalises across the three main Activities. For details of each Activity, see the Activity Reviews in Appendices C, D and E.

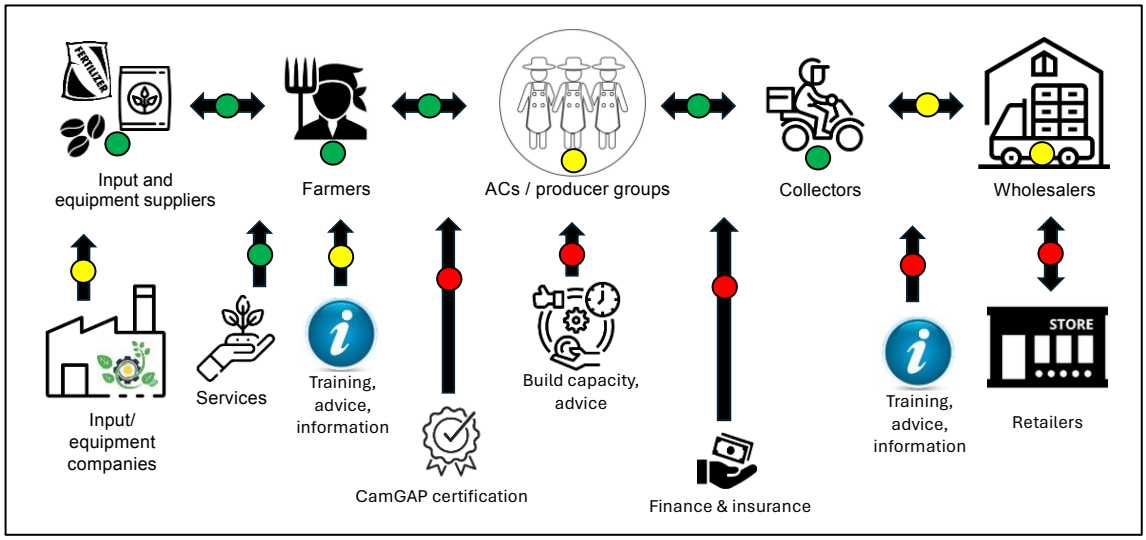
Figure 2 provides a snapshot of the likelihood of sustainability for the functions that the Activities addressed in horticulture value chains and supporting markets. It uses a traffic light system as follows:

🟢 Means that improvements in the function are likely to be sustainable.

🟡 Means that some aspects of the improvements are likely to be sustainable, but others are not, or that improvements are likely to be sustainable in some cases but not in others.

🔴 Means that there is no viable mechanism to sustain improvements in the function.

Figure 2: Sustainability of market functions and relationships improved by the portfolio Activities



4.1.1 Local and Pilot Value Chains

The transactions in local and pilot value chains among **input suppliers, farmers and collectors** facilitated by the Activities are likely to be sustainable because these market actors have the capacity, incentives and finances to continue them. The new practices introduced by the Activities help them to meet buyer demand for safe, quality produce and also to improve productivity, reduce risks, reduce costs and/or increase resilience. For example, the lead farmers trained by CSmart will continue to buy inputs from the local input suppliers and sell their produce to the collectors who were introduced to them through CSmart interventions. The input suppliers trained by STEER are likely to continue providing improved advice to local farmers.

The sustainability of improved functions performed by **agricultural cooperatives, associations and producer groups** supported by the Activities is mixed. Due to the technical and business capacity building provided by the Activities, many made improvements in coordinating member farmers' cropping and quality control, as well as jointly marketing their produce and managing the preparation and delivery of orders. Farmers generally expressed satisfaction with their organisations. However, some are not yet able to operate independently. For example, some cannot yet manage a cropping calendar to coordinate production across member farmers, nor to efficiently manage their business transactions. Furthermore, interviews with wholesalers and retailers indicated that the level of the wholesale functions performed by farmers' organisations was still not adequate in some cases, particularly for supermarkets. Nevertheless, many of the farmers' organisations are likely to continue to play a useful role in supporting farmers technically and linking them to inputs and markets.

The sustainability of **wholesalers** and their improved functioning is mixed. The consolidation in the wholesale function happening currently in major cities is

affecting some of the wholesalers supported by the Activities: their continued financial viability is in doubt. However, there are other wholesalers who are thriving and have internalised improved practices introduced primarily by CQHI. These wholesalers will not only be able to continue buying from, and supporting, farmers' organisations and collectors reached by the Activities, but are likely to extend similar support to others in the future.

The relationships between wholesalers and farmers' organisations are working well in some cases but not in others. While some were satisfied with their relationships, others expressed dissatisfaction, stating that the other party had not lived up to their obligations. For example, several farmers' organisations mentioned that wholesalers were late in paying them. In Cambodia, the PDAFFs often play a role in mediating these types of issues. Not all the Activities reinforced this useful role.

4.1.2 Links with Input Companies and Retailers

The Activities linked input suppliers to **input companies and some equipment companies,** such as those providing solar drip irrigation systems. These links are likely to continue as they benefit both parties. CSmart also involved input companies in their farmer training courses. This benefited the companies, who introduced their products to farmers, and the farmers, who learned about new products. While the companies will continue to sell their products in these locations, they have not adopted any particular strategy to strengthen their relationships with the local input suppliers or farmers in the target locations. Evidence shows that input companies typically rely on NGOs as a conduit to farmers – to build trust among them. The Activities did not significantly influence the nature of relationships between input companies and input suppliers, nor build the capacity of input companies to more effectively serve smallholder farmers or reach disadvantaged populations. This reduced the potential for these links to function without further support and was also a missed opportunity for scale and indirect impacts.

The Activities also linked wholesalers and farmers' organisations with **retailers**, primarily supermarkets. As mentioned in the discussion of barriers, supermarkets have very stringent requirements and unbalanced relationships with wholesalers. Some wholesalers were able to meet these requirements; others were not. Several supermarkets expressed some dissatisfaction with the performance of farmers' organisations, in particular, in terms of volume, on-time delivery, produce freshness (typically due to a lack of cold-chain transport) and year-round supply. The Activities did not influence the supermarkets' buying models or increase their investment in their local supply chains. Thus, the sustainability of the links with retailers is weak.

4.1.3 Supporting Functions

The sustainability of supporting functions is mixed. The most effective services that the Activities provided were **training, advice and information**. While the practices introduced are valuable, farmers and other market actors will need continued access to training, advice and information to update their practices as

their businesses and the context evolve. For example, climate change effects will intensify, market opportunities will change and farmers and other businesses will want to diversify into new crops. Without sustained access to training, advice and information, the continued success and resilience of farmers and other market actors is threatened.

The Activities did build the capacity of input suppliers, farmers' organisations, lead farmers, collectors, wholesalers and PDAFFs to provide advice and information to farmers to varying degrees, and also worked on digital approaches to information provision. However, for the most part, Activities continued to provide these services directly to farmers, missing an opportunity to test sustainability. Tellingly, all farmers interviewed across the Activities prioritised the implementing partner staff as a primary or key source of technical and market information, typically before they mentioned any other market actors.

In many cases, the market actors with whom the Activities worked will continue to provide some advice and information to farmers. But none of these is likely to provide sustained training. In addition, there are limitations to the advice and information that these sources are able, or motivated, to provide.

Some *lead farmers* will continue supporting other farmers, while others are unlikely to. Some lead farmers appreciate the recognition they get from providing support to other farmers and acknowledge that, when farmers cooperate, they all benefit from improved safety and quality. Other lead farmers do not see a competitive incentive to support other farmers, or they feel that their support is not valued. Thus, while the Activities have built the technical capacity of lead farmers to support others, incentives are mixed.

Input suppliers are likely to continue to provide advice to farmers because it is in their interests to do so. The Activities have effectively built the technical capacity of input suppliers to provide advice, and have supported them to integrate advice more effectively into their business models.

Collectors will continue to provide market information to farmers because they have an incentive to get marketable produce. However, most local collectors do not have a broad view of markets so it is likely that they will not always be able to spot and communicate new market opportunities to farmers.

The successful *wholesalers* are likely to continue to provide advice and information to farmers' organisations and farmers. For example, CQHI effectively built the capacity of the agronomists that wholesalers have on staff, and wholesalers have an incentive to provide advice to farmers so that they get produce that meets their buyers' demands. However, it must be noted that not all successful wholesalers provide production advice. At least one successful wholesaler, supported by CQHI, provides only post-harvest advice, due to the requirement to keep costs low to be competitive. Struggling wholesalers do not have the financial capacity to provide much advice to farmers or to sustain sufficient technical staff on their payroll.

Agricultural cooperatives and other farmers' organisations do not have agronomists on staff. Thus, while they provide some advice and information to farmers, their capacity and time to provide in-depth advice is limited.

The *PDAFFs* are enthusiastic about providing training, advice and information to farmers and it is within their core mandate to do so. They also have competent agronomists on staff. The Activities have built the capacity of technical staff within PDAFFs. However, the PDAFFs have limited budgets and generally rely on donor-funded projects to support them to provide services to farmers. MAFF has recently embarked on a plan to hire 1,600 Commune Agricultural Officers, which may improve the situation over the longer term, although their links to the PDAFFs have not yet been clarified.

The *social media groups* established by the Activities are likely to continue to be a source of advice and information: PDAFFs, farmers and other market actors share their knowledge, as do Activity staff who have offered to provide continued assistance even when the Activity ends. These groups are free and participants find them useful. CSmart developed a *digital app* to provide searchable information on good agricultural practices, particularly relating to pest and disease management, for farmers. While the information is valuable, there is not yet a sustainable model for the maintenance and updating of the app. The sustainability of CQHI's improvements of the *GDA website* is not yet clear.

A significant challenge is that these market actors cannot get updated advice or information that they can pass on to farmers. With limited links between these market actors and sources for updated information, the usefulness of the knowledge they provide to farmers will quickly wane. In addition, they cannot get training, advice and information to support the development of their own businesses or organisations. Input suppliers will get some updated training and information from input companies but this is unlikely to be sufficient, particularly without improved relationships.

> *"Farmers and [my company] need more training. Farmers want to specifically learn about new crops and how to grow them. We try our best to teach them but more is needed."*
>
> Wholesaler reached by CQHI

Another important service that the Activities provided was **building the capacity of farmers' organisations and advising them**. The PDAFFs typically provide some limited support to farmers' organisations, but, for the most part, these services will cease when the Activities conclude.

The **new services for farmers** that STEER and CSmart supported, including the provision of cocopeat and crop spraying services, while small-scale, are likely to continue. The service providers gained the technical and managerial capacity to run their businesses and have a financial interest in sustaining them.

The Activities provided **financing** to farmers' organisations, collectors, input suppliers, service providers and wholesalers in the form of grants, and also gave them equipment. They did not link them to sustainable sources of financial services or build their capacities to access financing. They also did not work with equipment suppliers to lower the costs, or provide financing for equipment that is needed, such as net houses and apparatus for vegetable washing. Interviews with farmers showed that while farmers are knowledgeable about the benefits of these types of equipment, most did not have the financial capacity to buy them. The financial capacity of other market actors to maintain existing, and purchase new, equipment was mixed. The lack of sustainability of these services is a significant gap.

The sustainability of **certification** services improved by CQHI are in doubt. While the technical capacity building that CQHI provided was very effective, the business model for CamGAP certification is currently weak. Certification is not yet financially rewarding for farmers, as most get a premium for 'safe' vegetables, but no extra premium for being certified. CQHI or the GDA paid for farmers to get certified under the Activity. The farmers say they will not get recertified when their certification expires because it is too expensive, and they do not get a higher price for their certified vegetables. Wholesalers are also not enthusiastic about paying the full cost for farmers to get certified. Unless demand for certification in Cambodia is built, it is unlikely to continue.

The Activities have caught the attention of some other NGO projects, particularly for the quality of the technical training and the advice provided to farmers. This has led to the implementing partners collaborating with other NGOs. For example, CQHI provides support to a World Vision project in horticultural production. However, for the most part, the collaboration between MFAT Activities and other NGO projects took the form of the MFAT implementing partners training farmers, lead farmers and farmers' organisations participating in the other NGO projects. Building the capacity, or influencing the implementing approaches, of the other projects took place only to a limited extent.

In summary, the likelihood that improvements are sustainable is strong within local and pilot value chains, moderate with links to input companies and retailers, and relatively weak within support markets. The weak sustainability of support markets threatens the continued expansion and resilience of the local and pilot value chains.

4.2 Progress of System Changes

The Activities focused on local value chains or pilot supply chains. Within these, there were some system changes. For example, farmers involved in all three Activities mentioned that some other farmers had copied their improved practices. In addition, the collaboration among farmers and local market actors continued to develop without the support of the Activities in some cases.

The Activities also linked local value chains to regional or urban markets and input companies to varying degrees, but did not influence business models among wider value chain actors like input companies or retailers. This limited the potential for

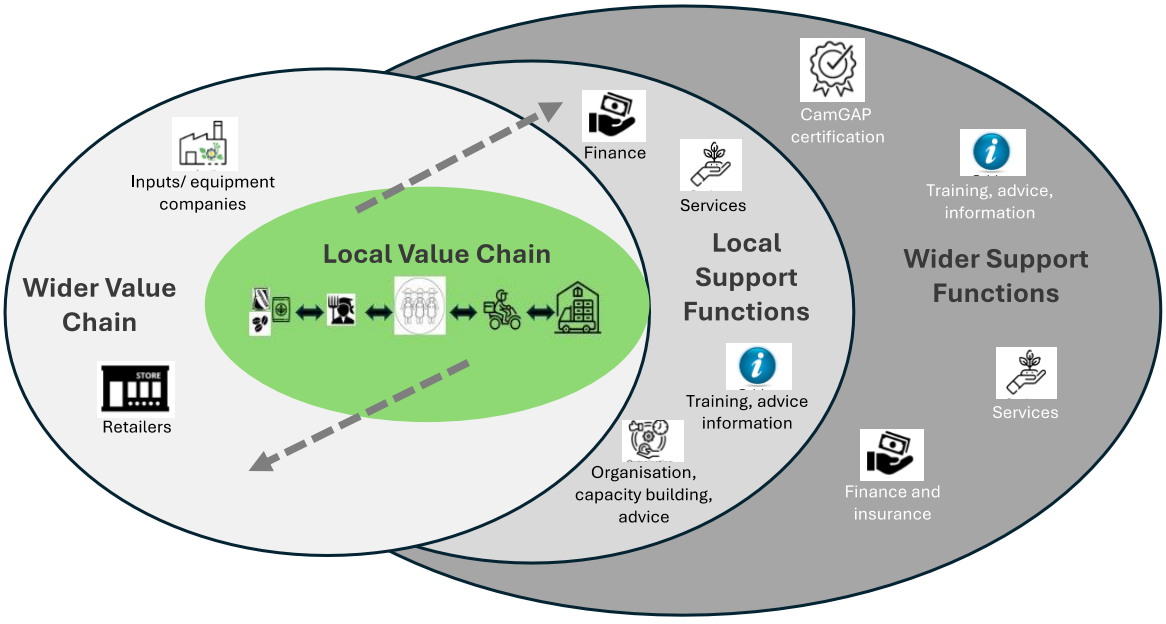
improvements to scale or for broader system changes to occur, both within and beyond local value chains and pilot supply chains.

The Activities worked with local supporting actors like farmers' organisations, farm services providers and PDAFFs. They also built the capacity of value chain actors, such as input suppliers, collectors and wholesalers, to provide supporting services to farmers. However, the Review did not find evidence that changes among these market actors had yet influenced support functions beyond those market actors directly reached.

With the exception of CamGAP certification, the Activities did not work with supporting functions in the wider market such as finance, insurance, transport/logistics and packaging. The Activities also did not connect local value chains and pilot supply chains with market actors who are sustainably providing many of these types of services, some of which are being supported by other development projects. As a consequence, there was very limited influence on models and practices outside of local value chains and pilot supply chains. In addition, local value chains and pilot supply chains missed opportunities to benefit from improvements in some wider supporting functions.

Figure 3 summarises the influence that the Activities had on different parts of the horticulture system in Cambodia. Local value chains, represented in the green circle, experienced some system changes. The dotted arrows show limited influence from local value chains into wider value chains and local and wider support functions. The illustration shows that system changes resulting from the Activities were limited and concentrated in local value chains and pilot supply chains, with minimal influence on wider parts of the horticulture system in Cambodia.

Figure 3: Illustration of Activities' influence on system changes



4.3 Assessment of Activity Implementation Approaches

This section analyses the Activity implementation approaches that significantly influenced the effectiveness and efficiency of the Activities. It discusses both those that detracted from, and those that contributed to, effectiveness and efficiency.

4.3.1 Approaches that detracted from effectiveness and efficiency

Lack of sustainable and scalable models for supporting functions: Sustainable models are essential to ensure continued growth and resilience in a sector. Scalable models lay the foundation for wider impacts. The Activities did not give enough attention to building sustainable and scalable business models for support functions.

> *"Activities that start on a small scale, to test the design, must have a plan of how they will scale-up and achieve the benefit of the investment and become financially sustainable."*
>
> MFAT Agriculture Activity Insights 2022

This gap was rooted in two management practices. The first was focusing on capacity building to improve market functions, but giving less attention to the other two essential ingredients of sustainability: incentives and sufficient financing. For example, while lead farmers and PDAFFs gained the capacity to provide better advice to farmers, some lead farmers lacked incentives and PDAFFs lacked funds.

The second management practice was partnering only with market actors in the local or pilot system without considering the potential of these actors or their business models to scale. This resulted in missed opportunities to work with, and influence, market actors with the potential to scale improvements, such as national input companies, buyers or financial institutions. A notable exception was CQHI's work with the GDA on CamGAP. The Activities also did not sufficiently consider how successful business models in the local or pilot value chains could be scaled. For example, asking the key question about which Cambodian market actors or institutions could sustainably provide updated technical information or business advice to market actors in value chains. Then considering how to work with those market actors or institutions to develop a sustainable model for the services. The importance of planning for scale was mentioned in both the 2019 and 2022 MFAT Agriculture Activity Insights.

Narrow definition of 'system': The Activities' definition of the 'system' they aimed to influence was narrow, focusing on local value chains and pilot supply chains. This definition not only reduced the potential for sustainability and scale, but also limited options for solutions to farmers' and market actors' challenges. For example, there is wide acknowledgement in the horticulture sector that farmers need vastly scaled-up access to covered production (in the form of net houses or rain shelters) to successfully adapt to the increasing effects of climate change. Current designs are too expensive for most vegetable farmers; those who have a structure for covered production typically got it through a development project. However, none of the Activities worked with market actors or institutions that could adapt designs to offer structures at different prices or offer appropriate financing to purchase them. A

broader definition of the 'system' that the Activities aimed to influence could have led to more appropriate solutions to some challenges and contributed to improved sustainability and increased scale.

Limited strategy on inclusion: The Activities' approaches to fostering inclusion in horticulture were relatively general. All collected disaggregated data and aimed to ensure the balanced participation of women and men in activities. Given that women's participation in horticulture was already high, this was not an appropriate gender objective. Rather, it would have been useful to analyse if and why women led, influenced, or benefited less than men in some aspects or functions of horticulture. For example, in Cambodia the leaders of agricultural cooperatives tend to be men, which shows that women's engagement in key leadership positions is not traditionally accepted. In other countries, development projects have found that agricultural equipment is too big or heavy for women to operate and have then worked with suppliers to make smaller equipment appropriate for women. Once issues were pinpointed, the Activities could have addressed these aspects specifically to promote inclusion.

To reach indigenous and other disadvantaged populations, STEER and CSmart both worked in some areas where these groups are located. This approach was effective in reaching these populations. It would have been helpful to also analyse if adaptations to services and relationships were required to make them more accessible to, and beneficial for, these populations. For example, development projects in other countries have worked on sourcing arrangements that take into account the cultural differences between buyers and suppliers. Some market actors may already have an incentive to serve disadvantaged populations, for example because they belong to the same disadvantaged group or because they want to increase their market share. To encourage sustainable inclusion, the Activities could have identified, and worked with, such market actors. A more robust analysis and approach to inclusion could have had a greater impact on how people who are disadvantaged participate in, influence and benefit from the horticulture sector.

Limited government ownership: With the notable exception of STEER's partnership with the Koh Kong PDAFF, the approaches of the Activities towards their government partnerships have not sufficiently encouraged a sense of ownership. The partnerships have been focused on specific activities, rather than involving government agencies in setting priorities and planning. Most of the government agencies interviewed, who were involved in the Activities, requested strengthened partnerships in this regard. In Cambodia, closely involving appropriate government agencies in Activities can support effectiveness, efficiency and a focus on private sector-led inclusive growth.

Example of Positive Deviance: STEER's partnership with the Koh Kong PDAFF

STEER involved the Koh Kong PDAFF at every step of the Activity, including planning and monitoring, as well as implementation. For example, the PDAFF staff appreciated that the technical staff from the Activity and the technical staff from the PDAFF had bi-monthly meetings throughout the Activity. The PDAFF staff understood and contributed to all aspects of the Activity, including not only the technical activities, but also producer group formation and capacity building, facilitating market links, and the child protection activities. This involvement built ownership and increased efficiency. The Koh Kong PDAFF is now more likely to prioritise the approaches used under STEER when allocating their limited budget.

Inappropriate results frameworks: The Activities' results diagrams lay out logical causality between their actions and expected benefits. However, many aspects of the results frameworks did not support effective management of the Activities. For example:

- The labels on the levels of the results diagrams encouraged a focus on achieving output targets. Some outcomes labelled 'medium-' or 'long-term', such as improved productivity and increased income, started happening as early as Year 2 of the Activities. Nevertheless, the Activities tended to focus on their output targets rather than flexibly carrying out activities to maximise their contributions to outcomes.
- Scale targets lacked ambition, which effectively endorsed the Activities' narrow definition of 'system change'.
- Limited indicators of sustainability restricted understanding and discouraged sufficient focus on it.
- Assessments during the Activities did not take attribution into account, limiting their usefulness for adaptive management and reporting. When attribution is not considered, particularly in a dynamic sector such as horticulture in Cambodia where revenues from vegetables grew 6-8% per annum from 2019-2023,[11] results measured and communicated represent total change stemming from many factors, not the Activities' value-add.
- Basic statistics for assessing progress, such as the number of farmers reached to date and the number of farmers benefited to date, were not consistently reported, making oversight of the Activities more difficult.

In short, the results frameworks frequently provided perversive incentives, and did not provide the right kind of information for adaptive management and oversight.

Insufficient responses to reviews: All three of the main Activities managed adaptively to some extent, using learning to improve efficiency or effectiveness. For example, they all expanded the types of partners with whom they worked, to provide new products or services to farmers or to address limitations in their initial

[11] Statista (2024) Vegetables – Cambodia.

partnerships. However, opportunities for more significant changes were not realised. For example, key limitations of the fly-in/fly-out model used by CQHI became clear even before the COVID 19 pandemic. While a local coordinator was hired, and later a few additional local staff, significant changes in the Activity design were not made. Similarly, concerns about the sustainability of direct service delivery models employed by CSmart were raised around the midpoint of the Activity, but significant changes in this regard were not made. More robust adaptive management, facilitated by MFAT, would have increased the efficiency of the Activities in progressing towards their outcomes.

> *"Our activities are implemented in dynamic circumstances over several years. An activity is more likely to achieve good outcomes if the design is flexible and can be adapted while the activity is being implemented.""*
>
> MFAT Agriculture Activity Insights 2022

4.3.2 Approaches that contributed to effectiveness and efficiency

Strong technical inputs: The Activities' provision of technical training and advice to farmers, other market actors and government agencies was highly commended by all stakeholders who received it. The strong technical inputs encouraged behaviour changes that resulted in concrete benefits for farmers as well as other stakeholders. The technical strength of the Activities also built credibility with market actors, government agencies and other development projects, which strengthened partnerships and opened additional opportunities for collaboration.

> *'Before the project, I knew only a little – only what was on the [input] label, so I might advise farmers to use two similar products. But now I know how to advise farmers based on active ingredients. I know which mixture is for which insect. I can advise farmers clearly. From the project, I got technical knowledge, which has helped [me] gain the trust of the farmers.'*
>
> Input supplier reached by STEER

Responsive partnerships with government agencies and market actors: The Activities gauged and adapted their support to partners to ensure that it responded to partners' needs. This responsiveness was critical in building capacity and promoting behaviour changes. It also contributed to efficiency in delivering outputs.

Examples of Responsive Partnerships

- CQHI recognised the gaps in the GDA's approach to operationalising CamGAP certifications and developed specific systems and tools to help them address the gaps.
- STEER listened to input suppliers and provided responsive support to enable them to serve farmers better while also achieving their own business aims.
- CSmart worked closely with an entrepreneur to enable him to successfully start up a pioneering and environmentally friendly cocopeat business.

Testing of innovations: The Activities tested a range of innovations that could improve local value chains and pilot supply chains, such as new technologies, new crops and new ways of disseminating information. A number of these have potential application in the wider sector. Not all the innovations were successful, but all were worth testing because they responded to gaps and constraints in the sector. This appetite for innovation improved effectiveness and could potentially result in wider system changes, provided that mechanisms to disseminate successful innovations are developed.

Examples of CQHI Innovations

- CQHI developed and tested an improved rain shelter for covered cropping that contributes to reduced pests and diseases over several seasons.
- CQHI worked with a wholesaler to develop and test a solar powered 'cool tuk tuk' for delivering fruits and vegetables in an urban environment. While the innovation did not work because the tuk tuk was too heavy, the idea might be picked-up and further developed by others in the future.

These innovations both have potential application beyond pilot supply chains.

Adapting to specific challenges: The Activities adapted to some key challenges that arose during implementation, most notably COVID-19. During this period, the Activities developed new ways of operating to continue implementation with reduced face-to-face interaction, such as remote help desks and online training. The Activities also successfully adapted to other challenges. For example, STEER managed the challenge of hiring and retaining staff in a remote location by flexibly reallocating roles and responsibilities among staff positions. CQHI responded to the business challenges among wholesalers by seeking out new partnerships with farmers' organisations. CSmart responded to the challenge of increased plastics usage in horticulture by conducting a study to identify viable alternatives. This process of identifying risks and responding to them supported the achievement of the portfolio's aims.

Passionate implementing teams: The Activity teams showed that they were passionate advocates for improving safety and resilience to climate change while enabling the horticulture sector to grow and benefit smallholder farmers. This passion inspired involvement and built trust with public and private market actors. A significant number of stakeholders and farmers specifically noted that the passion and caring attitude shown by Activity implementing partners' staff members made the Activities more effective.

4.4 Assessment of MFAT Management Approaches

This section analyses MFAT management approaches that significantly influenced the effectiveness and efficiency of the Activities. It discusses both those that detracted from, and those that contributed to effectiveness and efficiency.

4.4.1 Approaches that detracted from effectiveness and efficiency

The lack of a country-specific strategy: MFAT does not have a country-specific strategy for Cambodia, but instead relies on its Four-Year Plan for ASEAN, developed in 2021. While the ASEAN strategy sets out principles and key thematic areas, it is too broad to effectively guide MFAT's agriculture portfolio in Cambodia. The lack of a country-specific strategy to guide the design of Activities contributed to the lack of coherence in the agriculture portfolio. A country-specific strategy could shape the portfolio by identifying the agricultural system(s) in which MFAT will work, its vision for a competitive and inclusive agricultural system (considering market trends and RGC priorities), and the main strategies for contributing to progress towards that vision.

Misalignment of roles based on core competencies: The implementing partners did not necessarily have all the competencies required to effectively implement their Activity designs. At the same time, some of their core competencies were not effectively utilised. For example, Plant and Food Research (PFR) has strong technical and research skills that could have been shared with an appropriate and sustainable Cambodian partner to build their long-term technical and research capacity. As another example, all Activity teams could have benefited from additional skills in business and economic analysis as well as market systems development. This misalignment reduced the effectiveness of the portfolio.

Limited technical oversight of Activities: MFAT was not able to provide strong technical oversight of the Activities, which contributed to some issues in implementation being missed or minimised. For example, MFAT did not communicate to the Activities a strong priority on sustainability for supporting functions and scalable improvements. The reasons for the limited technical oversight related to MFAT overseeing the Activities remotely, shortage of staff and limited capacity in MSD during the relevant time period, exacerbated by the COVID 19 pandemic. Stronger technical oversight could also have identified opportunities for greater collaboration and coordination among the Activities in the portfolio.

Requirements and guidance on results frameworks: MFAT's requirements for, and guidance on, results frameworks at the time of the Activity designs, contributed to the issues outlined in the section above. Although MFAT's MERL guidance has since evolved, the Activities did not enhance their results frameworks to accommodate systems thinking in the portfolio.

Low in-country profile: Few development partners or government agencies are aware of MFAT's involvement in agriculture in Cambodia. MFAT's profile with private sector market actors in agriculture, outside of the Activities, is similarly limited. This low in-country profile reduced opportunities for collaboration, learning, influence and diplomatic profile, particularly with government and other development partners.

4.4.2 Approaches that contributed to effectiveness and efficiency

Flexibility: The implementing partners appreciated MFAT's flexibility in their implementation of the Activities. They all mentioned that MFAT accepted changes in design once they were discussed. This flexibility contributed to effectiveness and efficiency because it supported partners' adaptive management.

Approachability and listening: The implementing partners appreciated that MFAT's team was approachable and listened to them. This trait built rapport and enabled implementing partners and MFAT to jointly solve problems, which was particularly important when challenges arose, most notably the COVID 19 pandemic. The ability to work together contributed to the effectiveness and efficiency of the portfolio.

Regular communication: The portfolio is managed from the New Zealand Embassy in Bangkok, increasing the challenges of effective oversight. In this context, MFAT's regular communication with the implementing partners was critical to ensure smooth management. This regular communication complemented annual written reports from the implementing partners, creating a manageable reporting regime that did not detract from the focus on Activity implementation.

Willingness to support innovation: As mentioned in the section above, testing of innovations was a strength across the Activities in the portfolio. MFAT's encouragement of innovation, accepting that not all innovations will work, was critical to support this strength.

Long-term time horizon: While MFAT funds relatively short Activities - typically five years - its strategic time horizon is long, as evidenced by its long-term support for horticulture in Cambodia. This long-term support has allowed the portfolio to build on progress and lessons over time. Long-term thinking also opens opportunities for programming that is essential but can take time, which other development partners with shorter time horizons may not be willing to fund. Managed strategically, a long-term time horizon can allow MFAT to effectively contribute to scaled and systemic changes with limited funds, by addressing gaps in the support of other development partners.

4.5 Value of the Portfolio

The value of the portfolio relates both to its achievements during the life of the Activities and the potential for continued and expanding benefits after the Activities end. These must, of course, be understood in the context of the resources expended. This section summarises key strengths and weaknesses of the portfolio in terms of current achievements and future potential benefits in a table format (Table 4). It then concludes with a qualitative assessment of the value of the portfolio.[12]

[12] The quantitative data available on the portfolio does not allow for an appropriate quantitative estimation of the benefits accrued to date, nor a reasonable projection of future benefits. The available figures on benefits do not take attribution into account and the outreach figures do not clearly

Table 4: Strengths and weaknesses of current achievements and future potential benefits

	Current achievements	Potential future benefits
Strengths	• Improved, safe, climate resilient production • Strengthened local/pilot value chains • Increased technical capacity of value chain and some supporting market actors • Increased incomes, improved health, wealth accumulation, and family benefits	• Many local/pilot value chain improvements will continue • Most of those already reached are likely to continue benefiting in the short- to medium-term
Weaknesses	• Limited influence on inclusion • Few improvements beyond local/pilot value chains	• In the medium- to long-term, the lack of links for updated technical inputs threatens resilience and continued benefits for those reached • The lack of sustainable supporting functions will limit future growth in local/pilot value chains • Little potential for benefits to expand beyond local/pilot value chains

With relatively modest resources, the portfolio has clearly resulted in important benefits for farmers and other market actors in local value chains and pilot supply chains. Importantly, it has also contributed to improved health not only among farmers reached, but also among consumers who purchase their crops. Many of these benefits are likely to continue in the short- to medium-term but are threatened over the medium- to longer-term as the context changes and practices introduced become outdated. The portfolio has missed opportunities to strengthen the sustainability of support functions, and achieve greater scale and wider influence with the same resource expenditure. Thus, the portfolio is undoubtedly valuable but could have been significantly more so.

differentiate between those reached and those benefited. However, a qualitative assessment can be made and is likely to be more useful than a quantitative one.

5 Recommendations and Programming Options

This section addresses Objective 4: Identify the key learnings to increase positive impact in the future. It covers the following Review questions:

- What changes in any future design and delivery of the Cambodia Agriculture portfolio programme could improve programme relevance, coherence, effectiveness, efficiency and/or sustainability?
- What are key opportunities and appropriate strategic entry points for future MFAT investment in programming that is complementary to the market trends in Cambodian agriculture?
- What are the opportunities for MFAT investments to leverage market development trends within agriculture and what are the key design principles necessary to achieve this?
- What evidence or insights can be offered on additional market engagement opportunities they are not yet being explored in the Activities reviewed?

The section first discusses lessons from the portfolio and associated recommendations that are relevant to any future MFAT agriculture portfolio in Cambodia. It then discusses the choice of agriculture subsectors on which to focus. It closes with a menu of programming options.

5.1 Lessons and Recommendations

The Review team has identified eight lessons and associated recommendations for MFAT. The recommendations will improve the effectiveness, efficiency and/or sustainability of any future MFAT portfolio in agriculture in Cambodia. They aim to enable MFAT to maximise the scale, depth and resilience of impacts among smallholder farmers.

Recommendation 1:

The potential of the portfolio to catalyse broader system changes would increase if each of the Activities in the portfolio contributed to one vision for a safe, competitive and inclusive horticulture sector in Cambodia. A stronger portfolio profile with government, development partners and the private sector would open opportunities for collaboration that could strengthen MFAT's contribution to broader system changes. There are other actors in Cambodia with similar goals as those of New Zealand and collaborating with them could leverage additional resources and enthusiasm to progress towards those goals.

To increase coherence, the Review team recommends that MFAT proceeds with its plan to **develop a country strategy**. The portion of the strategy on agriculture can outline a long-term vision for the horticulture (or other agriculture) sector in Cambodia that aligns with market trends and supports the RGC's goals. It can also outline a broad strategy that establishes New Zealand's niche within a relatively crowded donor environment. The vision and strategy will guide Activity design, helping to ensure that Activities complement each other and contribute to broader aims. It can also be used to encourage MFAT Activities in Cambodia outside of bilateral funding to contribute to the vision with aligned and complementary designs. This greater coherence will help to increase the scale and resilience of impacts among smallholder farmers.

Publicising an MFAT country strategy would raise MFAT's profile with other development partners, government and, to a lesser extent, the private sector. A higher profile would open opportunities to influence and learn from other development partners as well as to collaborate when it makes sense to do so. Finally, developing a country strategy would assist MFAT in complying with the government's increasing oversight of development partners. Ensuring that MFAT's approach supports the RGC's aims and is endorsed by MAFF, will increase opportunities for productive partnerships and ownership both by government agencies and the private sector.

To further embed the strategy in Cambodia, MFAT can consider **convening an advisory committee for the country strategy.** Particularly given that MFAT does not have a presence in Cambodia, an advisory committee could provide MFAT with useful information about trends and new developments, link Activities to new opportunities and help MFAT management to stay abreast of any new risks. Ideally, MFAT would also participate more actively in forums on agriculture, including development partners, public and private forums to exchange learning and increase opportunities for Activities to collaborate with appropriate public and private organisations as well as development partners.

Recommendation 2:

The Activities in the portfolio are relatively small with overlaps among them and insufficient collaboration, not only among the main Activities but also with the Tier 2 investments. For example, both CSmart and CQHI worked on digital approaches to provide farmers with information on horticultural production. The Tier 2 Activities have limited interaction with the main Activities, reducing cross-learning and complementarity.

The Review team recommends that MFAT **concentrates its relatively modest resources for agriculture in Cambodia on one or a couple of Activities**. This

approach would not only address overlaps and collaboration but also make it easier to oversee the portfolio from Bangkok. Further, it is recommended that MFAT either works across value chain and support functions with a geographic focus related to production, or on a limited number of functions nationally. These options are further elaborated in the last section below and can increase the potential for scaled and sustainable results.

Recommendation 3:

Market systems development principles focus on influencing systems to achieve scale and sustainable results. Experience in MSD around the world is particularly strong in agriculture. Prominent development partners in Cambodia are using MSD because of its potential for scaled and sustainable results, as well as the contribution it can make to resilience.

The Review team recommends that MFAT **designs and manages the portfolio using MSD principles**. MSD aims to catalyse changes in how systems function so that they become 'more financially rewarding, accessible, inclusive and resilient in the long term'.[13] The key principles[14] and their implications for the portfolio are outlined below.

- *Address underlying causes of market failures, rather than superficial symptoms.* In MFAT's agriculture portfolio, this implies not only sustainably improving value chain functions but also sustainably improving supporting functions that can underpin competitiveness, inclusion and resilience in the sector over the long-term.
- *Ensure that desired behaviour changes reflect the genuine incentives and capabilities of permanent market actors.* In MFAT's portfolio, this implies recognising that incentives and financial capabilities are as important in sustainable models as technical capabilities. This is equally important for government and civil society organisations as it is for private sector market actors.
- *Take the complexity of market systems into account in programme strategy and interventions.* In MFAT's portfolio, this implies defining the 'system' appropriately to achieve the portfolio's aims and explicitly seeking models with the potential to scale results beyond those reached directly. It also implies using a MERL system that emphasises sustainability and system changes as well as impacts, and increasing the scope of adaptive management both at the Activity and at the portfolio levels.

[13] BEAM Exchange (n.d.) Features of a market systems approach.
[14] Ibid.

In its early days, there were concerns that MSD in agriculture reached only wealthier farmers. In the last decade, however, there has been more and more application of MSD to reach poor and disadvantaged groups, including, for example, women farmers, remote populations, refugees and people with disabilities. Underpinning this success has been a wealth of lessons on how to flexibly apply MSD principles depending on the context and aims of a programme. Similarly, programmes using an MSD approach have increasingly integrated cross-cutting issues effectively, such as gender equality, inclusion, environmental sustainability, and climate change mitigation and adaption. It will be useful for MFAT and implementing partners to **keep abreast of developments in MSD** so that improvements can be applied in the Cambodia agriculture portfolio.

Recommendation 4:

Key competencies were missing in all the Activities. At the same time, some of the implementing partners have strengths that were underutilised. This mismatch reduced the effectiveness of the portfolio.

The Review team recommends that MFAT **outlines core competencies required in the country strategy**. This will then guide the choice of implementing partners and also help to ensure that each partner's roles are best suited to their competencies. It is likely that a partner with key strengths may also lack specific competencies. By identifying this during design, MFAT can ensure that sufficient capacity building for partner staff is built into the Activity early and reinforced throughout implementation. This approach worked well with STEER, where iDE provided technical support and capacity building for the first half of the Activity. It could also be applied to other areas of capacity.

Recommendation 5:

MFAT was not able to provide sufficient technical oversight of the portfolio, partly due to staff shortages but also due to a lack of distributed technical capacity in agriculture and MSD. As a consequence, shortcomings in the Activities were not always identified and there were missed opportunities for the Activities to learn from other programmes, both within MFAT and among other development partners.

The Review team recommends that MFAT plans to **provide more technical support and supervision to the Activities** in the portfolio. If the implementing partners chosen to implement Activities do not have sufficient capacity in MSD (or other competencies), an **accompaniment model** may be appropriate. In this

model MFAT would contract an organisation with strong MSD (or other) competence to work with one or several implementing partners over an extended time period, both to ensure the Activities have sufficient capacity early on, and to build the capacity of the implementing partners. There is experience around the world with this type of model that can offer lessons in how to appropriately structure it.

Even if the implementing partners have the required competencies, the Review team recommends more regular technical reviews of the portfolio to identify issues early and facilitate bold adaptations to improve strategies, implementation and management. To manage this efficiently, the Review team recommends that MFAT commissions a **technical advisory group (TAG) for the portfolio**. There are useful lessons in MFAT and elsewhere in how to ensure a TAG plays a supportive role, rather than an adversarial one. Having a TAG would also address, to some degree, the long-distance technical oversight challenges currently facing the Bangkok Embassy team.

Recommendation 6:

Climate change adaptation and food safety are two critical challenges facing Cambodia now and into the future. The current portfolio has made an important contribution to both. The promotion of climate smart agriculture has enabled farmers to better manage the intensifying effects of climate change, increasing their profits, reliability of income and resilience. The focus on safe practices in both production and post-harvest handling have led to improvements in health among producers and consumers.

The Review team recommends that **climate change adaptation and food safety continue to be a focus** of the portfolio in the future. Climate change effects are escalating. Despite other development partners and the government also addressing this issue, efforts are still insufficient given the magnitude of the challenge. Furthermore, both the government and other development partners are under pressure to focus first on climate change mitigation in their activities. This leaves gaps in work around climate change adaptation that MFAT is well placed to address. Food safety is a widespread problem across Cambodia and there is more room for improvements. Consumers are increasingly demanding safe food, which means that this focus is also aligned with market trends. A focus on food safety is viable and will continue to benefit producers and consumers for the foreseeable future.

Recommendation 7:

While the portfolio had some approaches to addressing inclusion, these were not robust enough to influence inclusion to a significant degree.

The Review team recommends that MFAT **develops a more robust and targeted approach to inclusion** with the long-term aim of shifting norms in Cambodian agriculture towards greater inclusion. This would require a more systematic consideration of which groups are disadvantaged with respect to involvement in agriculture. It would also aim to identify what their opportunities, limitations and challenges are now, and how they might be sustainably reached in ways that increase their participation, leadership, influence and/or benefits from involvement in agriculture. In addition to targeting smallholder farmers, the portfolio could develop approaches to involve and benefit agricultural labourers, who tend to be some of the poorest people. It is important that the approach to inclusion applies MSD principles so that results among disadvantaged groups are sustainable and scalable. Implementing partners may require support and guidance to develop and implement an effective inclusion strategy.

Recommendation 8:

MFAT's MERL requirements and the MERL frameworks in the Activities have not supported a focus on sustainability, scale and impacts and have not encouraged sufficiently robust adaptive management. Thus, MERL has often detracted from effectiveness and sustainability in the portfolio. In addition, MERL approaches and report formats have not led to consistently accurate and useful reporting.

The Review team recommends that MERL requirements and guidance to implementing partners are redesigned to address the deficiencies in current frameworks and **incentivise a greater focus on scale, sustainability and impacts**. Areas that particularly require attention include:

- Indicators of sustainability, including not only technical capacity but also incentives, ownership and funding
- Monitoring system changes, including changes among farmers and other market actors not reached directly
- Approaches to impact assessment and reporting that regularly consider attribution
- Theories of change that better represent how change happens, including greater attention to behaviour changes among market actors

- Better integration of inclusion into results frameworks
- Reporting formats that require evidence related to sustainability, resilience and the potential for scale and system changes
- Processes for using information on results to inform adaptive management at the Activity and portfolio levels.

Experience shows that a strong MERL system can have a significant impact on the effectiveness, efficiency, scale and sustainability of Activities and portfolios.

5.2 Choice of Agriculture Sector

While MFAT has focused on the horticulture subsector in the current portfolio and previous work in Cambodia, the Review team considered which subsectors in agriculture are appropriate for future support. The criteria applied are:

- Inclusive growth: subsectors that enjoy good growth prospects and have the potential to benefit smallholder farmers and disadvantaged groups
- Climate change adaptation and resilience: subsectors that can make a contribution to households' adaptation to climate change and resilience in the face of increasing shocks
- Health and nutrition: subsectors that contribute to the health and nutrition of Cambodians
- Development partner landscape: subsectors where there are gaps in support from other development partners that MFAT could address
- Government priorities: subsectors that the RGC prioritises for development.

There are two subsectors that meet these criteria: horticulture and aquaculture. The subsectors are similar in many ways with aquaculture following a similar trajectory as horticulture but several years behind. Table 5 briefly elaborates how each of these subsectors meets the criteria.

Table 5: Analysis of subsectors that best fit MFAT's priorities

Criteria	Horticulture	Aquaculture
Inclusive growth	Domestic demand for produce continues to grow, particularly safe produce. Experience indicates that Cambodian smallholder farmers can competitively supply domestic markets. Women and disadvantaged groups are involved with potential for improvements.	Domestic demand for fish is growing while natural catch from rivers and lakes is declining. Development partners report that smallholder aquaculture farmers can meet some of this demand and substitute local fish for imports.

Criteria	Horticulture	Aquaculture
Climate change adaptation and resilience	The current portfolio shows that horticulture offers opportunities to increase climate change adaptation and resilience.	Aquaculture can contribute to water management which is an essential aspect of climate change adaptation and resilience.
Health and nutrition	Vegetables and fruits for the domestic market contribute to Cambodians' health and nutrition. There are opportunities to improve safety.	Fish is an important part of Cambodians' diets contributing to health and nutrition. There are opportunities to improve safety.
Development partner landscape	Other development partners are focusing mainly on export crops with limited support for vegetables destined for the domestic market. There are gaps in their support geographically and in relation to specific supporting functions.	There are fewer development partners in aquaculture than in many other agriculture subsectors. Those working in aquaculture report that there is room for more assistance.
Government priority	RGC continues to prioritise import substitution in vegetables as well as horticultural exports.	RGC values aquaculture for its potential to contribute to food security and to meeting domestic demand with domestic production.

While aquaculture could be addressed as a separate subsector, it could also be considered as part of a programme on integrated farming and water management that includes horticulture. Should MFAT decide to enter the aquaculture subsector, it will be important to coordinate with Activities supported by the European Union, the FAO and World Vision.

Subsectors that did not meet the criteria include:

- Rice because the development partner landscape is very crowded with a broad range of initiatives
- Livestock because it is not particularly supportive of climate change mitigation and adaptation
- Industrial export crops because the development partner landscape is crowded, the potential for the involvement of smallholder farmers is lower and it does not support the health and nutrition of Cambodians.

The Review team recommends a continued focus on horticulture.
Horticultural production has provided relatively poor rural and peri-urban households with a pathway to wealth creation over the last decade. While the income gains in horticulture are unlikely to be as accessible as they have been in the previous five years, there continue to be good opportunities for programming in

horticulture that can benefit smallholder farmers and, potentially, labourers as well. Most other development partners working in agriculture have pivoted to export crops leaving relatively limited support for value chains serving domestic markets. A focus on horticulture does not preclude collaborating with another development partner with expertise in aquaculture to test an integrated farming model. This kind of model could include aquaculture alongside horticulture, particularly to support climate change adaptation. Continuing to work in horticulture would allow MFAT to build on the progress, relationships and learning gained over the last 20 years.

Figure 4: Illustration of the progression of farming households' market interactions in horticulture and associated benefits

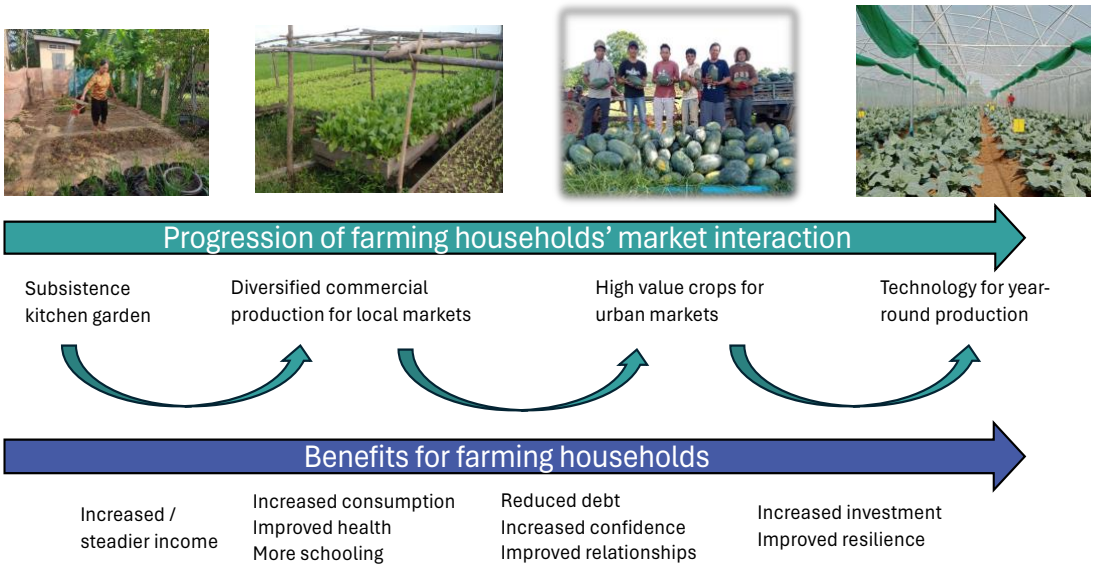


Figure 4 shows a simplified illustration of how farming households have moved from subsistence kitchen gardens through stages of increasing market integration in horticulture. This progression has provided households with a range of benefits that support wealth creation, improved well-being and increased resilience over a relatively short time period. The Review found that farmers can move from one stage to the next in as little as a couple of years, although technology for year-round production typically takes longer because of the high capital outlay. It should be noted that the illustration is simplified. Most farming households grow other crops as well and may also have other sources of income. However, farmers consistently rated vegetables as their most profitable crop.

This is not to suggest that horticulture is a universally perfect solution for rural wealth creation. It is labour intensive, which is not appropriate for all households. New technology to reduce labour is important to make horticulture more accessible for more households. As with all crops, adverse weather events, or pests and diseases, can wipe out a crop. When coordination is poor, oversupply of a particular crop reduces prices. But MFAT's portfolio has shown that there are viable approaches to reducing these issues. There may also be opportunities to export or process vegetables in the future.

5.3 Programming Options

Table 6 provides a menu of options for future programming. It is a mix and match menu but, given MFAT's limited resources, it will be more effective and efficient to focus either on inclusion or on growth, with the possible addition of one or both of the other options. All options need further investigation to validate their viability and potential for achieving desired objectives. The Review team also recommends a full design is developed for any option chosen to ensure future Activities are underpinned by sufficient evidence and effectively build on lessons learnt both from the MFAT portfolio and from other development partners and countries.

Table 6: Programming options for MFAT's future agriculture portfolio in Cambodia

Focus	Inclusion
Programming Options	1. Enabling remote and marginalised people to effectively engage with horticulture markets as farmers or labourers. 2. Similar to the option above but with a focus on integrated farming that includes horticulture and aquaculture.
Description	These options would focus on enabling marginalised farmers to raise their incomes and improve their well-being and resilience through horticulture (and potentially aquaculture) by progressively connecting to growing markets. The Activity would work vertically, across value chains and supporting markets. It would also ensure that marginalised areas benefit from innovations being developed in more mainstream areas by bridging local and national horticultural systems. In addition to using and improving some of the interventions in the current portfolio, the Activity could facilitate market actors to adapt innovations from other areas or countries, such as agricultural technologies and approaches to climate change adaptation, to address the requirements of disadvantaged populations. The Activity could also test ways to reach increasingly marginalised people as farmers and possibly also labourers. The choice of province(s) will need to take into account where horticulture will be viable as the climate heats up, as well as economic and targeting considerations.
Entry Point	Single MFAT Activity in one or two provinces managed by a contractor or NGO. Based on its experience in Cambodia and other countries, MFAT has the capacity to manage this option directly. An MFAT branded Activity can provide MFAT with diplomatic visibility. If Option 2 on integrated farming is chosen, MFAT would work in close collaboration with an agency that has expertise in integrated farming and aquaculture.
NZ Value Add	Most development partners continue to focus primarily on the Tonle Sap and Mekong Plain corridors with Modulkiri as an emerging area of focus. Working outside of these areas would provide opportunities for those that might not get them otherwise. Furthermore, these options would focus on domestic markets which are more accessible to poor and disadvantaged farmers. Most other donors are focusing on export crops.

Focus	Growth
Programming Options	1. Building essential supporting functions in the horticulture system. 2. Building technical capacity in key public and private market actors in the horticulture system.
Description	These options would support growth by making the Cambodian horticulture sector more competitive. MFAT would focus horizontally on selected supporting functions and/or areas of technical skill or system deficiency. These would be chosen based on gaps in other development partners' support. Examples of functions might be packaging and labelling, logistics or lab services. Examples of technical skill or system deficiencies might include government phytosanitary control systems, CamGAP systems, skills in factory layout and management for wholesalers and processors or agricultural engineering skills. MFAT's support will be most relevant to promoting exports but might also have some benefits for domestic value chains.
Entry Point	Delegated cooperation with one of the development partners supporting a large horticulture programme e.g. the FAO, USAID, DFAT. Delegated cooperation is recommended for these options because it will be important that support is well coordinated with broader efforts to develop the horticulture system. In addition, MFAT does not have experience in managing this type of support in Cambodia.
NZ Value Add	New Zealand's support would be geared towards filling gaps in its partner agency's strategy for the horticulture sector. Ideally, the supporting functions or technical areas chosen would also be ones where NZ has particular expertise that its partner agency lacks. The partner agency would be responsible for managing MFAT's contribution to the programme to ensure coherence.

Focus	Digital innovation
Programming Options	Fostering digital innovation and business models for agri-tech solutions in horticulture.
Description	This option could be integrated with either an inclusion or a growth focused Activity. Digital innovation and agri-tech solutions have significant potential to contribute to growth and/or inclusion in Cambodia. There are some efforts already underway but much more is possible; neighbouring countries have made considerable progress. Solutions could range from improved information provision through social media to reach remote farmers, to AI technologies that contribute to pest and disease management. This option should also include capacity building for Cambodian entities to identify, adapt and disseminate digital and agri-tech solutions.
Entry Point	Integrated with one of the options above.
NZ Value Add	MFAT's Development Economy Division (DEVECO) covers digital innovation. MFAT could test innovations in its programming in partnership with public and private entities with the capacity and incentives to disseminate successful solutions more widely.

Focus	Long-term climate change adaptation
Programming Options	Improving Cambodia's capacity in R&D for agriculture, particularly related to climate change adaptations.
Description	There is widespread concern that Cambodia does not have sufficient R&D capacity, particularly related to climate change adaptation. Cambodia is behind neighbouring countries in R&D capacity, which reduces its resilience and competitiveness. While development partners are helping in the short-term, it will be more effective in the long-term to build this capacity in Cambodian institutions. This option would focus on building capacity in one or a couple of Cambodian institutions focusing on research for development in agriculture. R&D could address, for example, new climate resilient varieties, new technologies and systems for managing agriculture based on climate change projections.
Entry Point	Institutional partnership between an NZ institution and one or a couple of Cambodian institutions. Under such a partnership, the institutions could conduct joint research as well as engage in other cooperative activities that would build capacity in the Cambodian institutions as well as expose New Zealand researchers to new challenges.
NZ Value Add	New Zealand has strong R&D capacity in agriculture. Rather than sharing this expertise on a case by case basis, it could be used to sustainably build capacity in Cambodia that would support the country to address the challenges of climate change in agriculture over the long-term.

Appendix A: Review Plan

NEW ZEALAND
FOREIGN AFFAIRS & TRADE
Aid Programme

Cambodia Agriculture Review Plan

This document details the plan to review MFAT's Agriculture Portfolio in Cambodia over the last two trienniums (2018-2023). The NZD 24 million portfolio focuses on three key and ongoing Activities and several, smaller investments. The Review aims to understand the trajectory of New Zealand's Official Development Assistance (ODA) into Agriculture in Cambodia and its contribution to MFAT's development objectives there. It also aims to identify lessons and opportunities to improve impacts, sustainability and inclusiveness of future programming in this sector.

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Date: 23 February 2024

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1 Introduction

1.1 Background and Context

The New Zealand Ministry of Foreign Affairs and Trade (MFAT) is investing nearly NZD 24 million in current agricultural programming in Cambodia. A large portion of the total investment is programmed through three key Activities all of which are due to close before March 2025: Cambodia Quality Horticulture Initiative (CQHI) (NZD 9.8m); Climate Smart Commercial Horticulture Cambodia (CSmart) (NZD 8.5m); and Systems Approach to Transformative Economic Empowerment and Resilience (STEER) (NZD 5.6m). These coordinated closures present an opportunity to review the achievements of recent years and take stock of the opportunities for future investments in agriculture in Cambodia with the aim of maximising programming effectiveness.

MFAT acknowledges that it is a comparably small partner in the Cambodian national context, with a limited footprint. Through this Review, MFAT wishes to identify a niche that is the best fit for New Zealand to continue as a valuable development partner within Cambodian agriculture over the coming five-10 years.

Review Objectives

Objective 1: Assess to what extent the Cambodia Agriculture portfolio programme is fit-for-purpose. *(Relevance, Coherence)*

Objective 2: Identify to what extent the Cambodia Agriculture portfolio programme Activities are making a difference. *(Effectiveness)*

Objective 3: Assess the value of the Cambodia Agriculture portfolio programme Activities delivery model. *(Efficiency, Sustainability)*

Objective 4: Identify the key learnings to increase its positive impact in the future. *(Lessons learned for improvement)*

1.2 Review Purpose

The Review's broad objectives are shown in the box above, while its outcomes will be used by MFAT to:

- Understand the trajectory of New Zealand's official development assistance (ODA) to support agriculture in Cambodia, and its contribution to MFAT's development objectives there. This will include understanding the key drivers behind areas of success or shortcomings. It will also evaluate the effectiveness and sustainability of the Activities, particularly focusing on the ways in which MFAT has been working with smallholder farmers in Cambodia through projects classified as 'agriculture', 'rural development', 'food security' or similar.
- Identify opportunities for shared learning about how MFAT and its implementing partners can improve the impacts, sustainability and inclusiveness of future programming in this sector.

1.3 Review Objectives and Questions

Below are the Review objectives and questions as agreed between the Review team and the Steering Group.

Objective 1: Assess to what extent the Cambodia Agriculture portfolio programme is fit-for-purpose. *[Relevance/Coherence]*

- To what extent is the MFAT Cambodia Agriculture investment portfolio aligned with key trends in the real economy of the Cambodian agricultural sector?
    - What are key features of Cambodia's agriculture sector currently, particularly within the private sector, and what are key trends in regard to the maturation process of the agricultural market system?
    - What are key donor trends in terms of investment in Cambodian agricultural markets?
    - What are the main types of support, services and delivery models provided by NGOs targeting Cambodia's agricultural sector?
- To what extent are the outputs of Cambodia Agriculture portfolio programme Activities aligned with Cambodia's government priorities and ASEAN 4 Year Plan?

Objective 2: Identify to what extent the Cambodia Agriculture portfolio programme Activities are delivering a difference. *(Effectiveness)*

- To what extent have the Cambodia Agriculture portfolio programme Activities delivered their outputs and progressed towards their intended outcomes?
- Which approaches have been the most effective?
- What have been the key enablers and barriers for the Cambodia Agriculture portfolio programme achievements?
- What, if any, other results have programme stakeholders noted (beyond the stated Activity outcomes) from MFAT investments in Cambodian agriculture?

Objective 3: Assess the value of the Cambodia Agriculture portfolio programme Activities delivery model. *[Efficiency/Sustainability]*

- What have been some of the main challenges to efficient programme delivery and what could be done to overcome these in future?
- Do the outcomes achieved so far by Cambodia Agriculture portfolio programme Activities justify the delivery costs?
- To what extent has the Cambodia Agriculture portfolio programme built the capacity of different stakeholders (government, private sector, community) toward improved market function without on-going support?

Objective 4: Identify the key learnings to increase positive impact in the future. [*Lessons learned for improvement*]

- What changes in any future design and delivery of the Cambodia Agriculture portfolio programme could improve programme relevance, coherence, effectiveness, efficiency and/or sustainability?
- What are key opportunities and appropriate strategic entry points for future MFAT investment in programming that is complimentary to the market trends in Cambodian agriculture?
- What are the opportunities for MFAT investments to leverage market development trends within agriculture and what are the key design principles necessary to achieve this?
- What evidence or insights can be offered on additional market engagement opportunities they are not yet being explored in the Activities reviewed?

1.4 Review Scope

The Review will focus on the current, contracted phases of the three main Activities in MFAT's current portfolio:

- Cambodia Quality Horticulture Initiative (CQHI), implemented by Plant and Food Research (PFR): January 2017 – to the present (end date March 2025)
- Cambodia Climate Smart Commercial Horticulture (CSmart), implemented by International Development Enterprises (iDE): October 2019 – to the present (end date September 2024)
- Cambodia Systems Approach to Transformative Economic Empowerment and Resilience (STEER), implemented by Save the Children International (SCI): May 2019 – to the present (end date April 2024)

Previous phases of these Activities or support for these organisations working in Cambodian agriculture will be taken into account but not reviewed. The Review will consider these Activities in relation to all four of the Review Objectives. There will be deep engagement with the implementing partners for these Activities, and field research in Cambodia will gather significant primary data from the private enterprises, government agencies, civil society organisations, communities and beneficiaries involved.

In addition, the Review will touch on four other MFAT investments (Tier 2 Activities), specifically:

- Sustainable Produce to Market Value Chain Enhancement Project (Pro-Market), implemented by the Adventist Development and Relief Agency (ADRA): January 2019 – December 2023
- He Oranga Taurikura - which means 'A Thriving Life'- implemented by the Catholic Agency for Justice, Peace and Development (Caritas): 2021-2026
- Promoting Safe Food for Everyone (PROSAFE) in Cambodia, Lao PDR, Myanmar and Vietnam, implemented by the Mekong Institute: June 2018 – October 2023

- Angkor Water Resilience, implemented by Live and Learn: June 2023 – November 2028

The Review will consider these Activities only in relation to the relevance and strategic coherence of the portfolio (Objective 1), as well lessons relevant for future programming (Objective 4). The Review team will investigate these Activities using secondary sources and a few, remote key informant interviews (KIIs).

The geographic scope of the Review will cover key areas where the three main Activities are operating - in the central, northwest and southwest regions - while also taking into account the markets for agricultural crops targeted by the Activities in these regions. In terms of the contextual analysis and lessons learned for improvement, the Review will broaden its focus to the whole of Cambodia, reflecting the importance of approaching investments in agricultural systems at the national level.

Within the agriculture sector, the Review will focus on horticulture as this is the primary subsector in which all three main Activities are working. To help to inform future programming, the Review team will also seek the opinions of key informants about the opportunities and trends in other crops and aquaculture, as well as integrated food systems particularly in relation to food security, climate change adaptation and the potential to reach vulnerable households.

In addition to the implementing partners and those involved in the portfolio Activities, the Review team will engage with a range of key stakeholders during the Review, as follows:

- MFAT country programme and Activity Managers; New Zealand Embassy Bangkok Development team
- PDG thematic advisers and non-core teams (DEVECO, Partnerships)
- Key Cambodian government agencies at national and provincial levels
- Selected private sector leaders in agriculture in Cambodia, as well as civil society organisations as key informants, if relevant
- Other selected development partners, agencies and projects active in agriculture in Cambodia.

2 Review Design

The Cambodia Agriculture Review has two phases. Phase 1 (Planning) started in early January 2024 and will culminate in mid-February with the submission and appraisal of this Review Plan. During this planning phase the four-person Review team:

- Reviewed selected public literature to summarise key features of, and trends in, the Cambodia agriculture sector, including those related to the private sector, the Royal Government of Cambodia (RGC), and aid investments.

- Reviewed the available literature relating to the Cambodia Agriculture portfolio's three main Activities and Tier 2 Activities to identify the information already available to address the Review questions, the areas where there are gaps, ambiguities, or where there is ongoing work, which will require probing in more detail during the field research.
- Engaged with MFAT staff in Wellington and the Bangkok Post, including the Review Steering Group, to:
    - understand the background to the Review
    - gain their inputs into the Review Plan, including the objectives, scope, design, stakeholders and schedule, and
    - discuss issues that will improve the utility of the Review to MFAT.
- Engaged with managers of the implementing partners for the three main Activities in the Cambodia Agriculture portfolio to:
    - gather their input into the Review Plan, including the design, stakeholders, schedule and logistical planning for the field research and remote consultations, and
    - discuss the issues that will improve the utility of the Review to their agencies.

On approval of the Review Plan, Phase 2 will deliver a Review with two dimensions:

- A summative analysis of the progress and achievements of the Cambodia Agriculture portfolio, including both a brief analysis of each of the three main Activities in the current portfolio, as well as an analysis of the relevance and coherence of the portfolio as a whole in the last two trienniums (2018-2023).
- A formative analysis of the implications that the Cambodia Agriculture portfolio's progress, achievements, relevance and coherence may have for future programming under the portfolio, particularly in relation to opportunities for sustained and scaled impacts, strategic entry points for New Zealand aid, programming approaches and logical expectations.

2.1 Principles Underpinning this Review

Key principles that will underpin the Review include:

- **Impartiality and independence:** The Review team is independent of MFAT and all Cambodia Agriculture portfolio programme stakeholders, and has no vested interest in its outcomes. The team has not been involved in the implementation of any Cambodia Agriculture portfolio programme Activities and has not provided advice that may have informed the programme's decision-making. The Team Leader had a brief assignment providing training and advice to CSmart in 2020, but has not otherwise been engaged with the Activities in the portfolio. MFAT has agreed that this does not present a conflict of interest. The other team members have not been involved in any of the portfolio

programme Activities. To avoid any appearance of a conflict of interest, the National Research Specialist and the Market Systems Development (MSD) and Management Specialist will conduct the review of CSmart.

- **User involvement:** The Review will adopt a 'utilisation focused approach'. This requires that its products are tailored to the needs of the intended users, and will, thus, be judged on their usefulness. Throughout the Review, discussions with the Review Steering Group will ensure that their needs, as well as those of other stakeholders within and outside of MFAT, are being addressed, and that the Review's products are being tailored to inform future decisions and to improve performance.
- **Learning:** A focus throughout the Review will be on lessons and future programming pathways that can contribute to improving the performance of the Cambodia Agriculture portfolio programme.
- **Methodological pragmatism and efficiency:** The methods proposed for the Review represent good field research practices that are both practical and focused on efficiently obtaining only the data that is required to inform decisions. It needs to be noted, however, that aid reviews take place in resource and time-constrained contexts, and that compromise may sometimes be needed.
- **Developmental appropriateness:** The Review team comprises professionals with long-standing experience in international development, and significant experience in economic and agricultural programming in Cambodia and globally. The team is committed to respecting the cultural norms of Cambodian peoples, and to proactively seeking and reflecting the perspectives of both women and men. The team will strive to ensure social inclusion is reflected in their research methodology to ensure that a diverse range of perspectives are included, e.g. (where appropriate) those of people with disabilities, young people, indigenous people, and other marginalised groups. All primary research will be undertaken in an ethical manner which respects the need for informed consent and privacy of personal information. (See the section on Ethical Considerations for more detail.)

2.2 Methodology

The methodology for the Review will include the gathering of information from both secondary and primary sources. The key secondary sources will be MFAT and partner documents, supplemented by documents from key informants and those that are publicly available. The primary research will focus on qualitative information, using a range of research methods (as detailed below), allowing adaptation in data collection to probe new areas as they emerge. The Review will also utilise quantitative data where it is available from secondary sources and both of good quality and meaningful in the context of the Review questions. The Review team will collate and discuss findings on an iterative basis during the data collection to feed into the analysis of findings once field research has been completed. Conclusions and recommendations will be built on this analysis. Details about the

research methods, information collection, sampling and information analysis are provided below.

Research Methods

The methods outlined in Table 1 are likely to evolve and become more focused as the information gathering progresses, and as additional, relevant key informants are identified. Please see the section on Ethical Considerations below for more information about voluntary and informed consent as well as personal data security for all interviews and focus group discussions.

Table 1: Cambodia Agriculture Review Methods

Method	How it will be used
Document Review • Main Activity literature • Tier 2 Activity literature • Public literature about the Cambodian agriculture sector • MFAT Policy documents	The Review team has examined available reporting documentation relating to the Cambodia Agriculture portfolio Activities (e.g. design documents, annual reports, Activity monitoring assessments), and selected MFAT policy documents relevant to the portfolio (e.g. MFAT Cambodia country summary, New Zealand ASEAN four-year plan). The Review team has also consulted literature relevant to Cambodian agricultural development including documents from other development partners and programmes, government reports and other publicly available information. The Document Review, attached as an Appendix, summarises information according to the Review objectives and key questions, and identifies gaps and additional questions that the Review team will investigate through the field research. A list of documents consulted is provided. The Review team will examine additional documents provided by MFAT, implementing partners and other stakeholders, as and when needed, before and during the field research.

Method	How it will be used
Interactive Workshops • Main Activity implementing teams (PFR, iDE, Save the Children) • MFAT Steering Group and other selected stakeholders	Interactive workshops will be used in three ways: 1. Before beginning the field interviews for each of the main Activities, the Review team will conduct an interactive workshop with the project team to gather a first-hand overview and insights into the progress, achievements, enablers, barriers and lessons learned. The Review team will use this opportunity to seek clarifications (if required) relating to the information gathered from the document review. 2. At the end of the field research, and once the Activity Monitoring Report is accepted, the Review team will conduct a 'sense making' workshop with the Review Steering Group and a select group of stakeholders to present and discuss the preliminary findings. The discussion will cover reactions to the findings and areas that may need improvement. Time will also be devoted to preliminary ideas about the future direction and approaches for the Cambodia Agriculture portfolio. 3. At the completion of the Review, and once the final document is accepted, a workshop will be held and managed by MFAT in Wellington to present its outcomes and to discuss future programming in the Cambodia Agriculture portfolio.
• **Key Informant Interviews (KIIs) (individual and group):** • MFAT Country Programme and Activity Managers, Bangkok Post • PDG Thematic Advisers and non-core teams (DEVECO, Partnerships) • RGC national and local agencies • Tier 2 Activity partner implementing agencies (Mekong Institute, ADRA, Caritas, Live and Learn) • Other development partners, agencies and projects working in Cambodian agriculture • Private sector leaders, civil society organisations and key informants involved in Cambodian agriculture	A significant element of the research will be the Key Informant Interviews (KIIs) with the different types of stakeholders in Cambodia, New Zealand and remotely. These interviews will enable probing and triangulation of stakeholder perspectives. Semi-structured, non-leading questioning will allow flexibility in data gathering, offer a nuanced and in-depth understanding of stakeholder perspectives, and elicit the discussion of issues that may not have been foreseen by the team. Where interviews are with a group, for example, several staff members of a government agency, the Review team will encourage all members to participate and utilise the group dynamics to probe issues and perceptions. When required, the Review team will also follow up with individuals from the group interviews. The plan is for the in-person interviews to be undertaken at the participants' places of work. Remote interviews will be conducted on Zoom (or another platform if requested by a respondent). All interviews will last for 30-75 minutes.

Method	How it will be used
Focus Group Discussions (FGDs): • Smallholder farmer beneficiaries • Agricultural input retailers	The Review team will conduct up to 19 focus group discussions (FGDs), most with smallholder farmers involved in Activities. The FGDs will have four to six respondents each, including both women and men, as mixed groups are effective in the Cambodian context. The FGDs will focus on participants' experiences of being involved in the relevant activities, including the products and services they have used, behaviour changes, performance changes and benefits. The FGDs will also cover indications of sustainability and smallholder farmers' perceptions of trends and issues in agriculture. The contribution and interaction of a group's members will deliver a range of insights that are often lacking when interviews are conducted with fewer or single participants. The discussions will take place in culturally appropriate and easy-to-reach venues and will be facilitated in Khmer by professional facilitators overseen by the Cambodian Review team members. There will also be a dedicated note-taker for each FGD to ensure that detailed notes cover the scope and nuances of the discussions. All FGDs will last for 90-120 minutes.
In-Depth Interviews: Market actor partners involved in Activities: • Lead farmers • Agricultural cooperatives • Agricultural collectors • Agricultural input suppliers • Agricultural service providers • Buyers • Retailers	The Review team will conduct in-depth interviews with other market actors involved in Activities. As with the FGDs, these in-depth interviews will focus on respondents' experiences of being involved in the relevant Activities. Questions will elicit the products and services they have used, behaviour changes, performance changes and benefits, as well as indications of sustainability and their perceptions of trends and issues in agriculture. If farmers are not geographically close enough for FGDs, individual in-depth interviews may be substituted in some cases. The in-depth interviews will each last for 45-75 minutes.
Site Visit Observation • Agricultural cooperatives • Agricultural collectors • Agricultural input suppliers • Agricultural service providers • Buyers • Retailers	As part of the interviews, the Review team will visit key sites to confirm or challenge the preliminary conclusions arrived at using other methods. This will be especially important to support understanding of the interactions/relationships between the types of stakeholders involved in Activities, the degree of professionalism in the implementation, the quality and appropriateness of products and services promoted, and the general attitude/engagement of the various stakeholders.

Information Collection

Guided by the Review question framework (in Tables 2 and 3 below), and informed by the document review, the Review team will design question checklists to be used in the interactive workshops, KIIs, IDIs and FGDs for each stakeholder category. Each question checklist will be customised as necessary to match the specific respondent(s) before the interview is conducted. The question checklists will be used in a semi-structured way to enable the triangulation of issues across the different categories of stakeholders.

The interactive workshops, KIIs and IDIs will be conducted by the Review team members operating as two pairs - each with a Cambodian and a non-Cambodian team member. One team member will take the lead in the discussion while the other takes notes and ensures all questions are adequately covered. The interactive workshops will be conducted in English, but Khmer translation will be provided by the Cambodian team members as necessary to enable all participants to contribute easily. The KIIs and IDIs will be conducted in Khmer, English or a combination of the two according to the preference of the respondent(s). The Cambodian team members will translate as needed.

The FGDs will be conducted by professional FGD facilitators in Khmer and overseen by the Research Specialist and Research Coordinator. Each FGD will have two facilitators; one will lead the discussion while the other takes notes and ensures that all questions are adequately covered. Prior to starting the FGDs, the Research Specialist will conduct a training session for the FGD facilitators covering the aims of the research, relevant aspects of the Activities, the respondents and the schedule of the FGDs, how to use the FGD question checklists, ethics in the research – including informed consent and security of personal data, and the format and expectations for the notes from the FGD. The FGD facilitators will travel to the field locations with the Review team members so that the Cambodian team members can support and oversee them as needed. Upon completion of the FGDs, the facilitators will deliver their notes in Khmer, which will then be translated into English for use by the Review team. (Please see the section below on Ethical Considerations for more details.)

The Review team members will have regular discussions during the field research to exchange information and steer the direction of the interviews to ensure a comprehensive understanding of the multiple responses to the Review questions.

Tables 2 and 3 provide the question frameworks that will inform both the summative and formative analyses. The main questions in the framework are the Review questions organised under each of the Review Objectives. Supplemental questions have been added based on the issues identified for deeper exploration during the document review and the preliminary discussions with key stakeholders during the Planning Phase. The question frameworks show from whom, and how, the Review team will gather information to answer each of the Review questions.

Table 2: Cambodia Agriculture Review Summative Question Framework

REVIEW & SUPPLEMENTAL QUESTIONS	STAKEHOLDER CATEGORY[1]	METHODS
Objective 1: Assess to what extent the Cambodia Agriculture portfolio programme is fit-for-purpose *[Relevance/Coherence]*		
1.1 To what extent is the MFAT Cambodia Agriculture investment portfolio aligned with key trends in the real economy of the Cambodian agricultural sector?	• Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 7: Tier 2 Activity implementing partners • Category 8: National and local government agencies • Category 9: Private sector leaders, civil society organisations, and other key informants	• Document review – Activity documents, MFAT policy documents, RGC policy documents • KIIs and IDIs • Site visits for observation • Steering Group meetings/workshop
1.1.1 What are key features of Cambodia's agriculture sector currently, particularly within the private sector, and what are key trends in regard to the maturation process of the agricultural market system?	• Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 8: National and local government agencies • Category 9: Private sector leaders, civil society organisations, and other key informants • Category 10: Smallholder farmer beneficiaries	• Document review- literature on Cambodian agriculture • KIIs and IDIs • Interactive workshops • FGDs
1.1.2 What are key donor trends in terms of investment in Cambodian agricultural markets?	• Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners	• Document review – other donor reports • KIIs and IDIs • Interactive workshops
1.1.3 What are the main types of support, services and delivery models provided by NGOs targeting Cambodia's agricultural sector?	• Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 8: National and local government agencies	• KIIs and IDIs • Site visits for observation • Interactive workshops • Web search on specific NGOs if needed

[1] See Section 4 for more detail and the Stakeholder Engagement Plan

REVIEW & SUPPLEMENTAL QUESTIONS	STAKEHOLDER CATEGORY[1]	METHODS
Supplemental: • *What has been the strategic thinking behind the Cambodia Agriculture portfolio of investments?* • *To what extent and how did systems thinking influence the agriculture portfolio at the design stage?*	• Category 1: MFAT managers and staff (Wellington) including the Activity Manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok)	• Document review – MFAT policy documents • KIIs • Steering Group meetings
1.2 To what extent are the outputs of the Cambodia Agriculture portfolio programme Activities aligned with Cambodia's government priorities and the ASEAN 4-Year Plan?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Category 8: National and local government agencies	• Document review - Activity documents, MFAT policy documents, RGC policy documents • Interactive workshops • KIIs • Steering Group meetings
Objective 2: Identify to what extent the Cambodia Agriculture portfolio programme Activities are delivering a difference (Effectiveness)		
2.1 To what extent have the Cambodia Agriculture portfolio programme Activities delivered their outputs and progressed towards their intended outcomes?	• Category 2: MFAT managers and staff (Bangkok) • Categories 4 to 6: Implementing partners • Category 10: Smallholder farmer beneficiaries	• Document review – Activity reports • KIIs and IDIs • Participant and site visit observations • Interactive workshops • FGDs
2.2 Which approaches have been the most effective? • Which approaches have been the most effective in reaching marginalised groups (women, people with disability, indigenous groups, etc.)? • Which approaches have been the most effective in raising the incomes of smallholder farmers? • To what extent have projects integrated safeguarding measures (as per MFAT guidelines)?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Categories 4 to 6: Implementing partners • Category 8: National and local government agencies • Category 10: Smallholder farmer beneficiaries	• Document review – Activity reports • Interactive workshops • KIIs and IDIs • Site visit observations • FGDs

REVIEW & SUPPLEMENTAL QUESTIONS	STAKEHOLDER CATEGORY[1]	METHODS
2.3 What have been the key enablers and barriers for the Cambodia Agriculture portfolio programme achievements?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 8: National and local government agencies • Category 10: Smallholder farmer beneficiaries	• Document review – Activity reports • Interactive workshops • KIIs and IDIs • FGDs
2.4 What, if any, other results have programme stakeholders noted (beyond the stated Activity outcomes) from MFAT investments in Cambodian agriculture?	• Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 8: National and local government agencies • Category 9: Private sector leaders, civil society organisations, other Key Informants involved in agriculture in Cambodia	• Document review – Activity reports • Interactive workshops • KIIs and IDIs • Site visit observations
Objective 3: Assess the value of the Cambodia Agriculture portfolio programme Activities delivery model [Efficiency/Sustainability]		
3.1 What have been some of the main challenges to efficient programme delivery and what could be done to overcome these in future? • What could Activity management have done better in programme delivery? • What could MFAT management have done better to guide, support and oversee programme delivery?	• Category 2: MFAT managers and staff (Bangkok) • Categories 4 to 6: Implementing partners	• Document review – Activity documents • Interactive workshops • IDIs
3.2 Do the outcomes achieved so far by the Cambodia Agriculture portfolio programme Activities justify the delivery costs?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok)	• Document review – Activity documents, MFAT policy documents • KIIs • Steering Group meetings/workshop

REVIEW & SUPPLEMENTAL QUESTIONS	STAKEHOLDER CATEGORY[1]	METHODS
3.3 To what extent has the Cambodia Agriculture portfolio programme built the capacity of different stakeholders (government, private sector, community) toward improved market function without on-going support? • Which results and system changes are expected to be sustainable? Which not? Why?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Categories 4 to 6: Implementing partners • Category 8: National and local government agencies • Category 10: Smallholder farmer beneficiaries	• Document review – Activity documents • Interactive workshops • KIIs and IDIs • FGDs

Table 3: Cambodia Agriculture Review Formative Question Framework

REVIEW & SUPPLEMENTAL QUESTIONS	STAKEHOLDER CATEGORY	METHODS
Objective 4: Identify the key learnings to increase positive impact in the future [Lessons learned for improvement]		
4.1 What changes in any future design and delivery of the Cambodia Agriculture portfolio programme could improve programme relevance, coherence, effectiveness, efficiency and/or sustainability? • What are the key lessons learned from the Activities in terms of relevance, effectiveness, efficiency and/or sustainability? • What could be done to ensure the availability of appropriate capacity early on in the Activities?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 7: Tier 2 Activity implementing partners • Category 8: National and local government agencies • Category 10: Smallholder farmer beneficiaries	• Document review – Activity reports, literature on Cambodian agriculture, RGC policy documents • Interactive workshops • KIIs and IDIs • FGDs

REVIEW & SUPPLEMENTAL QUESTIONS	STAKEHOLDER CATEGORY	METHODS
4.2 What are key opportunities and appropriate strategic entry points for future MFAT investment in programming that is complementary to the market trends in Cambodian agriculture?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 7: Tier 2 Activity implementing partners • Category 8: National and local government agencies • Category 9: Private sector leaders, civil society organisations, other Key Informants • Category 10: Smallholder farmer beneficiaries	• Document review – Activity documents, MFAT policy documents, RGC policy documents, literature on Cambodian agriculture • Interactive workshops • KIIs and IDIs • FGDs
4.3 What are the opportunities for MFAT investments to leverage market development trends within agriculture and what are the key design principles necessary to achieve this?	• Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group • Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 7: Tier 2 Activity implementing partners • Category 8: National and local government agencies • Category 10: Smallholder farmer beneficiaries	• Document review- literature on Cambodian agriculture • Interactive workshops • KIIs and IDIs • FGDs
4.4 What evidence or insights can be offered on additional market engagement opportunities that are not yet being explored in the Activities reviewed?	• Category 2: MFAT managers and staff (Bangkok) • Category 3: Other development partners, agencies and projects • Categories 4 to 6: Implementing partners • Category 7: Tier 2 Activity implementing partners • Category 8: National and local government agencies • Category 10: Smallholder farmer beneficiaries	• Document review- literature on Cambodian agriculture • Interactive workshops • KIIs and IDIs • FGDs

Cross-cutting Issues

The Review team will explicitly integrate probing questions into the information collection related to relevant cross-cutting issues: Gender and Social Inclusion; Environmental Stewardship; and Climate Change Adaptation. Questions relating to gender will explore the extent to which - and how - both women and men participate in, lead and benefit from the Activities. Questions on social inclusion will explore what types of smallholder farmers the Activities reach, and to what extent - and how - different groups, particularly those that are vulnerable, benefit. Questions about environmental stewardship will explore to what extent Activities promote behaviours that conserve and restore the environment including the soil, water, air and forests, and other natural ecosystems. Questions about climate change adaptation will explore to what extent - and how - the Activities enable smallholder farmers and other value chain actors to successfully adapt to climate change, minimising risks and increasing resilience.

The Review team will also seek out a diversity of voices during information collection. With respect to gender inclusion, the Review team will ensure that both women and men, as well as people of other genders when possible, are represented in all stakeholder groups. The Review team will seek to include vulnerable groups in the FGDs and IDIs, particularly people with disabilities and ethnic minorities where they are reached by the Activities.

Sampling

The aim of the sampling is to provide the Review team with a meaningful overview of the three main Activities and Tier 2 investments within the time/resource constraints of the fieldwork and remote interviewing.

Key informants among MFAT staff members have been recommended by the Review Steering Group. Key informants among other development partners, agencies and projects, as well as national government agencies, have been chosen purposefully with the aim of gathering the most relevant information for the Review. It is likely that some additions will be made, including in Category 9 - private sector leaders, civil society organisations and other key informants involved in agriculture in Cambodia - as the Review progresses, more nuanced insights into the Activities and portfolio are developed, and issues emerge that require deeper probing.

Implementing partners for both the main Activities and half of the Tier 2 Activities will be interviewed. For the remainder of the Tier 2 Activities, the Review team will meet with the Bangkok Post Activity Manager. The interaction with the main Activity implementing partners will be much more intensive than the Tier 2 Activity implementing partners. The sampling of private, public and civil society organisations and individuals, as well as beneficiaries involved in the main Activities, aims to cover a meaningful selection of the implementing approaches used in each Activity, given time and resource constraints. To counteract bias in selection, the Review team is choosing respondents from full lists provided by the Activity implementing partners. However, the Review team is consulting with the

implementing partners to ensure an adequate overview, to gain participation from disadvantaged groups and to explore contrasting experiences where possible. Table 4 below outlines the sampling for the FGDs. Annex 1 provides an evolving list of stakeholders for the interactive workshops, KIIs and IDIs.

The purposeful sampling of all respondents will take into consideration logistical constraints, remote interviewing when required, and the importance/relevance of a stakeholder's perspectives to the Review questions.

Table 4: Sampling for FGDs

Project	Province	Sample
CQHI	Kandal	2 FGDs (1 FGD with producers and 1 FGD with lead farmers)
	Svay Rieng	2 FGDs with Svay Rieng Agro-Product Cooperative (SAC) producers
STEER	Koh Kong	6 FGDs with producers
CSMART	Siem Reap	6 FGDs with producers
	Banteay Meanchey	3 FGDs with producers
Total		19 FGDs

Information Analysis

The Review team members will compile their own notes during and after interviews and discussions. Regular team discussions will be undertaken throughout the remote interviewing and field research to enable a more comprehensive understanding of emerging trends relating to the Review questions, and to coordinate approaches. On the last day of the Cambodia field visit, the team will have a half-day internal workshop to discuss emerging findings, pinpoint any gaps in information collection and plan the Review analysis in more detail.

All interactive workshop, interview and FGD notes will be summarised using a coding process organised according to the Review question framework presented above. These notes, together with the summaries of the reviewed documents, will then be processed to identify both common and exceptional themes for each of the Review questions. The Review team will synthesise the views of the various stakeholders, applying their professional judgement to interpret any divergent perspectives. The Review team will also bring their professional expertise to bear on analysing the implications of the findings to answer the Review questions. The team will adopt a 'consensus approach' to conclusions; or if views on an issue are diversified, this diversity will be documented in the report.

The Review team will also incorporate the inputs of key stakeholders into the analysis of the Review findings. This will take place through a series of meetings with key MFAT stakeholders and the main Activity implementing partners, at which the Review team will outline preliminary findings for feedback and discussion. This

analysis phase will culminate in a 'sense making' workshop with the Review Steering Group and selected MFAT stakeholders in early April. This intensive analysis process will provide a strong basis for the conclusions and recommendations in the report.

It is important to note that the Review team will not gather quantitative data from primary sources, but will rely on the quantitative data available in Activity reports. During the document review, the Review team noted that reported, quantitative results from the Activities seem not to take attribution into account, but rather report the before and after situation of smallholder farmers and other market actors involved in the Activities. The implementing partners may be planning quantitative studies that address attribution as part of their final impact assessments, but these are not currently available. The Review team will clarify with the implementing partners the approaches taken in measuring reported results and take this into account in the analysis of the reported results. As much as possible, the Review team will mitigate any limitations by asking probing questions to understand the contribution of the Activities to changes in the behaviours and performance of smallholder farmers and other market actors.

3 Review Schedule

Table 5 shows the work schedule for the Review. The timing of the Review takes into account Khmer New Year holidays in Cambodia in April and aligns with MFAT's desire to have the Review completed by the end of June 2024. While the schedule includes the final workshop for the Review taking place in June, flexibility will be maintained to delay this, if required, to accommodate the schedules of key MFAT staff members.

The schedule includes two weeks of field research in Cambodia commencing on 3 March 2024. This will be preceded and followed by remote interviews and consultations with MFAT and other selected stakeholders. Table 6 summarises the schedule for the remote interviews. Table 7 outlines the schedule for the Cambodia field research for the two Review team pairs and the FGD facilitators that will be traveling with them. More details about the schedule and stakeholders are provided in Appendix A. Some interviews with other development partners, agencies and projects, as well as private sector players, may be shifted from in-person to remote if time is insufficient during the Cambodia field research, or to accommodate schedules of respondents.

The Review team has discussed the schedule with the Steering Group members, the Bangkok Post and the main Activity implementing partners. The travel dates both to and within Cambodia have been agreed as have the interactive workshop dates with the implementing partner teams. The Review team has also discussed the interviews and FGDs with the implementing partners, although most interviews have yet to be set. Therefore, the details of the schedule will shift as individual interviews are requested.

Table 5: Overall Work Schedule

Phases and activities / Week starting	12-Feb	19-Feb	26-Feb	4-Mar	11-Mar	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	Total
Submit draft Review Plan to Steering Group																				Phase 1
Respond to Steering Group comments and finalise Review Plan																				Phase 1
Field work (up to 7 weeks)																				
Establish tools for qualitative data gathering for respondent groups identified		3.00	1.00																	4.00
Confirm and invite participants; schedule meetings; flights, transport and logistics		3.00	0.75																	3.75
Interviews with MFAT staff, Main and Tier 2 implementing partner staff, additional doc review		2.00	5.00			3.00														10.00
Train FGD Facilitators			1.00																	1.00
Site visit to Cambodia (incl travel) -Interactive workshops, KIIs, IDIs, FGDs, observation, doc review, triangulation				25.00	24.00															49.00
Collate data according to the Review question framework						5.50														5.50
Feedback meetings with main implementing partners							2.50													2.50
Prepare and engage in 'sense making' workshop with Review Steeering Group on key findings								1.00	1.00											2.00
Deliverable: Field work complete and brief Activity Monitoring Report		**8.00**	**7.75**	**25.00**	**24.00**	**8.50**	**2.50**	**1.00**	**1.00**											**77.75**
Draft Reporting (up to 4 weeks)																				
Internal team workshop and develop report annotated outline								2.00												2.00
Analysis and triangulation of evidence against review questions								3.00	2.00											5.00
Consider future programming options in relation to opportunities, strategic entry points for NZ aid, programming approaches and logical expectations									1.50	1.75										3.25
Draft the Review Report and submit to MFAT for feedback										6.00	6.00	2.00								14.00
Deliverable: Draft Review Report								**5.00**	**3.50**	**7.75**	**6.00**	**2.00**								**24.25**
Final reporting (up to 3 weeks)																				
Debrief with MFAT and other relevant stakeholders on feedback received													Break		0.50					0.50
Address stakeholder feedback - revise and submit Final Review Report																2.00	1.50			3.50
Deliverable: Final Review Report															**0.50**	**2.00**	**1.50**			**4.00**
Workshop/Presentation and Two-page Infographic Summary																				
Develop two-page infographic summary																	1.50	0.50		2.00
Prepare and engage in presentation and final workshop																		1.50	2.00	3.50
Deliverable: Workshop/Presentation and Two-page Infographic Summary																	**1.50**	**2.00**	**2.00**	**5.50**
Total days		**8.00**	**7.75**	**25.00**	**24.00**	**8.50**	**2.50**	**6.00**	**4.50**	**7.75**	**6.00**	**2.00**	**0.00**	**0.00**	**0.50**	**2.00**	**3.00**	**2.00**	**2.00**	**111.50**

Home based activities Field visit Offline

Table 6: Schedule for Remote Interviews and Consultations

Week starting	Stakeholders for meetings
19 February	• MFAT (DEVECO)
26 February	• MFAT (GDS) • MFAT (ARD) • Plant and Food Research team workshop (hybrid in person/remote) • Save the Children NZ managers • MFAT (Tier 2 Activity Manager) • ADRA NZ Pro-Market manager • Caritas He Oranga Taurikura manager • Mekong Institute PROSAFE manager • Live and Learn Angkor Water Resilience manager
18 March	• MFAT (GDS) • MFAT (DCI) • MFAT (BKK) • Any respondents from above that could not be accommodated in February

Table 7: Cambodia Field Research 3-16 March 2024

Days	**Activity/ Location**	**Morning**	**Afternoon**
Review Team Pair 1 and FGD Facilitators			
3-Mar Sun	Phnom Penh	Arrive in Cambodia (Team Leader)	Planning
4-Mar Mon	CQHI Kandal	• PDAFF Kandal • Svay Brateal AC • FGD with producers	• Svay Brateal AC Lead Farmers • FGD with input retailers
5-Mar Tues	CQHI Svay Rieng	• Svay Rieng Agro-products Cooperative (SAC) • FGD with SAC producers	• PDAFF Svay Rieng • FGD with SAC producers
6-Mar Wed	STEER Koh Kong	Travel to Koh Kong	• STEER team workshop • FGD with banana producers
7-Mar Thurs	STEER Koh Kong	• PDAFF • PD of Environment • FGD with banana producers	• PD of Education • PD of Women's Affairs • FGD with cashew producers
8-Mar Fri	STEER Koh Kong	• Vegetable wholesaler • Cashew wholesaler • FGD with vegetable producers	• Banana trader • Vegetable trader • Input supplier • FGD with vegetable producers
9-Mar Sat	STEER Koh Kong	• Vegetable trader • Cashew trader • Crop care and maintenance service provider • Input supplier • FGD with cashew producers	• Vegetable trader • Cashew trader • Travel to Phnom Penh
10-Mar Sun	Phnom Penh	Collate notes	Review team meeting

Days	**Activity/ Location**	**Morning**	**Afternoon**
11-Mar Mon	CQHI Phnom Penh	Lead company partners	Lead company partners
12-Mar Tues	CQHI Phnom Penh	• Lead company partner • GDA	Other private partners
13-Mar Wed	Phnom Penh	• CASIC (Conservation Agriculture and Sustainable Intensification Consortium) • MAFF	• MAFF • MOE
14-Mar Thurs	CQHI Phnom Penh	• Private sector partners • Project partner	Review team workshop
15-Mar Fri	Phnom Penh	Development partners, agencies and projects	Development partners, agencies and projects
16-Mar Sat	Phnom Penh	Depart Cambodia (Team Leader)	
Review Team Pair 2 and FGD Facilitators			
3-Mar Sun	Phnom Penh	Arrive in Cambodia (MSD and Management Specialist)	Planning
4-Mar Mon	CSmart Siem Reap	Travel to Siem Reap	• CSmart team workshop • PDAFF • FGDs with producers
5-Mar Tues	CSmart Siem Reap	• Melon Association • Collectors • FGD with producers	• Input supplier • FGD with producers
6-Mar Wed	CSmart Siem Reap	• ADRA • Input supplier • FGD with producers	• Lead farmers • Equipment supplier • FGD with producers
7-Mar Thurs	CSmart Banteay Meanchey	• PDAFF • Association members • Collectors • FGD with producers	• Input suppliers • Non-partner private sector • FGDs with producers
8-Mar Fri	CSmart Banteay Meanchey	• Lead farmers	Travel to Phnom Penh
9-Mar Sat	Phnom Penh	Collate notes	Collate notes
10-Mar Sun	Phnom Penh	Collate notes	Review team meeting
11-Mar Mon	CSmart Phnom Penh	• iDE Country Director • Input company	• Horticulture buyers
12-Mar Tues	CSmart Phnom Penh	• Equipment supplier • Input company	• Irrigation supplier • Horticulture app partner
13-Mar Wed	CSmart Phnom Penh	• Supermarkets	• Other private partners
14-Mar Thurs	Phnom Penh	Development partners, agencies and projects	• Review team workshop
15-Mar Fri	Phnom Penh	Depart Cambodia (MSD and Management Specialist)	

3.1 Deliverables

The expected deliverables, and the timing of these deliverables during the Review, are summarised in Table 8 below.

Table 8: Cambodia Agriculture Review deliverables

No.	Outputs	Description	Due date
Phase One			
1	Review Plan	Inception report confirming the review questions and scope and outlining a detailed review methodology, lists of secondary and primary information sources, stakeholder engagement plan, and work plan.	Friday, 23 February 2024
Phase Two			
2	Brief Activity Monitoring Report	Brief monitoring report outlining the sites visited, research conducted, dates and key observations.	Friday, 29 March 2024
3	Draft Review Report	A draft report presenting the findings of the Cambodia Agriculture portfolio programme Review including the research findings, analysis and recommendations. An annotated outline will be prepared in advance of the submission deadline for review and discussion with MFAT.	Tuesday, 30 April 2024
4	Final Review Report	A final report in a Word document, approximately 30-50 pages (plus Annexes). The report will summarise the evidence collected, present analysis and findings against the Review questions and provide a recommended direction for future programming investment, including opportunities for sustained and scaled impacts, strategic entry points for New Zealand aid, programming approaches and logical expectations.	Friday, 7 June 2024
5	Presentation and two-page summary	A presentation of key findings and conclusions to relevant MFAT stakeholders, including a slide deck. A two-page summary of the Review that conveys the essential findings and recommendations.	Friday, 28 June 2024

4 Review Stakeholders

The Review's approach will be consultative and participatory, and the Review team will engage with a range of stakeholder groups (See box).

Cambodia Agriculture Review Stakeholders and Respondents Categories

Category 1: MFAT managers and staff (Wellington) including the Activity manager and the MFAT Review Steering Group

Category 2: MFAT managers and staff Bangkok Post

Category 3: Other development partners, agencies and projects working in Cambodian agricultur

Category 4a: CQHI implementing partner - Plant and Food Research

Category 4b: CQHI collaborating organisations (private, public, civil society)

Category 5a: CSmart implementing partner - iDE

Category 5b: CSmart collaborating organisations (private, public, civil society)

Category 6a: STEER implementing partner - Save the Children

Category 6b: STEER collaborating organisations (private, public, civil society)

Category 7: Tier 2 Activity implementing partners

Category 8: National and local government agencies

Category 9: Private sector leaders, civil society organisations, other key informants involved in agriculture in Cambodia

Category 10: Smallholder farmer beneficiaries

Table 9 below outlines the engagement plan with each of the stakeholder groups listed above. It will guide the interaction of the Review team with the stakeholders, helping to ensure respectful and productive engagement.

Table 9: Stakeholder Engagement Plan

Stakeholder	Role	Issues/Constraints	Involvement/Participation
Category 1: MFAT managers and staff (Wellington) including the Activity Manager and the MFAT Review Steering Group	Ownership/funding Design Harmonisation Oversight and management Review and learning	Available for remote engagement. Flexibility required to accommodate travel and other commitments.	Review Steering Group Information/documentation KIIs Interactive workshop
Category 2: MFAT managers and staff Bangkok	Ownership Design Harmonisation Oversight and management Review and learning	Available for remote engagement. Flexibility required to accommodate travel and other commitments.	Review Steering Group Information/documentation KIIs Interactive workshop
Category 3: Development partners, agencies and projects	Collaboration Country oversight	Available for in-person or remote engagement. Flexibility required to accommodate other commitments.	Information/documentation KIIs
Category 4a: CQHI Implementing partner - Plant and Food Research	Ownership Project Management Collaboration Review and learning	Careful scheduling to ensure full team engagement in NZ and Cambodia combining remote and in-person engagement.	Information/documentation Interactive workshop and IDIs Site visit Accompany the Review team on some field visits but not participate in IDIs or FGDs
Category 4b: CQHI collaborating organisations (private, public, civil society)	Ownership Collaboration Review and learning Primary beneficiaries	Available for in-person engagement with time limitations; some private sector companies may prefer remote engagement	Information/Documentation Site visits IDIs
Category 5a: CSmart Implementing partner - iDE	Ownership Project management Collaboration Review and learning	Flexible and available for in-person engagement in Siem Reap. Country Director available for in-person engagement in Phnom Penh.	Information/documentation Interactive workshop and IDIs Site visit Accompany the Review team on some field visits but not participate in IDIs or FGDs
Category 5b: CSmart collaborating organisation (private, public, civil society)	Ownership Collaboration Review and learning Primary beneficiaries	Available for in-person engagement with time limitations; some private sector companies may prefer remote engagement	Information/documentation Site visits IDIs

Stakeholder	Role	Issues/Constraints	Involvement/Participation
Category 6a: STEER Implementing partner - Save the Children	Ownership Project management Collaboration Review and learning	Careful scheduling to ensure full team engagement in NZ and Cambodia, combining remote and in-person engagement. Close of project in April 2024 will limit time and some staff availability.	Information/documentation Interactive workshop and IDIs Site visit Accompany the Review Team on some field visits but not participate in IDIs or FGDs
Category 6b: STEER collaborating organization (private, public, civil society)	Ownership Collaboration Review and learning Primary beneficiary	Available for in-person engagement with time limitations.	Information/documentation Site visits IDIs
Category 7: Tier 2 Activity Implementing Partners	Ownership Project Management Collaboration Review and learning	Available for remote engagement. Flexibility required to accommodate other commitments.	Information/documentation KIIs
Category 8: National and local government agencies	Ownership Country oversight and management Collaboration Review and learning Primary beneficiaries	Available for in-person engagement with time limitations. Early meeting requests required for national government agencies.	Information/documentation KIIs
Category 9: Private sector leaders, civil society organisations, other key informants involved in agriculture in Cambodia	Collaboration Review and learning	Available for in-person or remote engagement. Careful scheduling to ensure availability of appropriate respondents.	Information/documentation KIIs
Category 10: Smallholder farmer beneficiaries	Ownership Review and learning Primary beneficiaries	Available for local, in-person engagement with time limitations.	FGDs

5 Other Considerations in the Review

5.1 Governance Arrangements

The Review team will report to the MFAT Senior Adviser Agricultural Value Chains and Market Systems - the Activity Manager (Andy Hunter) and Project Manager (Beth Oliver) within MFAT's Development Economy and Prosperity Division (DEVECO) throughout the Review, and will be guided by regular interactions with the Review Steering Group. A schedule of Steering Group meetings and feedback has been agreed, as outlined in Table 10 below. In addition, the Activity Manager regularly consults with the Steering Group to provide guidance to the Review team.

Table 10: Schedule for Steering Group – Review team interaction

Interaction	Date
Phase One	
Inception Meeting Steering Group – Review team	Friday, 2 February
Draft Review Plan	Tuesday, 13 February
Steering Group comments on draft Review Plan	Friday, 16 February
Final Review Plan	Friday, 23 February
Phase Two	
KIIs with Steering Group members	Week of 19 February Week of 18 March
Cambodia Field Research	Sunday, 3 – Friday, 15 March
Brief Activity Monitoring Report	Friday, 29 March
'Sense making' Workshop Steering Group – Review team	Tuesday, 9 April
Draft Review Report	Tuesday, 30 April
Steering Group meeting to discuss draft Review report and communication of findings and recommendations	To schedule between 1 and 11 May
Steering Group comments on the draft Review report and guidance on communication of findings and recommendations	Friday, 17 May
Debrief on feedback received with selected Steering Group and Review team members if needed	Week of 20 May
Final Review Report	Friday, 7 June
Two-page Review summary	Friday, 14 June
Final Workshop with Steering Group and selected others	Week of 17 or 24 June (or later if needed)

5.2 Quality Considerations

The Review team will interact and coordinate closely with the Activity Managers of the three main Activities in the Cambodia Agriculture portfolio programme as well as the implementing partner agency managers for these three investments. This will help both to ensure that the Review team appreciates the approach and full scope of these Activities and to plan and carry out the Review efficiently. The Review team will seek assistance from the implementing partner agencies to

provide information on relevant stakeholders and to assist with contacting them, including public and private sector partners, beneficiaries and other relevant value chain actors. The FGDs with farmers and input suppliers will be managed by a professional facilitator and note-taker in Khmer. The Research Specialist will train them in the objectives and content. During the field work, the Review team will have check-ins to adjust the line of questioning based on the progress of data collection.

The sampling choices will be made by the Review team in order to maintain the integrity of the Review. In addition, the Activity Managers and implementing agencies will not be involved in key informant interviews, FGDs or in-depth interviews, nor in the Review team deliberations. It will be important that the Review team establishes good relationships with the Activity Managers and implementing agencies and understands their perspectives, while maintaining independence in the Review.

5.3 Ethical Considerations

The Review team will employ ethical, gender and culturally sensitive approaches for data collection. These include:

- obtaining voluntary and informed consent prior to any interview or FGD;
- explicitly explaining to participants that they do not have to answer every question;
- considering gender balance and the inclusion of people from disadvantaged groups in the sampling for interviews and FGDs;
- ensuring that the interview times and locations (if applicable) are convenient and accessible to women and people from other disadvantaged groups; and
- creating an atmosphere in interviews and FGDs that encourages women and people from other disadvantaged groups to participate actively and frankly.

Although the Review team is well-versed in the cultural context of Cambodia, they will also consult with the implementing partner teams to understand any particular approach that should be applied in the context of the project locations. The Review team will also cooperate with the implementing partners to ensure women and people from other disadvantaged groups, such as young people, people with disabilities and indigenous people, are included in interviews and FGDs where the Activities are reaching them. The implementing partners, who already have the trust of the communities, have agreed to assist the Review team with inviting participants for interviews and FGDs. At the time of invitation, the implementing partners will explain the Review and give those invited the choice of whether to participate or not.

The interviews and FGDs will begin with an introduction to the Review team, the broad areas of questioning for the Review, and the opportunity for respondents to opt out if they do not wish to participate. The respondents will also be informed about how the information that will be obtained will be put to use. The questions for the interviews and FGDs will focus on the information and insights needed to

answer the Review questions. All members of the Review team have exemplary reputations in research, data collection and analysis that adhere to the highest standards of ethical, respectful, and culturally sensitive engagement.

The Review team will carefully manage all interview notes to ensure privacy and confidentiality. Responses will be anonymised after interviews and in FGD notes and participants' personal data securely stored. All electronic files containing primary data will not be shared beyond the Review team members and will only be stored in one secure location accessible only to the Review team. All members of the Review team, the FGD facilitators/note-takers and the translator for the FGD notes have signed agreements that include a clause on confidentiality.

All information from the stakeholders will be triangulated across interviews and with findings from the document review. The final Review findings will be presented in the report. The team will refrain from using the names of respondents in the report as a general rule. In the few cases where attribution may be warranted, the Review team will obtain prior informed consent from the respondent.

The Review team does not expect to engage with children but will adhere to MFAT guidelines in the unlikely event that this engagement is warranted.

5.4 Limitations, Risks and Constraints

Table 11 below presents the potential risks while implementing the Review along with the risk management strategies that will be applied by the Review team.

Table 11: Risks and management strategies

Risks	Risk management strategies
Lack of a common understanding of the Review objectives	Establish a common understanding of the Review objectives during the project inception meeting and during the design of the Review Plan. Ensure sign-off by MFAT on the Review Plan. Plan regular interactions between the Steering Group and the Review team. Ensure that open communication is established and that potential issues can be highlighted as these arise.
Low quality of existing data, missed information or data sources	Reporting to MFAT about the data gaps based on the document review and agreeing on the Review methodology and implementation plan with MFAT prior to the Review commencement. Sign-off from MFAT on the respondent list as part of the Review Plan. Consultation with key stakeholders during the Review planning process.

Risks	Risk management strategies
Lack of availability of stakeholders	Early identification of key stakeholders, with contact to be initiated at an early stage. Build on Review team members' agency contacts and relationships with partners, government agencies and private sector actors. Seek advice from MFAT Activity Managers, the Bangkok Post Development Team and the implementing agency partners. Develop a list of alternative stakeholders in case of need. Use a snowballing method to access private sector actors up and down the value chain, e.g. when interviewing a wholesaler, ask for contact details of their retail clients.
Natural disaster and security during travel	Check key information sources regarding potential natural disasters or security issues prior to the start of the field research. Be guided by Laws and any State of Emergency Declarations or other warnings. Develop a simple health, safety and security protocol as part of the Review Plan, to include incident reporting and management. Re-evaluate priority activities if threats change and adjust accordingly.
Inability to travel to conduct field research	Ensure all team members are vaccinated against COVID 19. If necessary, be flexible, and conduct the parts of the Review that are affected through remote means.
Work plan delays	Develop a comprehensive project timetable with realistic timelines for tasks and deliverables. Communicate as early as possible during the Review planning on time-windows for expected feedback/approval from MFAT. Establish and maintain a meaningful communication strategy with MFAT and between team members.
Positive/negative bias from respondents	Triangulate between the interviews, FGDs and the document review to ensure cross-referencing of the data. Speak to the respondents in as casual a setting as possible to encourage them to speak freely. Follow-up questions will be asked regarding the important issues pertaining to the Review objectives. Do not ask leading questions. Make focus groups as homogenous as possible to ensure respondents feel freer to speak openly. Emphasise the separation between the person asking the questions and the funder. This should help allay the perception that what is said in an FGD or interview will directly affect a stakeholder's funding.

6 Communicating Review Findings

6.1 Communications Plan

The Review team has considered the best ways to communicate with the major stakeholder groups to ensure that the Review is properly informed, its outcomes appropriately disseminated, and its findings used to inform decision-making on the future of the Cambodia Agriculture portfolio. Table 12 below summarises the communication needs that have been identified.

6.2 Dissemination Plan

The results of the Review will be reported and disseminated within MFAT and to implementing partners and other relevant stakeholders.

The Review team has integrated specific initiatives into the Review Plan to improve stakeholder ownership and engagement, and the dissemination and use of the findings.

1. The Review team will meet with the Senior Policy Officer for ASEAN and the Bangkok Post in the week after the field research to share progress on the Review, gain their inputs on any areas of concern, and exchange initial impressions and findings, as these MFAT staff will also have been on a recent field mission to Cambodia.
2. The Review team will meet with the three main Activity implementing partners following the Cambodia field research to share initial findings, gather their feedback and get input into the analysis of the findings.
3. The Review team will conduct a 'sense making' workshop in early April with the Review Steering Group and selected other MFAT staff members to present the preliminary findings of the Review for discussion. The workshop will cover feedback on the findings and areas that may need improvement. It will also draw-out lessons learned from the Cambodia Agriculture portfolio and begin to consider the possible implications for the future direction of the portfolio. This early input into the recommendations will both improve the quality of the recommendations and increase the ownership of them.
4. The final Cambodia Agriculture Review report will be concise, professionally edited, and suitable for e-publication by MFAT. It will include an Executive Summary of the key findings. The Review Team will provide a list of entities who have contributed information to facilitate MFAT's distribution of the report.
5. The Review team will also produce a two-page summary of the Review. It is proposed that this take the form of two, one-page infographics that simply and concisely summarise the high-level outcomes of the Review. The first infographic could focus on the achievements of the Cambodia Agriculture portfolio over the last two trienniums and be suitable for distribution to all stakeholders. The second infographic could summarise the recommendations related to future direction of the Cambodia Agriculture portfolio. The

audiences for this second page would be a more restricted group of MFAT stakeholders and potential future implementing and development partners. The Review team will discuss and agree the appropriate format and content for the summary with the Steering Group before it is developed.

6. Once the final report has been accepted, it is proposed that MFAT host a short workshop to discuss the findings. This would be held in Wellington and would be attended in-person by the Team Leader. Other members of the Review team, as well as key staff from the Bangkok Post, may join remotely. The focus of this event will be on the formative outcomes of the Review. The Review team will briefly summarise the Review findings and present their perspective on the direction for future programming including opportunities for sustained and scaled impacts, strategic entry points for New Zealand aid, programming approaches and logical expectations. The workshop will provide an opportunity for participants to clarify points in the Review with the Review team and discuss concrete options for moving forward. The presentation slides will be available to MFAT for future reference and use.

It is important to note that the formative aspects of the Review will not constitute a portfolio concept design. This would be a logical next step after the Review.

Table 12: Communication needs and approaches to inform the Review

Partners and Stakeholders	Interest/stake/role in the Review	How best to communicate?	What?	Who?	When?
MFAT	Current funder of the Cambodia Agriculture portfolio programme Contributing to inclusive economic development, food security and climate change adaptation in Cambodia	Regular, iterative discussions held remotely Review report Interactive workshops Review summary	Key findings on strategic relevance and coherence Key findings on progress, challenges and lessons Options for future portfolio direction including key opportunities and strategic entry points	• Review Steering Group • Bangkok Post • Other key MFAT stakeholders	Ongoing 'Sense making' Workshop - April Final Workshop - June Review Report – June Review summary - June
Main Implementing Partners	Implementing partners concerned about meeting contractual obligations and catalysing development outcomes	Several, iterative discussions held both remotely and in person Review Report by email Review summary	Confirming achievements, challenges and lessons Possible future opportunities for engagement in Cambodia agriculture	• New Zealand-based implementing partner managers • Cambodia-based implementing partner managers and staff members	Ongoing including site visits Post-field research meetings - March Review Report - June Final Workshop – June Review summary - June
Tier Two Implementing Partners	Implementing partners concerned about meeting contractual obligations and catalysing development outcomes	Remote meetings during Phase II Review report Review summary	Key findings on achievements, challenges and lessons Options for potential future collaboration in Cambodia agriculture	• New Zealand-based implementing partner managers • Cambodia-based implementing partner managers	During Phase II meetings - February Review Report – June Review summary - June

Partners and Stakeholders	Interest/stake/role in the Review	How best to communicate?	What?	Who?	When?
Development Partners, Agencies and Projects in Cambodian agriculture	Ongoing and potential future collaborators with MFAT Contributing to inclusive economic development, food security and/or climate change adaptation in Cambodia	In person or remote meetings during Phase II Review Report Review summary	Key findings on achievements, challenges and lessons Harmonisation of efforts Options for potential future collaboration in Cambodia agriculture	• Cambodia-based managers of development partners, agencies and projects (e.g. Swisscontact, CAPRED, IFAD, Action Aid, etc.)	Review Report – June Review summary - June
RGC national and local agencies	Mandate to promote inclusive growth in agriculture, improve food security and/or help farmers and agri-businesses mitigate and adapt to climate change Seeking lessons and opportunities for collaboration	In person meetings during field research Review Report by email Review summary	Confirming relevance of MFAT support to government policies and programmes Understanding achievements, key challenges, and lessons Possible future opportunities for engagement with MFAT	• MAFF • PDAFFs • GDA (General Directorate of Agriculture) • Ministry of Environment • PD of Environment • PD of Women's Affairs • PD of Education	During Cambodia field research - March Review Report - June Review summary - June
Cambodia private sector in agriculture	Managing businesses in Cambodian horticulture Looking for lessons learned and opportunities in agriculture	In-person meetings during field research Review Report by email Review summary	Understanding achievements, key challenges, and lessons Possible future opportunities for engagement with the MFAT Agriculture portfolio	• Private sector partners of implementing partners	During Cambodia field research - March Review Report as soon as publicly released Review summary as soon as publicly released

Partners and Stakeholders	Interest/stake/role in the Review	How best to communicate?	What?	Who?	When?
Communities and Smallholder Farmers involved in Activities	Dependent on horticulture for subsistence and income Looking for lessons learned, particularly on climate change adaptation, and opportunities in agriculture	FGDs and in-person meetings during field research Review summary disseminated by implementing partners Largely beyond the scope of the Review	Consider communicating the major achievements of the MFAT Cambodia Agriculture portfolio and/or discussing future directions and opportunities	Communities and smallholder farmers involved in Activities in the central, northwest and southwest regions.	During Cambodia field research - March

Appendix B: Cambodia Agriculture Literature Review

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Cambodia Agriculture Literature Review

The Review team examined available documentation to better understand the Activities in the portfolio as well as to situate them in the context and trajectory of Cambodian agriculture. This document review uses the Review objectives and key questions as an organisational framework. It focuses on the literature relating to the Cambodian agricultural context to help to address the Review Objective 1: Assess to what extent the Cambodia Agriculture portfolio program is fit for purpose. The analysis of the Activity literature has been incorporated into the Activity Reviews in Appendices C, D and E, and the Summary of the Tier 2 Activities in Appendix F.

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Completion Date: 07 February 2024

Review Question 1.1: To what extent is the MFAT Cambodia Agriculture investment portfolio aligned with key trends in the real economy of the Cambodian agricultural sector?

Review Question 1.1.1 What are the key features of Cambodia's agriculture sector, particularly within the private sector, and what are key trends in regard to the maturation process of the agricultural market system?

1. Overall growth of the Cambodian economy

In the two decades preceding the COVID-19 pandemic, Cambodia experienced uninterrupted economic expansion. The country had one of the fastest-growing economies in the world between 1998 and 2019 with a sustained average real growth rate of 7.7%, driven largely by tourism, manufacturing exports, real estate, and construction. The country reached lower-middle-income status in 2015 and aspires to attain upper-middle-income status by 2030 and high-income economy status by 2050.[2] Cambodia has achieved considerable gains in socio-economic indicators such as health and education, but equitable access to basic public services remains a challenge. The poverty rate in the country declined from 33.8% in 2009 to 17.8% in 2019.[3]

1.1 Agricultural Production and Share

Agriculture plays an important role in the overall economic growth of Cambodia. According to the 2021 Cambodia Agriculture Survey, there are 2.2 million household agricultural holdings, representing 63% of all households in Cambodia, involved in agricultural production.[4] More than half of Cambodian households continued to depend on subsistence agriculture for their livelihoods. Home consumption was reported as the main agricultural product destination by 58% of the household holdings in Cambodia, while the other 42% mentioned that agricultural production was mostly for sale. This indicates that, despite efforts to move toward export-oriented commercial agriculture, the country's agriculture sector remains subsistent. The survey estimated that approximately 92% of the 2,226,000 household agricultural holdings were growing crops, mainly non-aromatic paddy, banana, mango, and coconut in all socio-geographic zones, except for the plateau zone where cashew gains more prominence than coconut. The agriculture sector, therefore, continues to play a strategic role in maintaining the availability of food and achieving food security, although the share of agriculture in GDP declined to 22% in 2022, down from 33.5% a decade ago. This is due to the country's structural transformation. However, the agricultural value-add increased

[2] RGC (2023). Pentagonal Strategy – Phase I for Growth, Employment, Equity, Efficiency and Sustainability, Building the Foundation Towards Realizing the Cambodia Vision 2050

[3] CDRI (2023). Poverty and Covid-19 in Cambodia: Lessons and Future Preparedness, Policy Brief No. 03.

[4] RGC (2021) Cambodia Agricultural Survey 2021

from approximately USD3.8 million in 2010 to USD5.5 million in 2019, with average growth of 4% per annum.[5]

The share of agricultural labour in total employment dropped from 54% in 2010 to 35.5% in 2020 and is forecast to decrease to 23-25% by 2030.[6] This decrease presents an opportunity for mechanisation in response to the lack of labour in agricultural production. However, due to unbalanced modernisation in other parts of the economy, agriculture is not modernising fast enough, leading to low productivity levels. This is despite the fact that agricultural employment in Cambodia is now comparable to elsewhere in developing East Asia.[7] Thus, restoring robust agricultural growth is a priority for sustaining rapid and inclusive economic growth in the short-to-medium term.

Crop production in 2023 accounted for roughly 57.1% of agricultural GDP, followed by fisheries, livestock, and forestry.[8] Rice production dominates crop production and is grown on three-fourths of all cropped lands,[9] accounting for 85% of annual food production and almost 70% of dietary energy needs. The average growth in paddy rice production in the past 10 years has been about 3.1% per annum (going from 8.2 million tons in 2010 to 10.8 million tons in 2019, and 12.21 tons in 2021). The paddy rice surplus has seen noticeable growth, from 3.9 million tons in 2010 to 5.75 million tons in 2019, and 6.9 tons in 2021. The paddy rice yield increased from 2,970 kg/ha in 2010 to 3,335 kg/ha in 2019. The average annual growth in rice cultivated areas is about 2.4% (due to intensive farming system practices), and that of harvested areas is about 2.2%, while the average yield is increasing by about 2% per year.

Vegetable production increased from 0.64 million tons in 2018 to 0.95 million tons in 2022. However, the production could supply only 78-80% of local consumption. The consumption per year was estimated to be 1.24 to 1.55 million tons. Thus, there is still a shortage of 0.30 to 0.60 million tons.[10]

The production of subsidiary crops has fluctuated every year over the past 10. Production reached over 6.14 million tons in 2010 and increased dramatically to over 14.72 million tons in 2014 and 16.64 million tons in 2018 (with average growth of 13% in the past 10 years). The growth of subsidiary crops was about 5% in 2009 and 9.6% in 2015, but only 1.4% in 2018 as a result of a severe outbreak

[5] RGC (2022). National Agricultural Development Policy 2022-2030.

[6] RGC (2022). National Agricultural Development Policy 2022-2030.

[7] CAVAC (2020). Structural transformation and the role of agriculture in the Cambodian economy: Past, present and future.

[8] MAFF (2022). Consolidated annual report for 2023 and directions for 2024, Ministry of Agriculture, Forestry and Fisheries.

[9] Other crops grown include subsidiary crops (maize, cassava, sweet potatoes, vegetables, and mung beans), industrial crops (soybeans, peanuts, sesame, jute, and tobacco), and perennial crops (bananas, mangos, jackfruit, coconuts, black pepper, and oranges).

[10] GDA/MAFF (2023). Cambodia vegetable production: a fortnightly report, 27 Dec 2023

of mosaic disease in cassava production. In 2021, industrial crops increased up to 19 million tons.

The cassava crop contributes around 3-4% to domestic production in the agricultural value chains. Cassava production increased by 13 million tons per annum from 2015 to 2019, of which 15% was used for domestic processing while 85% was exported overseas, especially to neighbouring countries.

Cashew nut production is considered as an industrial crop with significant potential in Cambodia. The cashew crop has increasingly expanded, remarkably growing from 93,944 tons in 2015 to 208,769 tons in 2019 thanks to favourable market conditions and demand for cashew products. Due to limited domestic processing capacity, 97% of raw cashew have been exported to neighbouring countries.

Mango production has progressed remarkably in the last 10 years. Mango cultivated areas surged to about 124,000 ha in 2019 compared with 24,000 ha in 2010. The harvested area was about 91,000 ha, which could yield 144 million tons. Despite strong progress, mango processing and formal exports of fresh mango are still comparatively limited. In 2019, 5% of the processed and fresh mangoes of the total products were formally exported.

1.2 Agricultural Exports

The total export of agricultural products (based on data collected through the formal sanitary and phyto-sanitary standards (SPS) monitoring system has increased since 2013, reaching 3.6 million tons equivalent to USD1 billion (it was only 680,000 tons in 2012). According to a GDA report,[11] Cambodia exports ten main commodities, among them are paddy, milled rice, cashew, banana, mango and maize. Exports increased from 4.88 million tons in 2019 to 8.45 million tons in 2023, of which fresh and dried cassava accounted for 38%, paddy 32%, milled rice 8%, unprocessed cashew 5%, fresh banana 3%, fresh mango 2%, maize 1%, and others 9%. Exporting destinations for Cambodian agricultural products include ASEAN countries (Thailand, Vietnam, Malaysia, Singapore), EU countries, India, Japan, Korea and the USA.

1.3 Agricultural land holdings

According to the census of agriculture in Cambodia 2013,[12] the average agricultural land operated per farm household was around 1.6 hectares (average area per plot 0.6 ha). Farm households with a total holding size of less than 1 ha and between 1 ha to 3.99 ha account for 47% and 45%, respectively. The average area of separate agricultural lands used by the household holdings in the Tonle Sap Lake Zone and Plateau Zone were higher than the national average. Sixteen provinces have average household agricultural holdings larger than the national average of 1.64 ha. The average size in those provinces ranged from 5.01 ha in Oddar

[11] General Directorate of Agriculture (2024) Annual Consolidated Report for 2023 and Directions for 2024

[12] National Institute of Statistics (2015) Census of Agriculture of the Kingdom of Cambodia 2013 https://nis.gov.kh/nis/CAC2013/Final_Report_En.pdf

Meanchey and 3.01 ha in Banteay Meanchey to 1.75 ha in Kampong Thom and Tbong Khmum. In the Plateau Zone, all provinces (except for Kampong Speu) had an average land size of more than 2 ha. Provinces with the average size below the national average included Kampong Speu (0.96 ha), Kep (0.91 ha), Takeo (0.91 ha) and Kandal (0.83 ha).

2 Climate Change and Impacts

Cambodia is highly vulnerable to the impacts of climate change, especially those related to the variability of precipitation and the frequency and intensity of floods and droughts. The country is particularly prone to flooding during the wet season from May to September—80% of the country is located within the Mekong River and Tonle Sap basins—and to prolonged droughts during the dry season. The impact of climate change can be witnessed in increased temperatures, which have risen 0.18°C per decade.[13] The number of 'hot days' in Cambodia has increased by as many as 46 days per year over the last century. The past 20 years have seen substantial losses in crop production due to flooding (roughly a 62% loss) and drought (about a 36% loss). Between 1987 and 2020, six major drought events affected more than nine million Cambodians causing a significant impact on communities, particularly farmers and small landholders, with crop damage and loss of livelihoods.[14] Climatic events have disproportionately affected poor and vulnerable households. In 2020, severe flooding in 20 provinces affected 800,000 people, of whom more than 388,000 were recognised as belonging to poor and vulnerable households. Widespread damage to houses, agricultural lands, and key infrastructure - such as roads, bridges, irrigation schemes, and dam failures - resulted in an estimated loss of over USD450 million (in nine of the 20 provinces). Approximately 2.4 million people, or 15% of Cambodia's population, are defined as 'near poor'[15] and susceptible to falling back into poverty due to economic shocks, natural hazards, and environmental degradation.[16] In addition, climate change may reduce the country's absolute GDP by 2.5% in 2030, and by up to 9.8% in 2050, thus delaying the country's prospects for reaching upper-middle-income status by that date.

3 Challenges

Below are some of the key constraints in the Cambodian agricultural sector:

- Lack of financial capital
- Lack of quality seeds
- Lack of technologies and innovations

[13] USAID (2019) Climate Risk in Cambodia: Fact Sheet https://www.climatelinks.org/sites/default/files/asset/document/2019_USAID_Cambodia%20CRP.pdf

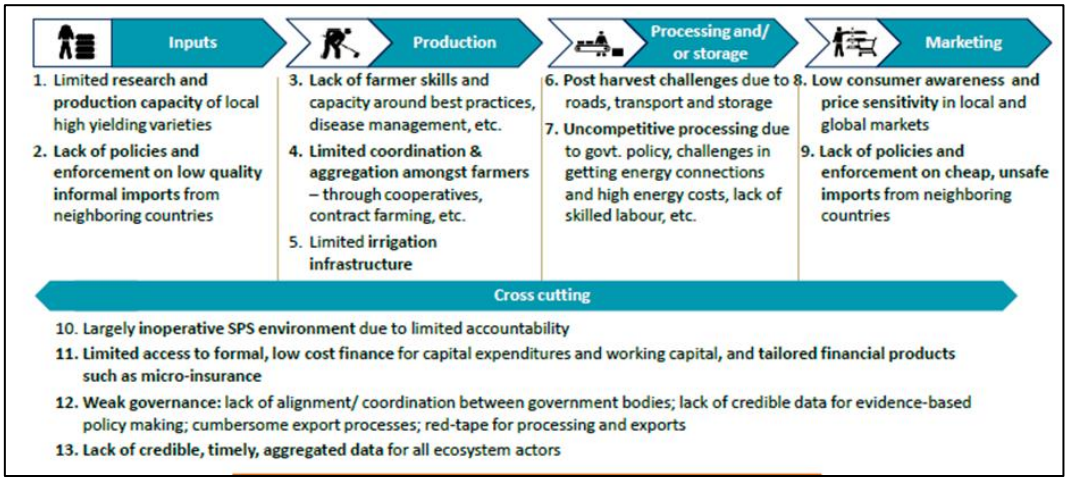
[14] International Disasters Database (2020) The Emergency Events Database (EM-DAT)

[15] Defined as people whose daily per capita consumption lies between the poverty line and 1.25 times the poverty line.

[16] The World Bank (2022) Cambodia Poverty Assessment 2022: Toward a More Inclusive and Resilient Cambodia https://www.worldbank.org/en/country/cambodia/publication/cambodia-poverty-assessment-2022-toward-a-more-inclusive-and-resilient-cambodia

- Lack of cropping calendars to adapt to climate change and sustain year-round supply
- Limited agriculture extension services
- Lack of processing facilities
- Low produce quality
- Lack of systems in compliance with sanitary and phyto-sanitary standards (SPS) and other standards required by importing countries (laboratories included).

Figure 1: Challenges of Agricultural Value Chains in Cambodia[17]



The growth of the agriculture sector has been slow, with an annual rate of 1.0% from 2014 to 2018,[18] and less than 1% in the years following the COVID-19 outbreak. This is mainly attributed to the negative impact of extreme weather conditions such as floods and droughts, the drop of agriculture commodity prices, and the slowdown of agriculture productivity under the constraints of the limited expansion of cultivated area. Other factors included a lack of investment in R&D in good quality seeds, limited access to water, limited farming techniques, inefficient agriculture input utilisation, inefficient mechanisation, lower human capital, and lack of diversification. Boosting agricultural productivity—land, labour and total factor productivity (TFP)— is the key to drive agricultural growth in the medium- and long-term by addressing the aforementioned issues.

Compared with neighbouring countries, Cambodia still lags behind in terms of product quality, productivity, and export competitiveness. This is due to low value-

[17] USAID (2019) Cambodia Agriculture Competitiveness Opportunity Assessment https://agrilinks.org/sites/default/files/2018_cambodia_opportunity_identification.pdf
[18] Lao Poriveth (2019) Cambodia's Agriculture Productivity: Challenges and Policy Direction https://www.nbc.gov.kh/download_files/research_papers/english/3.1.1.Report_of_Cambodia's_Agriculture.pdf

addition, the high costs of production, unfavourable transport conditions, burdensome border procedures, and market diversification.[19]

4 Opportunities

Below are key opportunities to increase growth and improve the competitiveness of the Cambodian agricultural sector based on the literature review. During the field research, the Review team investigated which were the most significant gaps and what were the opportunities to improve growth and competitiveness in line with economic trends, while also increasing smallholder farmer incomes, resilience, and inclusion in the sector. During the analysis, the Review team considered which of these opportunities might be best suited to New Zealand support.

- Promoting investments in the domestic processing of the primary agricultural products to increase value-addition
- Lowering costs of production including electricity, gas or oil, water, and quality transportation for better efficiency at each stage of value chains
- Improving technology for productivity and quality assurance of the products for commercialisation
- Expanding export markets, not depending on trade concessions or free trade agreements.

According to the MAFF annual report (2023), there are 232 Economic Land Concession (ELC) projects in 19 provinces with a contracted land area of 1.15 million hectares. But only 212 projects have an active investment contract, and are employing 56,743 people including office staff, technical staff, and workers. The fees collected in 2023 amounted to USD4.23 million. The prioritised commodities for ELC projects are industrial crops—mainly rubber, oil palm, banana, cassava, cashew, eucalyptus, teak, pine tree, acacia, and sugarcane—plus livestock. Horticulture and subsidiary crops of high value and in market demand are also allowed.

5 Gender Context

In 2020, women's labour participation rate in Cambodia was 84.1% compared with men's at 91%.[20] Women aged 15 to 64 years were employed at 38% in the agriculture, forestry and fishing sectors, while 24.2% were in the industrial sector and 27.8% in providing services. In the agriculture sector, the majority of women are represented in low-skilled and low-paid roles. Unpaid family work involved 25.7% of rural women, more than twice the rate of rural men at 11.5%. Most

[19] Sok Piseth, Yang Monyoudom, Houn Tynarath (2021) Cambodia's Agri-Food Trade: Structure, New Emerging Potentials, Challenges and Impacts of Covid-19 https://www.canr.msu.edu/prci/PRCI-Research_Paper_5_Cambodia_updated.pdf

[20] National Institute of Statistics (2020) Report of Cambodia Socio-Economic Survey 2019/20 https://www.nis.gov.kh/nis/CSES/Final%20Report%20of%20Cambodia%20Socio-Economic%20Survey%202019-20_EN.pdf

female household member workers are not paid for their work in contributing to agricultural households.

According to the country gender assessment in 2023 commissioned by the FAO,[21] girls and women farmers have been better recognised and given opportunities in Cambodian political and economic activities compared with the past two decades. However, gender inequalities remain. These include entrenched gender and social norms that consider men and boys to be superior to women and girls. Women still earn an average of 19% less than men for equivalent work. Women in rural areas have limited access to, and control of, productive resources, natural resources, and services. They are also at a disadvantage in accessing markets and other opportunities to scale-up their businesses. Furthermore, there is still few women holding high-ranking positions in government, with lower representation at decision-making positions compared with men.

Table 1: Gender-Disaggregated Employment and Labour Force

Employment and Labor Force	Women (percent)	Men (percent)
Labor force participation	84.1	91
Employment	81.	90
- Paid employee/employer	41.2	53.6
- Own account/self-employed worker	38.6	37.1
- Unpaid family worker	20.2	9.3
- Unpaid family worker in rural areas	25.7	11.5
- In Agriculture	38	33
- Industrial	24.2	27.9
- Service	37.8	39.1
Women's earning on average less than men – gender wage gap	19	
Women-led businesses (MSMEs)	65	

Sources: CSES 2019/20, ADB (2018) and UN Cambodia (2022)

As shown in the Table above, although women accounted for 65% of all business owners in Cambodia, the majority are informal microenterprises including in the agriculture sector. Around 51% of women entrepreneurs employ only one person, and 96% engage four or fewer persons. Women-owned businesses face several challenges. These include limited access to resources to expand their business, such as information about markets, financial inputs, new technologies and processes, communications, and limited access to professional and technical training.[22]

Policies, mechanisms and institutional frameworks for gender mainstreaming and gender equality are in place through government structures and policy documents. However, there are questions about their implementation and effectiveness. Table 2

[21] FAO (2023) Gender Assessment of Agriculture and the Rural Sector in Cambodia

[22] (2018) Kingdom of Cambodia: Climate-Friendly Agribusiness Value Chains Sector Project https://www.adb.org/sites/default/files/linked-documents/48409-002-sd-06.pdf

and Table 3 presents the gender aspects in the government's policies and frameworks.

Table 2: Summary of Government Mechanisms and Institutional Framework for Gender Equality

Responsible Ministry	Name of the Framework	Key Focus
	At national level	
CNCW	Inter-ministerial mechanism	to oversee, coordinate and report on the implementation of CEDAW
MOWA	Technical Working Group on Gender	Inter-ministerial
Line Ministries	Gender Mainstreaming Action Groups (GMAGs)	Mandatary for gender mainstreaming action plans in respective ministries
MAFF	Working Group on Gender and Child Labor (WG-GCL)	to promote gender equality and women's empowerment within MAFF
	At sub-national level	
District/Provincial Governor	Women and Children Consultative Committees (WCCCs)	to provide advice and recommendations on gender-related issues at provincial, municipal, and district/khan levels
Commune Chief	Commune Committee for Women and Children (CCWCs)	to provide advice and recommendations on gender-related issues at commune level

Table 3: Relevant Policies and Frameworks on Gender in Agriculture and Rural Development

Responsible Ministry	Name of the Framework	Key Focus
MAFF	Agriculture Strategic Development Plan 2019-2023	Strategic roadmap for agriculture sector, in which there are links to Gender Mainstreaming Policy.
MAFF	Gender Mainstreaming Policy and Strategic Framework in Agriculture (GMPSFA) 2022-2026	Main guiding framework for gender equality and women's empowerment stated in the agriculture.
Fishery Administration, MAFF	Fisheries Strategic Planning Framework (2019-2023)	A strategic framework for fisheries plan.
Fishery Administration, MAFF	Action Plan for Gender Equality Promotion and Child Labor Elimination in fisheries 2016-2020	Fisheries administration's working Group on Gender and Child Labor (FiA WG-GCL)
Forestry Administration, MAFF	National Forest Program 2010-2029	Includes the participation of women in the management of the institutional structures and management of the Forestry Administration to make the forestry sector more efficient and effective.
Forestry Administration, MAFF	Gender Mainstreaming in the forestry sector	At preparation stage – it will focus on the empowerment of youth, women and the vulnerable groups in Cambodia as part of food system and forestry.
RGC	Cambodia Climate Change Strategic Plan 2014-2023	Recognizes women's differentiated vulnerability to climate change and presents gender equality as one pathway to reduce vulnerabilities. Each ministry needs to establish action plans to implement this.
MAFF	Climate Change Strategic Plan for Agriculture, Agri-industry, Animal Production, Fisheries and Forestry 2013-2018	Highlights gender responsiveness in the policy, strategies, key activities, management and financial management, and monitoring and evaluation framework.
RGC	National Action Plan for Disaster Risk Reduction 2019-2023	Emphasizes enhancing vulnerable social groups' (such as women, youth, children the elderly and people with disabilities) awareness of and resilience to disaster risks and increasing the accessibility of early warning systems for these groups.
MoE	Gender Mainstreaming Strategic Plan in Environment Sector 2021-2025	A roadmap contributing to gender inequality reduction, women's rights improvement and women empowerment in the environment sector.

6 Royal Government of Cambodia Priorities

The key policy documents for the agriculture sector include the following:

- Cambodian Sustainable Development Goals 2030
- Rectangular Strategy Phase IV, succeeded by Pentagonal Strategy Phase I
- National Strategic Development Plan (NSDP) 2019-2023
- Agricultural Sector Development Plan (ASDP), 2019-2023
- Cambodia's Industrial Development Policy (IDP) 2015-2025
- Cambodia's Roadmap for Food Systems for Sustainable Development 2030
- Strategic Framework and Programs for Economic Recovery and to Promote Cambodia's Economic Growth in Living with COVID-19 in the New Normal for 2021-2023
- National Cassava Policy Framework 2020-2025
- One Village One Product Movement Strategic Plan in the Agricultural Sector 2020-2026
- Cambodia Digital Economy and Society Policy Framework 2021-2035

- AgriTech Road Map 2030
- National Research Agenda 2025
- Fifth and sixth priority programs of the RGC for 7th mandate of the National Assembly.

The National Agricultural Development Policy (NADP) 2022-2030 sets out four main areas and thematic policies for intervention: (1) Modernising and commercialising agricultural value chains; (2) Public and private investments in the agriculture sector; (3) Growing sustainably and increasing resilience to climate change; and (4) Institutional reforms and cross-cutting issues. There are four strategic objectives: (1) Enhancing the competitiveness of agricultural value chains; (2) Increasing support for infrastructure in agriculture and agri-business facilitation; (3) Promoting sustainable land, forestry and fisheries resource management; and (4) Strengthening institutional management and regulatory reforms, human resource development and addressing emerging challenges. The approaches of the NADP are based on agricultural value chains at two levels: (1) Food security; and (2) Agricultural commercialisation and policy intervention.

The Fifth and Sixth Priority Programs 2023-2028 focus on three interventions: (1) Increasing agricultural productivity, market access, and price stabilisation through financing programs; (2) The deployment of commune agriculture officers; and (3) Developing modern ACs. The RGC has committed USD100 million, and a policy guidance council, headed by the MAFF minister, and an AC Fund will be established to implement the programmes. Price stabilisation will be implemented through general measures (regulating supply-demand, temporary state-sponsored storage systems, contract farming, modern ACs, allocations of produce to different areas) and direct intervention (setting ceilings and minimum prices, releasing stored produce to lower prices or releasing funds to buy produce to increase prices). MAFF has deployed 250 commune agriculture officers in 2023, out of the planned total of 1,600, with 800 and 550 officers to be deployed in 2024 and 2025, respectively. Moving from the current model of ACs, the modern ACs, headed by professional CEOs, are agriculture economic enterprises for economies of scale that have the capacity to compete in terms of quantity and quality. As of 2023, 1,251 ACs had been recognised by MAFF and their performance was assessed as strong (17.5%), moderate (66%), and weak (16.5%).

A multi-ministerial technical working group (November 2023) selected five commodities as priority crops for scaling-up and export in the next five to ten years. These include rice, cashew, mango, maize and longan. Meanwhile, the increase in vegetable production to keep up with local demand remains a priority.

The National Research Agenda 2025 sets out to achieve the goal of 70% of food consumption being locally produced by 2030: as the export targets for commodities such as milled rice, cassava, maize, beans, cashew, mango and coconut have not been accomplished, only 10% of agricultural produce is currently processed locally, and a high amount of food is imported (e.g. USD1 billion of meat is imported per year). The research agenda focuses on four areas:

1. Production: breeding programs, smart irrigation, climate resilience, production inputs
2. Storage: of raw materials and post-harvest conservation
3. Processing: R&D of food product development and food preservation
4. Distribution: packaging and market access and linkages.

Review Question 1.1.2 What are key donor trends in terms of investment in Cambodian agricultural markets?

7 Key Donor Trends

In addition to MFAT, there are a significant number of development partners supporting horticulture, other agricultural subsectors and/or agriculture more broadly in Cambodia. These include: the Australian Department of Foreign Affairs and Trade (DFAT), the United States Agency for International Development (USAID), the Swiss Agency for Development and Cooperation (SDC), Swiss Church Aid – HEKS/EPER, the Asian Development Bank (ADB), the World Bank, the International Fund for Agricultural Development (IFAD), the Netherlands Development Organisation (SNV), Agence Française de Développement (AFD), the Japan International Cooperation Agency (JICA), the German Technical Assistance Agency (GIZ), the European Union, the Food and Agriculture Organisation (FAO) of the United Nations, and the South Korean Development Agency (KOICA). The most significant programs and projects in relation to MFAT's portfolio are briefly described below:

- The **Asian Development Bank** (ADB) has a portfolio of projects addressing agriculture, natural resources and rural development that provides a wide range of support across all functions in the sector from production through to market connectivity. They also focus on strengthening agricultural cooperatives and agribusiness networks, and addressing disaster resilience, climate change and water management, particularly in the Tonle Sap and Lower Mekong basins. In 2021, ADB anticipated starting programs related to agriculture and water management worth USD355 million by 2023.[23]
- The **Australian Department of Foreign Affairs and Trade** is currently implementing the Cambodia Australia Partnership for Resilient Economic Development (CAPRED). This project focuses on agriculture and agro-processing, infrastructure services and trade, investment and enterprise development. Within agriculture, CAPRED aims to assist Cambodian farmers and agribusinesses to sell more higher-value agri-foods that meet market requirements and are climate resilient and sustainable. CAPRED works with the RGC, research organisations and the private sector to increase agriculture productivity and competitiveness.[24] The

[23] Asian Development Bank (2021) Cambodia agriculture, natural resources, and rural development sector assessment, strategy, and road map. p. 43-45.

[24] Cowater International (2022) Cambodia Australia Partnership for Resilient Economic Development

project runs from 2022-2027 with a budget of AUD87 million, and includes a possible three year extension up to AUD57 million.[25] CAPRED was preceded by the Cambodia-Australia Agricultural Value Chain (CAVAC) project that ran from 2010-2021. CAVAC aimed to improve farmers' incomes by increasing the value of agricultural production. It focused on a range of crop value chains through strengthening market systems and investing in irrigation infrastructure.[26]

- The **United States Agency for International Development** (USAID) Feed the Future programme has implemented the Harvest project in Cambodia since 2012 with a focus on the provinces around Tonle Sap. The project is currently in its third phase. Harvest I primarily focused on production. During Harvest II, the project transitioned to a market systems development approach and intensified support across horticulture value chains. Harvest III partners with a wide range of local actors including agricultural cooperatives, agribusinesses, service and technology providers, financial institutions and investors.[27] The five-year budget for Harvest III is USD25 million.[28]
- The **International Fund for Agricultural Development** implemented the Agricultural Services Programme for Innovation, Resilience and Extension (ASPIRE) from 2014-2022 with a total project cost of more than USD86 million. The programme aimed to enhance the Cambodian model of agricultural services and assist smallholder famers in achieving profitable and resilient farm businesses. ASPIRE worked closely with local, provincial, and national government with the aim that the ASPIRE model would be adopted as government policy. ASPIRE reached almost 150,000 households and resulted in a 54% increase in farm income in comparison to the 'without project' farm income.[29] CSmart worked with ASPIRE on the Chamka App to provide smallholder farmers with mobile extension services. IFAD also implements two complementary projects:
    - Sustainable Assets for Agriculture Markets, Business and Trade (SAABAT), running from 2019-2025, which supports the aims of poverty reduction and improved food security in rural areas.[30]

[25] Australian DFAT (2022) Investment Design: Cambodia-Australia Partnership for Resilient Economic Development

[26] CAVAC (2015) Cambodia Agricultural Value Chain program (CAVAC) Phase II Investment Design

[27] Abt Associates (n.d.) Partnering with the Private Sector to Strengthen the Cambodia Agriculture Sector

[28] US Embassy in Cambodia (2022) USAID Launches a $25 Million Project to Boot Agriculture Sector in Cambodia

[29] IFAD (2023) Adaptation for Smallholder Agriculture Programme

[30] IFAD (n.d.) Sustainable Assets for Agriculture Markets, Business and Trade (SAAMBAT)

    - Accelerating Inclusive Markets for Smallholders (AIMS), running from 2016-2024, which aims to increase returns from farming for smallholders through efficient public-sector investment.[31]

- The **Swiss Agency for Development and Cooperation** (SDC) implements a Climate Change and Natural Resource Management portfolio in Cambodia. The eight-year Cambodia Horticulture Advancing Income and Nutrition (CHAIN) project came to an end in 2022. It focused on developing the horticulture sector using a market systems approach and worked on promoting safe, locally-produced vegetables.[32] SDC is now supporting a USD9 million project called Nurturing Climate Resilience in Cambodia (Nurture) with Phase 1 ending in 2026. The project aims to build resilience to climate change for 15,000 households by sustainably increasing farmers' incomes and improving access to water for irrigation. It targets the vegetable and rice subsectors.[33]

While projects in the early 2000s were often focused primarily on production, there has been a trend over the last 15 years towards taking a more comprehensive and market-based approach. These approaches identify clear market opportunities, and work with stakeholders across value chains to enable them to meet growing demand in these markets. While this trend has continued, more recently there has been renewed efforts to ensure poor and vulnerable households are able to participate in, and benefit from, market integration. The increasing impacts of climate change and global crises on Cambodian agriculture have also intensified the focus on resilience to shocks. Conservation of natural resources and water management are also getting increasing attention from development partners. Donor coordination in agriculture is primarily managed through the Technical Working Group on Agriculture and Water (TWGAW).[34]

During the field research, the Review team met with a sample of these development partners to explore lessons learned from past work and what they were considering for upcoming support in the next decade. Based on both secondary and primary sources, the Review team have summarised the current and expected coverage of agricultural support in terms of approaches, entry points, content, and geography. The analysis pinpoints gaps and cross-references those with identified opportunities, to feed into recommendations on the future direction for New Zealand support to Cambodian agriculture.

[31] IFAD (n.d.) Accelerating Inclusive Markets for Smallholders (AIMS).

[32] Swisscontact (n.d.) Cambodia Horticulture Advancing Income and Nutrition (CHAIN)

[33] BEAM Exchange (2023) Programme profile: Nurture – Nurturing Climate Resilience in Cambodia

[34] Asian Development Bank (2021). Cambodia agriculture, natural resources, and rural development sector assessment, strategy, and road map. p. 41

Review Question 1.1.3 What are the main types of support, services and delivery models provided by NGOs targeting Cambodia's agricultural sector?

8 NGO Delivery Models

The NGO Forum in Cambodia is a membership organisation that builds NGO cooperation and capacity, supporting NGO networks and other civil society organisations to engage in policy dialogue, debate and advocacy.[35] One of the Forum's four programmes has an emphasis on environment and agriculture. It focuses on monitoring agricultural policies, community rights in hydropower development, rights and interests of indigenous and forest-dependent people and sustainable forest management, and monitoring climate change policy. The current focus of the programme is the effective facilitation of advocacy efforts on climate change, hydropower and agricultural policies.[36]

The Cooperation Committee for Cambodia is the leading membership-based organisation for NGOs in Cambodia with nearly 180 members working on various development sectors.[37] However, no information on NGO support to agriculture in Cambodia has been found on their webpage.

As there is not a central source of public information on NGO support, services and delivery models targeting Cambodia's agriculture sector, the Review team explored this topic through key informant interviews.

[35] The NGO Forum on Cambodia https://www.ngoforum.org.kh/

[36] The NGO Forum on Cambodia (n.d.) Environment and Agriculture Policy Program

[37] Cooperation Committee for Cambodia https://www.ccc-cambodia.org/en

Appendix C: Review of CQHI

Background

The Cambodia Quality Horticulture Initiative (CQHI) aims to support the growth of the horticulture sector in Cambodia through development of supply chains to deliver high quality and safe produce in accordance with market demand. The Activity's primary entry point is partnerships with wholesalers. It then works across these wholesalers' supply chains to improve both production and post-harvest practices. The Activity works in seven provinces, namely Kandal, Takeo, Svay Rieng, Mondulkiri, Koh Kong, Battambang and Kampoing Speu. The Activity also supports the General Directorate of Agriculture (GDA) to operationalise CamGAP certification. Originally planned from January 2017 through December 2022, the Activity was extended to March 2025. The CHQI budget is NZD9.8M for the eight years.

Alignment with Trends in the Cambodian Agriculture Sector

With a positive trend in the Cambodian horticulture sector in the last decade, Review findings show that smallholder farmers have shifted to a more commercial mindset and have increased their risk appetite to adopt/expand the production of high value crops in horticulture according to demand. CQHI has taken advantage of this trend, particularly the increase in demand for safe vegetables among urban areas with higher economic classes. CQHI's focus on building wholesalers' and farmers' capacity relating to safe practices, and linking them with markets (at provincial level as well as in Phnom Penh city) through different marketing models, was found to be aligned with the positive trend in the sector.

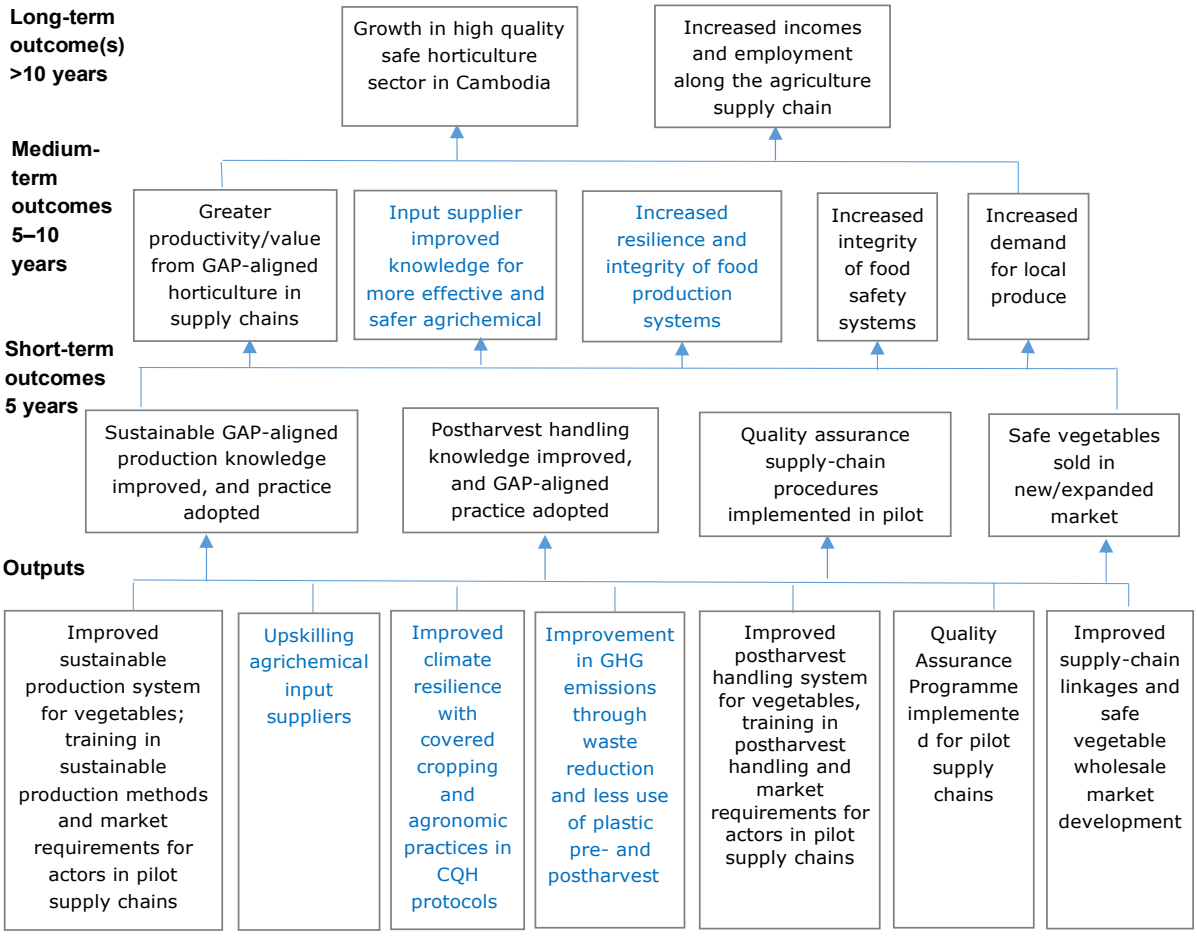
Alignment with RGC and the ASEAN Priorities of MFAT

CQHI is aligned with MFAT and RGC priorities. It supports the ASEAN Agricultural Strategic Plan 2016-2025 by assisting farmers to move toward managing their farms according to more modern practices and improving financial sustainability. It aligns with the Agriculture section of the New Zealand Aid Programme Investment Priorities 2015-2019 document and MFAT's ASEAN Four-Year Plan. It aligns with Cambodia's National Strategic Development Plan 2019-2023 and the Cambodia Climate Change Strategic Plan 2014-2023, and supports the RGC's aim to substitute imported produce with local produce. The Activity is also in line with the RGC's Pentagonal National Development Strategy released in 2023, particularly its focus on enhancing agricultural production, quality, safety, diversity, value addition and resilience.

Achievement of Outputs and Progress towards Outcomes

Figure 1 outlines the expected outputs and outcomes for CQHI. Progress towards outputs and outcomes in this section is assessed based on this framework and the targets set in the Activities' design document and results update.

Figure 1: CQHI Logic Diagram



It is evident from CQHI's reports that the Activity has made good progress towards accomplishing planned outputs. Several outputs were derailed during the COVID pandemic but have been restarted and enhanced during the extension phase. Economic benefits are accruing to farmers and workers in pilot supply chains. However, there are concerns about the extent to which farmers, as well as other market actors in the pilot supply chains, will be able to continue getting sufficient technical and business management support to manage future challenges. The discussion below on accomplishment of Outputs and progress towards Outcomes is organised in sections according to the short-term outcomes.

Production Systems

Output 1 - Improved sustainable production system for vegetables; training in sustainable production methods and market requirements for actors in pilot supply chains - On-track: CQHI is on track to achieve most of its output targets. Lead farmers, ACs, wholesalers and others who have been trained, have appreciated the high quality of the training particularly related to pest and disease management.

Output 2- Upskilling agri-chemical suppliers - In progress: CQHI has trained input suppliers in Kandal province. The Svay Rieng Agro-Product Cooperative (SAC) input supply shop is actively providing improved advice to farmers. However, farmers visiting other input suppliers have not yet reported that they have received better information from these suppliers.

Output 3 – Improved climate resilience from covered cropping and agronomic practices in CQH protocols - On-track: CQHI has implemented activities as planned. Farmers report that they know how to choose resilient varieties. The feedback on 'high-low' rain shelters was that it has helped to control pests. Soil testing was appreciated during training. However, several respondents noted that they did not have access to soil testing and/or only had a fertiliser recommendation from another area and so could not apply the appropriate inputs. In addition, several farmers reported that they could not get access to recommended inputs.

Output 4- Improvement in GHC emissions through waste reduction and less use of plastic pre- and post-harvest: In progress. There has been a limited reduction in the amount of plastic used in production due to a perceived lack of alternatives for tasks like mulching. Most farmers use plastic for this. There were some farmers already using straw mulch before CQHI intervened. Some of the farmers using plastic mulch mentioned challenges in safely disposing of plastic waste, particularly due to a shortage of space to bury it.

Short Term Outcome 1 - Sustainable GAP-aligned production knowledge improved, and practice adopted: Results for this outcome are strong. Farmers reported that they had made significant changes in their production practices, particularly related to pest and disease management and the application of fertiliser. For example, using less fertiliser and pesticide, adopting drip or spray irrigation, and monitoring crop growth at different stages. ACs and companies reported that farmers are now confident in production.

'Members are now more able to produce safe vegetables. The farmers are now confident in their production. They know exactly what to do for pesticide applications and how to address pest infestations. The rate of crop failure has significantly reduced.'

AC supported by CQHI

Medium Term Outcome 1 – Greater productivity and value from GAP-aligned horticulture in supply chains: Significant progress has been made towards this outcome. Areas under improved cultivation have increased. Farmers mostly in pilot supply chains stated a range of benefits related to their improved production practices. These are:

- Increased yields
- Reduced costs
- They were able to sell their produce easily because it was safe and good quality, which is what both companies and collectors demand; does not affect consumers' health
- Less labour required (particularly as a result of irrigation systems)
- Covered cropping (for those who have it) makes it easier to maintain the temperature and protect against hot weather or rain, for year-round production.

While farmer profits have been impacted by adverse weather, the effects are likely to have been worse without CQHI's intervention.

Medium Term Outcome 2 - Input supplier improved knowledge for more effective and safer agrichemicals: Farmers are not yet reporting improved advice from retailers. The interventions built the capacity of some actors to provide advice to farmers. For instance, SAC reported increased knowledge and ability to advise farmers. CQHI also trained the Kandal PDAFF with the expectation that they will train retailers, but field findings show that this has not yet taken place.

Medium Term Outcome 3- Increased resilience and integrity of food production systems; Medium Term Outcome 4 – Increased integrity of food safety systems: CQHI interventions have made significant contributions to food safety and resilience:

- Reduced use of pesticides and increased safety in production contributing to food safety in production systems
- More production cycles and better pest and disease management contributing to resilience
- Climate change related practices, such as choice of varieties and practices to maintain soil moisture, are also supporting resilience
- Those farmers that received a covered production structure have found it extremely helpful in managing climate change effects. However, the structures are still out of reach financially for most farmers.

Post-Harvest Handling

Output 5 - Improving post-harvest handling system for vegetables, training in post-harvest handling and market requirements of actors in pilot supply chains - On track: Farmers, ACs and companies all reported satisfaction with the training received on post-harvest handling and provided examples of the improvements that they are making in this area.

Short Term Outcome 2 – Post-harvest handling knowledge improved, and GAP-aligned practice adopted: Farmers, ACs and some wholesaler companies have made important changes in their post-harvest handling practices and reported benefits:

- Farmers reported:
  - Improved know-how to store and pack vegetables properly
  - Increased shelf-life
  - Improved appearance
  - Decreased weight loss during storage
  - Easier to sell
  - Recognition from markets for good quality and safe vegetables.
- ACs reported that collectors are more aware of safety and practise good hygiene during packing.
- Several companies reported that they were able to purchase produce from farmers that was better handled. Some companies strengthened their food safety protocols in packhouses, while others were challenged to apply the training due to inappropriate infrastructure and financial constraints.

'Collectors are now practising hygiene during packing. Before, they used bare hands and did not wear a cap. Now they wear gloves and a hair cap.'

AC supported by CQHI

Medium Term Outcome 4 - Increased integrity of food safety systems: The improvements discussed above have contributed to an increase in food safety systems in pilot supply chains. CQHI's testing of vegetables across pilot supply chains has shown significant reductions in contamination.

Quality Assurance

Output 6 - Quality Assurance Programme implemented for pilot supply chains - In progress: CQHI has supported several wholesalers to develop improved internal control systems. In addition, CQHI's work with the General Department of Agriculture (GDA) has resulted in user-friendly materials for market actors to improve the quality and safety of produce along the supply chain.

Short Term Outcome 3 – Quality assurance supply-chain procedures implemented in pilot supply chains: Growing wholesalers have implemented new internal control systems and evidence indicates they will continue the improvements. Those wholesalers who are struggling did not mention improvements in quality assurance. GDA has certified 942 farms as compliant with CamGAP, although the figure is still relatively modest in the context of Cambodia, and most certifications were paid for with development partner funding. Nevertheless the materials developed for CamGAP are helping farmers to adopt improved practices.

Safe Vegetables

Output 7 - Improved supply chain linkages and safe vegetable wholesale market development - In progress: Market links have helped some farmer organisations and companies, not all reached by the interventions. Some already had links and found markets before this component of CQHI was implemented, and additional volumes due to CQHI activities were small. For others, however, new links were helpful as they assured sales (for farmers) or supply (for wholesalers) and helped to stabilise prices. Some farmers had entered contracts with companies or ACs to supply vegetables for the first time. Some farmers reported receiving information on market prices from Activity staff and their ACs, which was helping them to negotiate prices with collectors.

Short Term Outcome 4 – Safe vegetables sold in new/expanded markets: CQHI has assisted partner companies, who were already focusing, or moving to a focus, on safe vegetables, to operate more effectively from a technical perspective. However, whether or not CQHI contributed to companies' increased sales is less clear. Companies that are growing (at least two CQHI partners) have been able to do so mainly because of their own business management practices. These have been behind the increased scale and improved efficiency, rather than improved technical practices. Companies that are struggling (at least two CQHI partners) are finding it difficult to focus on technical improvements due to their business challenges.

Medium Term Outcome 5 - Increased demand for local produce: Increased demand for safe produce has been driven by other factors in Cambodia's economy as explained in the section on trends. CQHI has helped producers, ACs and companies to meet that demand, rather than influencing the growth of the demand itself. Several respondents during the Review felt that more demand side awareness-raising and marketing is needed.

Long Term Outcomes

Long Term Outcome 1 – Growth in a high quality, safe horticulture sector in Cambodia: The growth of a high quality, safe horticulture sector in Cambodia has been influenced by many factors. CQHI has made a contribution to improving the safety of local produce in line with the perception of consumers that local produce is safer than imported produce.

Long Term Outcome 2 – Increased incomes and employment along the agriculture supply chain: CQHI has made an important contribution to increasing farmers' incomes in pilot supply chains. Farmers reported increased income, improved livelihoods, and increased consumption.

'Our income has increased due to the production of high-quality vegetables. We now have enough food for our family consumption that has improved our health and that of our families. We are confident in making decisions to expand our production as we can invest more than before.'

Farmer reached by CQHI

Furthermore, they had greater ability to pay-off debts, were able to invest in expanding production, decision-making relating to investment was easier as money was less of a constraint than before, and they had the means to send children to school and university. Farmers also reported several other benefits from their involvement with the Activity, such as better health, improved relationships with other farmers through their involvement in producer groups and ACs, and pride in the production of safe and high-quality vegetables.

CQHI has also undoubtedly contributed to improved health among those consuming safer vegetables. Farmers also noted health improvements in their communities. There had been increased employment in some of the ACs and companies with which CQHI was working. CQHI has been one of several factors that contributed to this increase in employment.

Most Effective Technical Approaches

During the Review team's field interviews, all farmers reached by CQHI interventions reported that the **technical training** on production provided by CQHI was very effective. This was particularly in relation to pest management and the appropriate application of inputs. However, several respondents (lead farmers and ACs) mentioned the slow pace of training due to the requirement for translation during the training delivery.

CQHI's work with the GDA on **CamGAP**, particularly in developing practical protocols (accompanied by visual materials) for CamGAP, and checklists for compliance by the farmers, built the capacity of the GDA and thus have potential for wider results in the sector. The systems have also been useful for wholesalers/ ACs to use in their quality control systems and in providing advice to farmers. CQHI also supported the GDA to develop their website, but it was too early for the Review to get feedback on the improvements.

The Activity supported the **capacity building of company agronomists** for the partner companies, which was well received. Additionally, CQHI's support for developing the **internal control system** (ICS) in the growing companies that included washing systems and packhouse facilities, contributed to an enhanced capacity to deliver safe vegetables and to operate more commercially.

Using **social media groups** through CQHI interventions increased interactions among farmers, ACs, collectors and, in some cases, with input suppliers.

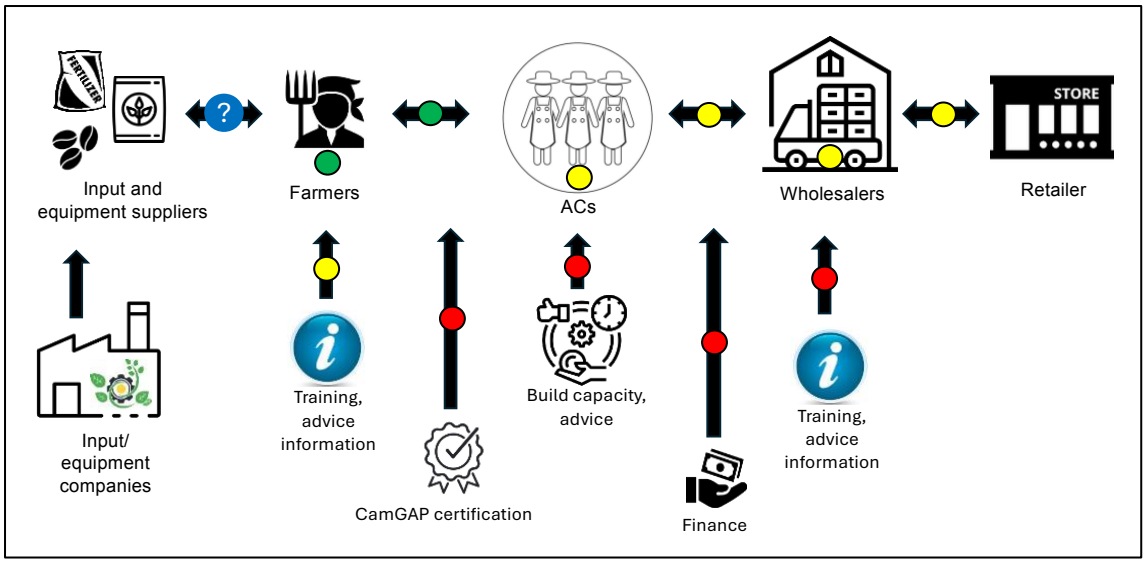
CQHI's focus on **adaptation to climate change** was critical and contributed to improving farmers' resilience and their ability to adapt. However, the sourcing of finance to install some solutions - such as rain shelters - was a challenge, limiting uptake by farmers.

Sustainability of Market Function Improvements

In order for improvements in a market function to be sustainable, there must be capacity, incentives and finances to support the improvement after the Activity ends. This section analyses whether these exist for the improvements that CQHI facilitated through its interventions.

Figure 2 provides a snapshot of the likelihood of sustainability for the functions that CQHI addressed in the horticulture value chain and supporting markets. It uses the same traffic light system as is used in Section 4.1 of the main report.

Figure 2: Sustainability of Market Functions and Relationships Improved by CQHI



Pilot Supply Chains

Review findings showed that the relationships and transactions in the pilot supply chains facilitated by CQHI, particularly among farmers and ACs, are strong. But the relationships between ACs and wholesalers, and between wholesalers and retailers, showed mixed signs of sustainability. For instance, at least two of the wholesalers with whom CQHI worked are struggling and have not been able to consistently meet their payment obligations to farmers on time. But at least two of the wholesalers are growing and buying from more farmers. While the links facilitated with retailers are strong in some cases, supermarkets in particular show some dissatisfaction with the performance of ACs. The relationships between farmers and the inputs suppliers has not yet shown signs of improvement compared with what has previously been the case.

Value Chain Functions beyond Pilot Supply Chains

As noted above, the links between the pilot supply chain actors and the actors beyond, have shown mixed strength. CQHI did not work on enhancing the nature of

the relationship between input companies and their suppliers, or to build the capacity of input companies to serve the target farmers more effectively in the target locations. This was a missed opportunity and limited the scope for enhancing the input distribution channels that could have had potential for scale and achieving indirect impacts.

Supporting Functions

Evidence shows that the sustainability of supporting functions for the pilot supply chains is low. All farmers and market actors commended CQHI's experts, reporting that the **training and advice** they provided was effective. However, once the Activity ends, there are very limited sources (such as the PDAFF but with limited outreach) from which farmers and market actors can receive advice. All CQHI respondents in the field are concerned about climate change issues and reported that they had no reliable sources of information other than the Activity staff. A few successful companies may take over the role of providing advice to farmers to a degree, but at least one growing company has a policy of providing advice only on post-harvest handling, rather than production, in order to keep their costs manageable. ACs do not have agronomists on their own payroll. Without channels of continued access to training, advice and updated information, the continued success and resilience of farmers in CQHI pilot supply chains and other market actors is threatened. The Activity also did not build links between market actors and the PDAFFs. One avenue that was included in the design was working with input companies who might have been a reliable and sustainable source for new information. However, early efforts in this regard were not successful.

While training **lead farmers** was a promising approach to enabling other farmers to access technical support, the Review found that only some of them will continue with the provision of assistance to other farmers. Some of the areas targeted by CQHI are highly competitive and without close-knit communities. In these contexts, some lead farmers do not see that they have an incentive to continue to provide support. In some cases, the lack of sustainability may also be due to the personalities of the lead farmers chosen. Also, lead farmers and an AC project-funded agronomist do not provide training, only advice, which is not as comprehensive. While lead famers appreciated the recognition they got in their roles in the local community, some expressed dissatisfaction because of the time it takes to change others' perceptions. They also felt frustration when some farmers did not apply the practices properly, and then they got the blame if production did not go well. Hence the sustainability of the relationships built between the lead farmers and other farmers, is moderate.

CQHI's work in building practical tools and systems for **CamGAP certification** was well received by the farmers, and market actors as well as the GDA. The GDA showed interest in these practical tools which can also be used by companies to check or build the capacity of their suppliers. However, the GDA made it clear that they do not have the capacity/funding to expand or further develop the CamGAP application without further support. Moreover, the certification does not fetch higher prices for farmers, and that limits their motivation to adopt it: in the market, there is no extra premium paid for certified products. The Activity or GDA paid for

farmers to get certified, and field interviews suggested that farmers will not recertify when their certification expires because it is too expensive, and they do not benefit financially. Wholesalers are also not enthusiastic about paying for farmers to get certified – some might contribute but not pay the full cost. Wholesalers are already facing high costs for adequately supporting farmers. Hence the sustainability of the certification function is weak due to a lack of sufficient incentives.

CQHI supported **infrastructure investment and building the technical capacity of producer groups.** The sustainability of this function is weak and the continuation of evolving technical capacity, and the potential for other ACs to get similar support from the market, is limited. The ACs are relying on other donor projects to support them in the long-run.

The Activity provided **finance** for equipment and other improvements to ACs and companies. It did not invest in identifying potential, sustainable financial sources for these market actors. This limits the sustainability of the finance function which may constrain the growth of ACs and wholesalers in the future.

In summary, the likelihood that improvements will continue to sustain is moderate within pilot supply chains, but weak within support markets. The weak sustainability of support markets threatens the continued expansion and resilience of the pilot value chains and beyond.

Assessment of Activity Implementation Approaches

This section identifies CQHI's implementation approaches that contributed to, or detracted from, both its effectiveness and efficiency. Some of these approaches originated with the design of the Activity, while others were part of the Activity management.

Effective Implementation Approaches

Responsive Partnership with the GDA: As noted earlier, CQHI's role in operationalising the local certification standard, CamGAP, was effective. The Activity's partnership with the GDA worked well because CQHI identified the problem that CamGAP was not operational, and hence supported the GDA with clear checklists and systems relevant for this certification. This helped the GDA to scale-up certifications and provide concrete guidance on CamGAP for market actors.

Responsive partnerships with companies and ACs: CQHI tailored their support to the specific needs of companies and ACs. This responsiveness was critical in building capacity and promoting behaviour changes. It also contributed to efficiency in delivering outputs. Field interviews indicated that CQHI's technical support for these actors was effective as they stated that they would continue to use the advice.

Example of CQHI's Support for Wholesalers

CQHI supported a wholesaler in Phnom Penh to improve its operations and strengthen its links with farmer organisations for quality supply. An interview with the wholesaler indicated that the partnership was very effective as the wholesaler's staff had learned about improved soil management and post-harvest techniques that were critical to guide their suppliers. Also, CQHI's support on implementing CamGAP using practical tools, and the introduction of internal control systems, were helpful. The wholesaler also appreciated the Activity's support on specific challenges it was facing that related to transportation and vegetable cleaning processes.

CQHI's adaptive support for the wholesaler enabled it to expand operations in line with market needs.

Innovation Focus: CQHI tested a number of innovations with the potential for wider application. For example, while most other agencies are promoting 'net houses' for covered cropping, which completely enclose the production space, CQHI tested an open-sided structure to protect from the rain. The field testing showed that the air flow helped to control pests and diseases in the crops. As another example, CQHI worked with a wholesaler to test a solar powered, cool 'tuk tuk' for urban produce deliveries. While the trial was unsuccessful due to the heavy weight of the required cooling equipment, the testing was worthwhile because it addressed a need among many wholesalers. It would be useful to marry this innovation focus with developing channels for wider and sustainable distribution of successful innovations.

Gaps in Implementation Approaches

Fly-in/fly-out model: While the content and delivery design of technical training were highly appreciated by the farmers and market actors, some respondents indicated issues with time management and scheduling of training sessions. Most activities stopped or were significantly curtailed, during the COVID 19 pandemic, due to travel restrictions. The fly-in/fly-out model for all training seemed to be expensive, and could have been more efficient by building capacity and/or systems around local resources.

Narrow focus on technical aspects in companies: The approach focused on important technical aspects of companies, especially those related to food safety – such as quality control, washing, packing etc. But the approach did not address constraints related to the companies' core business models. Hence the approach was not entirely effective as companies struggled to survive due to business/management issues. With heavy reliance on only a few partners, this

meant that some of CQHI's support for partners did not result in sustainable improvements and benefits.

Limited strategy to encourage uptake beyond pilot supply chains: CQHI lacked a clear strategy for encouraging crowding-in or wider adoption of systems beyond pilot companies. The Activity focused only on the technical capacity of the pilot companies, which limited the focus on looking at sustainable options to build systems to provide technical support to other companies in the pilot supply chains, and beyond.

Limited strategy to address inclusion: CQHI did not integrate a particular approach to ensure inclusion, particularly to reach poorer and more disadvantaged farmers. The Review team did not see an analysis of the particular needs and demands of specific disadvantaged groups for inputs, services and relationships that might have led to adaptations in the way these were delivered. This might have made them more accessible to, and beneficial for, disadvantaged farmers. This limited outreach to the more vulnerable farmers in the locations.

Limited government ownership: The Activity's approach to working with government has not encouraged ownership among the latter. Government agencies were involved in specific activities, e. g. training PDAFF staff or working with the GDA on CamGAP materials, but were not involved in setting priorities and planning activities. Greater government ownership could have increased the potential for sustainability in support functions. Government agencies requested strengthened relationships in this regard.

Inappropriate results framework: CQHI's results framework has not supported effective project management. It encouraged too much focus on numerical targets rather than on sustainable systems for expanding results. Attribution was not taken into account, which made it harder to assess the effectiveness of interventions. For example, the relative contributions of CQHI and other factors to the expansion of wholesale companies is unclear. Some of the indicators across outputs, short-term and medium-term outcomes, overlap which dilutes the sequence of expected systems changes promoted by the Activity. Furthermore, the causality of results is not always clear in the framework which makes it harder to assess the project's contribution. Thus, the framework did not act as an effective tool for maximising sustainable and positive results from the Activity.

Lessons and Recommendations for CQHI

This section reflects on lessons from CQHI with broader applicability as well as providing recommendations for Plant and Food Research (PFR) that may be appropriate for the remainder of the Activity.

No.	Lesson	Recommendation
1	It is critical to engage with government agencies at the planning stage of interventions not only to gain their insights from the field but also to build ownership of the activities that can lead to sustainable results	Engage with government agencies to embed CQHI materials into farmer extension, and support for ACs and companies
2	To ensure a sustainable model, Cambodian market actors need to have the capacity, incentives and finance to continue improved functions beyond the Activity's lifespan	Work on exit strategies to ensure relevant market actors have sufficient capacity as well as incentives and financing to continue
3	Sustainable and scalable models are needed to improve resilience over the longer-term, increase scale and maximise the likelihood of wider system change	Explicitly look for market actors and mechanisms with the potential to sustain and scale improvements
4	A broader definition of the 'system' an Activity aims to influence can expand opportunities for solutions to challenges, improve sustainability and increase scale	Focus on outcomes and system changes, rather than numerical output targets. Identify strategies to work on market functions with potential to impact beyond pilot supply chains
5	Disadvantaged populations may require adapted and sustainable inputs, services and relationships to implement improvements and to benefit from them equally as others	Build on experience from the field to identify what approaches can be effective to impact disadvantaged and poorer farmers and engage relevant market actors accordingly
6	Adaptive management is key to maximising positive results; it must be supported by an appropriate MERL framework	Continue regularly monitoring changes among market actors and farmers, with increased focus on reflecting on what is working and what is not, and adapting strategies and interventions. Support these practices with a MERL framework that emphasises outcomes, sustainability and system changes

Appendix D: Review of CSmart

Background

Climate Smart Commercial Horticulture (CSmart), implemented by iDE, is a five-year (October 2019-September 2024), NZD8.5 million Activity aiming to boost the incomes of local farmers, build value chains and strengthen farmer resilience to changing weather patterns. It does this by training people to use climate-smart technologies and connecting them to robust market systems. The Activity is working on three key areas:

1. *Climate change vulnerability:* the Activity has introduced about 17 climate resilient technologies and practices and has trained and supported farmers to use these. When farmers apply the promoted technologies and practices, they can increase crop production and productivity, and can improve the quality of the produce. In addition, they can increase the number of crop cycles per year and extend their production areas.

2. *Unsafe use of agrochemicals in farming practice, and challenges in pest and disease identification and control:* the Activity supported and trained farmers to encourage safe-use agrochemicals. The intervention is called 3S (Safe for farmers, Safe for consumers and Safe for the environment) to communicate the safe practice principles.

3. *Improving farmer and market system organisation:* This involved engagement with both conventional market systems, collaborating with farmgate collectors, and non-conventional market systems, such as partnering with the Melon Association (MASC) to facilitate the connection of locally produced high-value crops with supermarkets and other upscale market outlets.

Alignment with Trends in the Cambodian Agriculture Sector

The horticulture sector in Cambodia has seen significant growth, driven by increasing local demand for fruits and vegetables, especially during the COVID-19 pandemic. However, the recent economic slowdown and competition from cheaper imports have hampered this growth, exacerbated by challenges in logistics, storage, and certification. Climate change poses additional threats to the sector, with limited access to resilient technologies for farmers.

Before COVID-19, agriculture catered to the tourism industry's needs, but pandemic-related challenges led to decreased production and disrupted supply chains, particularly in areas reliant on tourism such as the province of Siem Reap. This resulted in a shift in employment from tourism to agriculture, although training and networking opportunities were impacted by restrictions on gatherings.

Post-COVID, demand is gradually recovering, albeit not yet to pre-pandemic levels. Imports are increasing again, emphasising quality, safety, and branding, leading to growth in collectors and agricultural input companies. While some have returned to previous employment, a small percentage have chosen to remain in agriculture, driven by the availability of locally-sourced inputs, and the competitive prices offered by suppliers.

CSmart primarily assists farmers in three provinces—Siem Reap, Banteay Meanchey, and Oddar Meanchey—in cultivating high-value crops, including cherry tomatoes, yellow cauliflower, broccoli, bulb onions, carrots, and select fruits like sweet melons, red-flesh watermelons, and yellow-flesh watermelons. These products are distributed within local provincial wholesale markets, and neighbouring provincial markets, and are also supplied to supermarkets in Phnom Penh. By focusing on high-value crops suitable for various markets, CSmart enables farmers to capitalise on increased demand, while diversification across crops and markets helps them to navigate economic downturns.

Alignment with the RGC and the ASEAN Priorities of MFAT

CSmart supports the RGC's strategic plans, such as Cambodia's National Strategic Development Plan 2014-2018, the Agriculture Sector Strategic Development Plan 2014-2018, and the National Action Plan for Disaster Risk Reduction (DRR). Additionally, it is harmonised with Cambodia's international commitments, notably the Sustainable Development Goals 2030. Aligning with the RGC's comprehensive Pentagonal National Development Strategy, unveiled in 2023, CSmart focused on bolstering agricultural production, quality, safety, diversity, value addition, and resilience.

Moreover, CSmart has actively contributed to MFAT's agricultural priorities in Cambodia, amplifying economic and food security benefits from agriculture while bolstering economic resilience, climate change adaptation, and support for vulnerable groups. Emphasising market-led agriculture, CSmart has identified and fortified value chains, furthering agricultural performance. Additionally, it complemented MFAT's objectives in disaster risk reduction (DRR) and its resilience-building efforts.

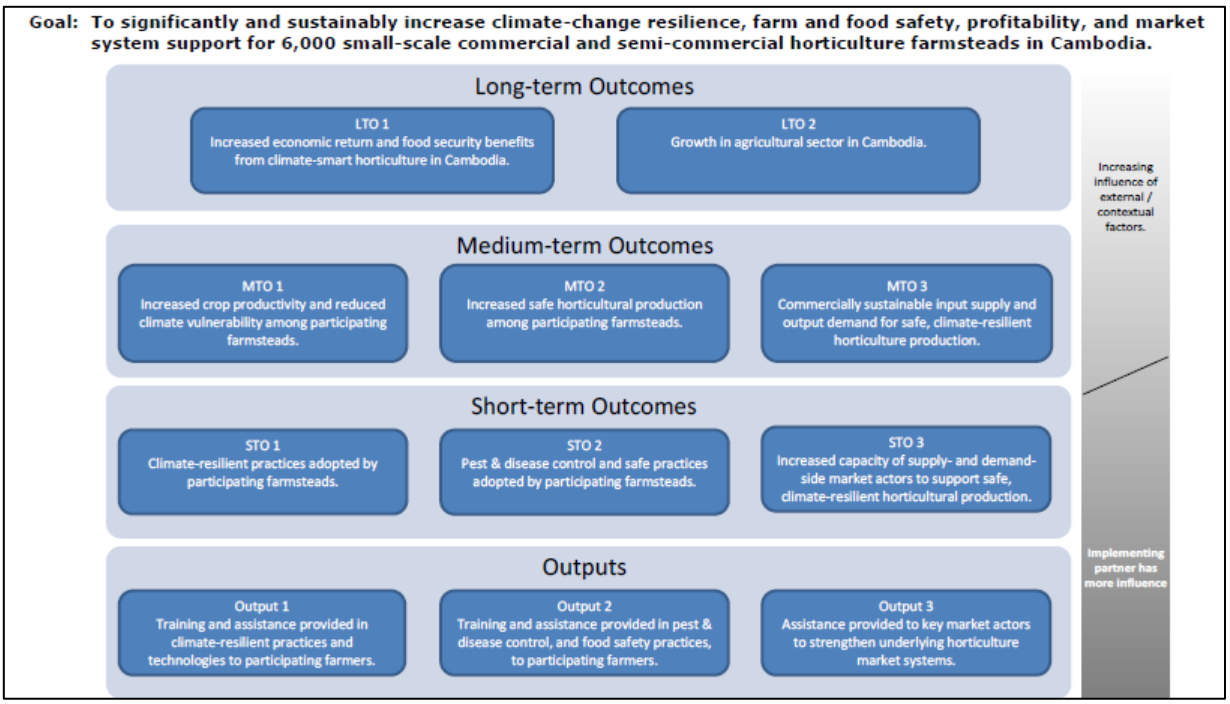
Achievement of Outputs and Progress towards Outcomes

Figure 1 outlines the expected outputs and outcomes from the CSmart Activity. The assessment of progress towards outputs and outcomes in this section is based on this framework and the targets set in the Activities' design document and results update. The discussion of progress is organised as follows:

- Farmer capacity building (Output 1 and 2; Short-term Outcome 1 and 2; Medium-term Outcome 1 and 2)

- Market actors linkages (Output 3; Short-term Outcome 3; Medium-term Outcome 3)
- Long-term Outcomes.

Figure 1: CSmart Results Diagram



It is evident from CSmart's reports that the Activity has achieved, or exceeded, almost all of its output targets. The outputs have contributed to solid progress in the short-, medium- and long-term outcomes among the households reached. However, there are concerns about the extent to which farming households and producer groups will be able to continue getting sufficient technical and managerial support to manage future challenges.

Farmer Capacity Building

Output 1– Training and assistance provided in climate-resilient practices and technologies for participating farmers; Output 2 – Training and assistance provided in pest and disease control, and food safety practices for participating farmers - Achieved: Farmers reported that they have learned about drip irrigation, the use of Personal Protective Equipment, the application of compost, the use of net houses/rain-house shelters, plastic waste management, mulching and trellising net. They were also taught about pest and disease control and safe food production. All of these practices have elevated the confidence of farmers. They have dared to expand their production areas and to invest in high-value crops such as cherry tomatoes, yellow flesh watermelon, sweet melon, broccoli etc. Their mindset has shifted to becoming 'commercial', from production according to seasons, to production according to orders from collectors. In addition, in-depth interviews with farmers showed that their knowledge about crop rotation and diversification has

helped them to reduce damage caused by insects, and some farmers have grown corn at the edge as barriers to large animals entering melon fields.

Short-term Outcome 1 – Climate-resilient practices adopted by participating farmsteads; Short-term Outcome 2 - Pest and disease control and safe practices adopted by participating farmsteads– Although results from CSmart's end-line survey are not yet available, qualitative field research indicates that behaviour change among the farmers reached was strong. While only 60-70% of farmers fully adopted the practices they were taught – and, therefore, experienced the highest increases in productivity - many more made some changes in their practices that contributed to improved productivity, profits, diversity and safety. The introduction of the 'lead' or 'demo farmers' concept has proven to be a good approach to expand farmer outreach. There is evidence that the lead farmers have shared their knowledge about the climate-resilient technologies (i.e. net houses, drip irrigation, plastic mulch, etc.) with other farmers within the same, or across, villages. Moreover, about 40% of farmsteads claimed that they now grow horticultural crops all year round due to the introduction of the new technologies in combination with crop diversification and crop rotation.

While there is solid evidence to indicate that improvements in practices are a key driver of productivity increases, it should be noted that the figures on productivity in CSmart reports should not be considered to be definitive as they do not take into account attribution. In other words, the attributable effects of the Activity on productivity could be higher or lower than those reported.

Medium-Term Outcome 1 – Increased crop productivity and reduced climate vulnerability among participating farmsteads; Medium-Term Outcome 2 – Increased safe horticultural production among participating farmstead – Farmers reported increased capacity in handling climate change effects and the risks of pest attack. They are aware of drip irrigation, techniques like plastic mulching, and crop rotation that have reduced their risks in production. Input suppliers are promoting safety measures due to the technical training provided by CSmart, while farmers are also using safe measures, all leading to improved safety for the farmers and the end-consumers of the produce.

Value Chain Actor Capacity Building and Links

Output 3 – Value chain interventions identified and delivered to increase linkages between value chain actors – Partially Achieved: CSmart has improved the capacity of local input sellers and collectors/aggregators connected to target farmers. The activities undertaken mainly focus on improving the relationship between farmers and the immediate actors in the local value chain. There is evidence that the farmers have more contacts with collectors/buyers for ease of selling and price quotations as well as with input retailers for information through telephone and Telegram. The relationships with input retailers have increased trust, enabling some farmers to access inputs on credit. Furthermore, the Activity has organised farmers into producer groups or clusters. This has empowered farmers to organise their production by growing different varieties at different times. This has contributed to

a reduction in the previous flooding of the market with the same crop, enabling farmers to sell all of their produce at a higher price.

Activity assistance was provided to only the immediate actors interacting with the farmers - the local input sellers and local collectors/aggregators. This limited the absorption of the innovative practices by higher level market actors such as input companies, the wholesalers and other larger output market actors (retail shops and supermarkets). This, in turn, restricted the piloting of sustainable business practices by key market actors in the system that had potential for scaling-up.

Short-term Outcome 3 – Increased capacity of supply- and demand-side market actors to support safe, climate-resilient horticultural production- One of the limitations of Output 3 is the limited absorption of innovative practices beyond the local value chain that could have led to a more sustained impact. The market actors were found to be heavily reliant on CSmart agronomists for any information they needed, be it about updated agricultural practices or about the market in general. There is a need for sustainable channels of information for the local input suppliers and collectors that should lie within the market system.

Nevertheless, input suppliers reported a range of benefits from involvement in CSmart, such as:

- New links with input companies that improved access to quality products, training and better prices
- Increased confidence and knowledge, providing farmers with advice about products to increase both productivity and safety
- Improved safety and display of their products
- Improved reputation by providing advice at the shop as well as through farm visits together with CSmart agronomists
- More customers not only from the village nearby but also from other villages
- Shop expansion, increasing product variety
- Improved management based on information and ideas gained from exchange visits and the incubation programme.

Collectors reported a range of benefits from involvement in CSmart, such as:

- Increased volumes
- New buyers
- Selling to more distant markets, not only within the same province. Some collectors now supply to high-value markets in Phnom Penh
- More reliable income
- Higher income.

Medium-Term Outcome 3 – Commercially sustainable input supply and output demand for safe, climate-resilient horticulture production. The achievement of commercially sustainable models adopting or replicating climate-smart technologies, advice, and practices introduced by CSmart, was not fully realised. This shortfall has impacted the attainment of medium- to long-term outcomes. While there is evidence of increased productivity and production, there remains a

lack of evidence demonstrating the adoption or replication of these technologies and knowledge in commercially sustainable models.

An exception to this trend is the case of the Melon Association: it was observed that the Association has developed the capacity to operate independently, effectively facilitating connections between melon producers and larger buyers. However, in instances where CSmart collaborated with input companies, their involvement has been limited to procuring inputs, primarily seeds, for training farms/lead farmers, and engaging company staff to provide training for farmers.

From the perspective of these input companies, the Activities of CSmart are perceived as similar to those of other donors, procuring inputs for their beneficiary groups. A broader partnership modality, aiming to enhance the commercial relationships of the companies with input depots and sellers in the districts, could have resulted in strengthened commercial ties with farmers.

Long-Term Outcomes

Long-term Outcome 1 – Increased economic return and food security benefits from climate-smart horticulture in Cambodia; Long-term Outcome 2 – Growth in the agricultural sector in Cambodia: Farmers supported by the Activity were very satisfied with the benefits of the new agriculture practices, ensuring higher yields and safe produce, new technologies addressing climate change, and links to market and value chain actors. The findings from the nine focus group discussions about the benefits that farmers received, conducted in Siem Reap and Banteay Meanchey with 72 farmers (47 female) during March 2024, are summarised below:

- Increased income, more steady income because crop yields and quality have improved as well as year-round production
- Savings in time and money on inputs due to the knowledge gained about the correct application of the inputs; new technologies also contributed to reduced labour requirements
- Behavioural change toward a more commercial mindset: farmers now dare to invest to increase the production area either through purchasing or renting more land
- Improved relationships and exchange of experience, knowledge and advice through producer group meetings
- Increase in essential consumption: spending more money on food leading to increased health and nutrition; ability to afford medical bills
- Improved ability to support children including sending them to school regularly, enabling them to attend school

'I have shared my knowledge and practices with some neighbours who previously sold their labour in Thailand. During the pandemic, they had no jobs and had to return home. They then started vegetable farming and are now able to build new houses and no longer consider migration.'

Vegetable Farmer reached by CSmart

to higher grades, and in some cases, supporting them to study at university
- Faster and easier decision-making as money is less of a constraint
- Improved engagement in social activities such as wedding parties and religious events
- Improved community well-being: seeing the benefits of farmers, some villagers decided not to migrate but to work on their land or get employment on others' farms and local input production.

It is important to note that changes and benefits mentioned above may not be solely attributed to the Activity. Various other factors taking place in the horticulture sectors have also contributed to these outcomes.

Most Effective Technical Approaches

During the focus group discussions, every farmer engaged in the Activity consistently highlighted that the **technical training and advice about production practices** provided by CSmart were among the most effective forms of support. They emphasised that these interventions led to swift improvements in productivity, profitability, and overall health. Furthermore, farmers appreciated the guidance on variety selection and connections to input retailers, which they deemed particularly valuable.

'Before, I was not confident to grow yellow watermelon as the production technique is quite complex and it is labour intensive to irrigate the crop. This is not suitable for me as a person with disability. The Activity has trained me in new production techniques, and the introduction of drip irrigation and plastic mulch has not only streamlined irrigation practices, but also significantly reduced labour costs and time. There is no reason for me not to invest more and rent more land and enjoy the benefits of the stable price and increasing demand.'

Vegetable Farmer with disability reached by CSmart

In addition to these aspects, vegetable farmers pointed out several other types of support that they found beneficial. These included coordinated planning through a cropping calendar, the implementation of drip irrigation systems, advice on harvesting and packaging produce, and assistance with establishing market connections. Strengthening **linkages between farmers and local collectors**, **as well as local input suppliers**, not only facilitated better market access but also enabled target farmers to negotiate and secure better prices for their produce. This enhanced market connectivity and played a crucial role in improving farmers' livelihoods and economic sustainability.

Farmers mentioned the usefulness of the **social media group** CSmart formed on Telegram as a platform for sharing information and seeking advice to deal with problems. Moreover, the introduction of the **Chamkar app** not only democratised access to agricultural knowledge but also empowered farmers with valuable insights

and best practices in Good Agricultural Practices (GAP). This digital tool played a pivotal role in bridging the information gap and empowering farmers to make informed decisions, ultimately leading to improved farming practices and outcomes.

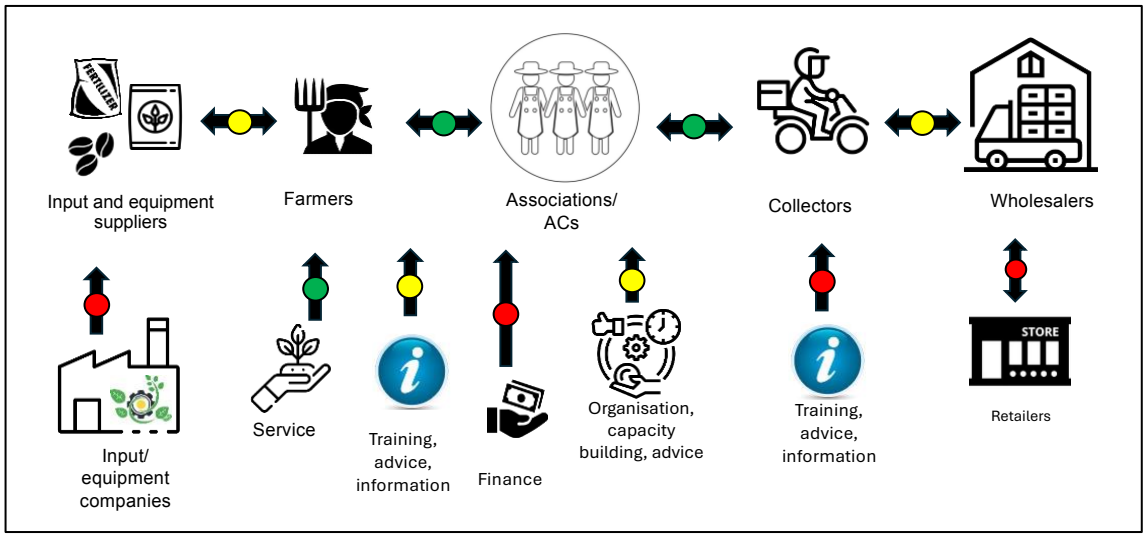
Providing incubation training for input suppliers not only enhanced their knowledge and skills in business and financial management, but also fostered stronger partnerships and collaborations within the agricultural value chain. This ultimately contributed to a more robust and resilient agricultural ecosystem.

Sustainability of Market Function Improvements

In order for improvements in a market function to be sustainable, there must be capacity, finance and incentives to support them over the long-term. This section analyses whether these exist for the improvements that CSmart facilitated in the Siem Reap, Banteay Meanchey and Oddar Meanchey horticulture market systems.

Figure 2 provides a snapshot of the likelihood of sustainability for the functions that CSmart addressed in the horticulture value chain and supporting markets. It uses the same traffic light system as Section 4.1 of the main report.

Figure 2: Sustainability of Market Functions and Relationships Improved by CSmart



Local Value Chains

The linkages between farmers, producer groups, and collectors appear robust and sustainable. However, the connections between collectors and wholesalers still lack strength. Interviews with the collectors indicated that these connections were introduced to only some of the wholesalers by CSmart but that this did not always result in the wholesalers buying from them consistently. The result is that collectors tend to scout for buyers (within and beyond the districts) during the aggregation season which might hamper the ability to sell on time. Regarding inputs, while

commercial relations with input sellers exist, farmers still lack confidence in receiving accurate advice from them.

The work that CSmart has done with the Melon Association is likely to be sustained as evidence shows that the board members have improved capacity among their members in terms of business management, financial management, marketing and branding, customer services and production management.

CSmart implemented the Gender-Smart Accelerator for Agricultural Entrepreneurs, which aimed to enhance business skills among selected female lead farmers and input retailers. Evidence suggests that this capacity-building initiative has been highly beneficial. Interviews with input retailer entrepreneurs revealed significant improvements in their business operations and management, attributed to the skills acquired from the acceleration programme. As a result, they expressed increased confidence in the positive growth of their businesses. Moreover, beyond acquiring business management knowledge, participants were connected with various value chain actors, including producers, collectors, and private input companies. This networking opportunity has facilitated collaboration and knowledge exchange within the agricultural ecosystem. Furthermore, participants gained technical knowledge in production practices, particularly in areas such as fertiliser application, pest and disease control, and the use of personal protective equipment. This technical expertise has bolstered their ability to advise farmers better than was previously the case, which is crucial for the sustainability of the business. However, as mentioned earlier, feedback from the farmers during field interviews showed that farmers still rely on CSmart staff for advice and do not trust the input suppliers.

Value Chain Functions

The linkages between supported market actors and value chain actors beyond their provincial areas, extending to wholesale markets and high-value supermarkets in Phnom Penh, are likely to continue because of the mutual benefits generated.

- Input suppliers demonstrate a link but show no significant change in their relationships with input companies
- High compliance standards from the high-value markets is a crucial constraint for the producers and the associations. Evidence shows that the supermarkets are not satisfied with the performance and inconsistent supplies, and that they are not sure whether they will continue buying from them in the longer-term
- The relationships between wholesalers and retailers are not optimal, affecting collectors and markets in Siem Reap. Similarly, the link between retailers and wholesalers remains weak, posing a threat to the stability of the broader sector. Even organised entities like the Melon Association face challenges in consistently supplying retailers.

Supporting Functions

The sustainability of supporting functions addressed by CSmart presents a mixed picture. Among the various services provided, training, advice, and information stand out as the most effective. While these practices are invaluable, ongoing access to training, advice, and information is crucial for farmers and other market actors to adapt their practices in response to evolving business dynamics and contextual changes. With climate change effects intensifying, and market opportunities evolving alongside infrastructure improvements, the need for adaptation becomes even more pressing. Without continued access to these essential resources, the ongoing success and resilience of farmers and other market actors, are at risk.

While farmers are likely to continue receiving advice and information from various sources such as input suppliers, producer groups, lead farmers, collectors, and PDAFFs, sustained training is unlikely to be provided by any entity. Additionally, there are limitations to the advice and information that these sources can offer. One of the main challenges lies in the limited avenues available for local market actors to access updated training, advice, or information, potentially leading to a decline in the quality of knowledge provided to farmers. Furthermore, without access to training, advice, and information, local stakeholders may struggle to develop their businesses or organisations.

Farmers express a need for more updated information about climate change and new varieties, highlighting capacity limitations among agricultural agencies and input sellers to provide adequate support.

Lead farmers express their commitment to supporting other farmers, driven by the recognition they receive for their assistance. However, some lead farmers encounter frustration when their advice is disregarded, or if crops do not yield as expected despite following recommended practices. Although CSmart effectively enhanced the technical capacity of lead farmers, the sustainability of their support may diminish over time as they prioritise their own farms or other business activities.

Input suppliers are inclined to continue providing advice as it helps them to increase their client base and retain customers. CSmart's efforts to improve the technical capacity of input suppliers and supporting them in integrating advice into their business models have been effective. Services, such as cocopeat, show promise, albeit on a small scale.

The **Telegram/Messenger group** established by CSmart is expected to persist as a valuable source of advice and information, facilitating knowledge sharing among farmers and other market actors. Additionally, CSmart staff have committed to providing continued assistance even after the Activity concludes, adding to the group's utility.

The **PDAFFs** expressed gratitude to CSmart for capacity-building initiatives and involvement in meetings and training. However, concerns have arisen regarding the continuation of activities due to limited government budget allocations for fieldwork.

Collectors are motivated to provide market information to farmers to ensure the availability of marketable produce. However, their limited market perspective may hinder their ability to identify and communicate new market opportunities effectively.

CSmart successfully organised **Agricultural Cooperatives (ACs) and producer groups**, and evidence suggests that these initiatives are likely to be sustained as members recognise the benefits, such as proper cropping calendar planning and technical support among members. The sustainability of access to vital information, including new techniques and technologies for climate change adaptation, as well as market insights for input suppliers and collectors post-Activity phase-out, remains uncertain. CSmart's provision of hands-on advice and training has fostered a significant dependency on iDE technical staff, raising concerns about the continuity of support beyond the project's conclusion.

New services supported by CSmart, such as the production of cocopeat by local input producers, are expected to endure, given that these service providers have gained technical and managerial capacity and have a financial interest in sustaining their businesses.

CSmart provided seed capital and short-term loans without interest to cover the cashflow shortage for some of the market actors reached through the interventions. These sources are not sustainable and challenges still persist in **accessing financial resources** for investments by the market actors. Furthermore, broader market functions such as transport and storage pose potential constraints to sector expansion.

Addressing these challenges will be pivotal in fostering sustainable growth and resilience within the horticulture sector in the Activity's target locations.

Assessment of Activity Implementation Approaches

This section identifies CSmart’s implementation approaches that contributed to, or detracted from, both effectiveness and efficiency. Some of these approaches originated with the design of the Activity, while others were part of the Activity management.

Effective Implementation Approaches

Strategic combination of training provision: CSmart’s approach of training farms by lead farmers, complemented by ongoing technical follow-up, yielded tangible

results, notably in the form of increased sales for the input providers, as farmers were equipped with the knowledge and resources to make informed purchasing decisions. However, there is a risk that the farmer-to-farmer extension model may decline over time due to a lack of incentives for lead farmers to continue advising their peers. Nevertheless, this approach remains valuable, especially considering the constraints faced by government extension services because of budget limitations.

Promoting climate-resilient seeds and technologies: CSmart has actively promoted the adoption of climate-resilient seeds and technologies within the horticulture sector. This initiative involved providing farmers with access to resilient seed varieties and innovative agricultural technologies designed to withstand the challenges posed by climate change. Through training programmes, demonstrations, and field trials, CSmart has educated farmers about the benefits and proper utilisation of these climate-smart solutions. Additionally, CSmart has facilitated partnerships with seed companies and technology providers to ensure the availability and accessibility of these resources to farmers. Overall, CSmart's efforts have played an important role in empowering farmers to adapt to changing climatic conditions and to improve the sustainability of their agricultural practices.

Strengthening linkages between value chain actors: CSmart has actively linked farmers and local collectors, as well local input suppliers, which has been instrumental in enhancing the economic outcomes for target farmers. This has facilitated several positive outcomes, such as improved market access, efficient supply chains, better access to information and resources leading to enhanced negotiation power particularly for fair prices and favourable terms. An increase in value addition opportunities for packaging and branding supply to high value supermarkets has been a further benefit.

Testing and adaptation of technical improvements: The CSmart team diligently collected and analysed data on various indicators of progress, including the operational maturity of producer groups, changes in business practices among input suppliers and collectors, and the support provided by lead farmers to their peers. They also assessed changes in farming practices and profitability among the farmers themselves. This wealth of information was regularly utilised for reflection on the effectiveness of the Activity, driving adaptive management strategies. For instance, the team collaborated with seed companies to conduct trials on newly imported seed varieties and to assess market receptiveness to these crops. This proactive approach allowed the team to make informed recommendations to farmers, promoting the adoption of successful varieties. Such iterative processes, both internally and collaboratively, played a pivotal role in achieving increasingly positive outcomes throughout the duration of the Activity.

Gaps in Implementation Approaches

Lack of sustainable and scalable business models: The absence of sustainable and scalable models for support functions, particularly in training and advice, restricted the Activity's outreach solely to the farmers directly targeted by the interventions and not beyond. For example, leveraging input companies could have facilitated the provision of enhanced embedded services for farmers.

Insufficient adaptation of approaches: CSmart's efforts to adapt its approaches have fallen short, particularly in addressing the sustainability of market functions. This concern was highlighted during the mid-term review of the Activity, where stakeholders expressed apprehension about the long-term viability of certain market functions. Despite acknowledging these concerns, the changes implemented by CSmart were deemed insufficient to adequately address this weakness. As a result, there remains uncertainty regarding the sustainability of key market functions beyond the Activity's lifespan.

Narrow definition of the 'system' CSmart aimed to influence: The Activity's definition of the 'system' targeted for improvement has been notably narrow, primarily concentrating on production and the local ecosystem surrounding farmers. A broader definition would have allowed for more tailored solutions to various constraints and would have heightened the potential for broader-scale and more systemic outcomes. While facilitating the adoption of innovations within the sector, CSmart assumed some of the crucial functions of the market system. Embedding these functions strategically within the operational frameworks of relevant market actors would have ensured the sustainability of the practices implemented. For instance, farmers did not actively look for new knowledge about pest and disease control, or market information such as the crop demand or price, because they could easily ask CSmart technical staff.

Inappropriate results framework: The results diagram crafted by CSmart effectively maps out the logical relationship between the activities undertaken and the anticipated benefits for farmers. However, there are notable deficiencies within the framework that hindered the efficient management of the Activity. First, the labels assigned to different levels inadvertently encouraged a narrow focus on attaining numerical targets for activities and service utilisation. By labelling the third and fourth levels as 'medium-term outcomes' and 'long-term outcomes', attribution was deferred until the endline evaluation. The gap in looking for immediate results attributed to outputs led to a missed opportunity for CSmart to identify and steer interventions that could have effectively strengthened the capacity and incentives of market actors to reach farmers. Second, the framework lacked sufficient emphasis on sustainability, evident in the scarcity of indicators addressing this critical aspect. While most indicators pertained to farmers, those related to market actors and business models providing inputs, services, and market links to farmers were inadequately represented. Moreover, the few indicators that did exist primarily focused on the services rendered by the Activity to these market actors, neglecting their business performance and sustainability. Third, essential supporting functions,

such as advice, information, and finance, vital for farmers' and other market actors' continued expansion and resilience, were overlooked within the framework. Finally, the absence of a mechanism for assessing system changes beyond those directly impacted by the Activity further undermined its efficacy. As a result, the framework fell short of serving as an effective tool for maximising sustainable and positive outcomes from the Activity.

Lessons and Recommendations for CSmart

This section reflects on lessons from CSmart with broader applicability: it also provides recommendations for iDE that may be appropriate for the remainder of that Activity.

No.	Lesson	Recommendation
1	In Cambodia, closely involving appropriate government agencies in Activities can support effectiveness and efficiency; a close partnership with a government agency is not incompatible with a focus on the private sector	Continue to work closely with PDAFFs; calibrate collaboration with other government agencies based on their core mandates and priorities
2	Robust technical inputs encourage behaviour changes and build credibility; however, market actors should take over the provision of technical advice as quickly as possible to avoid long-term dependency on Activity staff	Continue to supplement market actors' skills with additional technical expertise when needed, but always with an explicit, clear and timely exit plan with market actors taking over the provision of technical expertise as much, and as soon, as possible
3	Capacity is one essential aspect of a sustainable model; incentives and funding are equally important	To develop sustainable models, consider the capacity, incentives and sustainable financing of market actors for the envisioned improvements
4	Sustainable and scalable models are needed to improve resilience over the longer-term, increase scale and maximise the likelihood of wider system change	Explicitly look for market actors and mechanisms with the potential to sustain and scale improvements
5	The local value chain actors need to take ownership of the practices and technologies beyond the Activity's lifespan	Work on exit strategies to ensure relevant market actors adopt the function to deliver services on climate smart and safe food production practices and technologies that were introduced by CSmart

No.	Lesson	Recommendation
6	A broader definition of the 'system' an Activity aims to influence can expand opportunities for solutions to challenges, improve sustainability and increase scale	Maintain a geographic focus for smallholder farmers and local value chains but include provision for working with market actors outside of this geographic area for specific solutions to local challenges and to scale improvements
7	Adaptive management is key to maximising positive results; it must be supported by an appropriate MERL framework	Be self-critical about what is working and what is not in the portfolio of interventions - particularly from the angle of sustainability. Support these practices with a MERL framework that emphasises outcomes, sustainability and system changes
8	Climate change has had a detrimental impact on the development of the horticulture sector. Enhancing agricultural practices and introducing new technologies and seed varieties will be crucial for ensuring farm survival and productivity in the face of this challenge	Continue to prioritise climate change adaptation strategies to bolster farmers' resilience

Appendix E: Review of STEER

Background

The Systems Approach to Transformative Economic Empowerment and Resilience (STEER) Activity was implemented in three districts of Koh Kong province in Cambodia from May 2019 through April 2024, with a budget of NZD5.6 million. The goal of STEER was to improve economic empowerment through a market-based approach. The Activity aimed to use a systems approach to enable smallholder farming households to earn more income from safe and climate smart, commercial horticulture production. In line with the Save the Children's child sensitive livelihoods approach, the Activity also aimed to minimise potential harm and maximise positive outcomes for children in farming households.

Alignment with Trends in the Cambodian Agriculture Sector

Trends in Cambodia have supported growth in the horticulture sector for at least the last decade. Evidence indicates that smallholder farmers can be competitive in horticulture, particularly if they cooperate with other farmers in marketing. STEER also adopted a focus on high-value crops which are in strong demand. Given these trends, a focus on the horticulture sector was appropriate for increasing the incomes of vulnerable families.

STEER's choice of crops on which to focus is outlined in Table 1.

Table 1: STEER's choice of focus crops

Crop	Markets
Vegetables	Local markets primarily in Koh Kong
Bananas	Local, Phnom Penh and export markets
Cashews	Export markets

While farmers in the three districts were primarily growing vegetables in kitchen gardens for home consumption, they were already growing bananas and cashews commercially for sale to domestic and export markets through collectors. All three crops were appropriate from a demand and market competitiveness perspective at the time they were chosen. The choice of vegetables allowed farmers to substitute their local crops for produce coming from other provinces or countries. Within vegetables, there is also potential for diversification which can reduce risks and smooth income. The markets for bananas and cashews were well-established and offered good prospects. However, as the Activity proceeded, other export crops became more prominent among farmers as demand in export markets shifted. If STEER had planned-in the flexibility to add (or drop) crops from its selection, based on market demand over time, it would have been able to provide more responsive support for farming households as economic opportunities evolved.

Alignment with the RGC and MFAT ASEAN Priorities

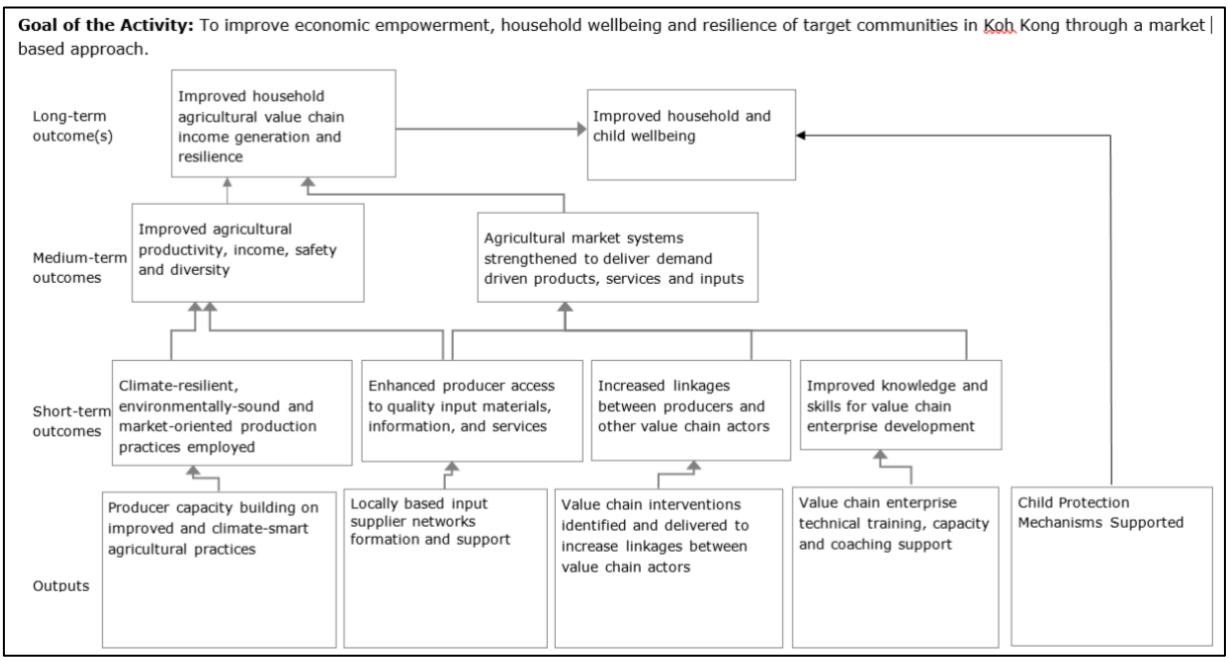
STEER was aligned with the RGC's plans, including Cambodia's National Strategic Development Plan 2014-2018, the Agriculture Sector Strategic Development Plan 2014-2018, and the National Action Plan for Disaster Risk Reduction (DRR). It was also aligned with Cambodia's international commitments including the Sustainable Development Goals 2030. STEER was relevant to the RGC's Pentagonal National Development Strategy, released in 2023, particularly its focus on enhancing agricultural production, quality, safety, diversity, value addition and resilience.

STEER also supported MFAT's agriculture priorities in Cambodia by increasing economic and food security benefits from agriculture, as well as addressing economic resilience, climate change adaptation and reaching vulnerable groups. In line with improving agricultural performance, STEER promoted market-led agriculture by identifying and strengthening value chains. It also supported MFAT's priorities in DRR and resilience.

Achievement of Outputs and Progress towards Outcomes

Figure 1 outlines the expected outputs and outcomes for the STEER Activity.

Figure 1: STEER Results Diagram



Progress towards outputs and outcomes in this section is assessed based on this framework and the targets set in the Activities' design document and results update. The discussion of progress is organised as follows:

- Farmer capacity building (Output 1; Short-term Outcome 1; Medium-term Outcome 1)
- Value chain actor capacity building and links (Outputs 2, 3 and 4; Short-term Outcomes 2, 3 and 4; Medium-term Outcome 2)
- Child protection (Output 5)
- Long-term Outcomes

It is evident from STEER's reports that the Activity has achieved or exceeded almost all of its output targets. The outputs have contributed to solid progress in the short-, medium- and long-term outcomes among households reached. However, there are concerns about the extent to which farming households and producer groups will be able to continue getting sufficient technical and managerial support to manage future challenges.

Farmer Capacity Building

Output 1 – Producer capacity building on improved and climate-smart agricultural practices - Achieved: Farmer outreach targets were achieved in Year 3, with Year 4 dedicated to refresher training related to the targeted crops. Farmers reported receiving training in a diversity of topics related to planning, land preparation, care and maintenance of crops, and post-harvest practices. These included practices such as pruning, safe and effective fertiliser and pesticide application, crop rotation, and irrigation system set-up and maintenance. Farmers were also taught safety and environmental management including practices related to the safe disposal of plastic and hazardous waste, appropriate use of personal protective equipment, and protection against land encroachment. Farmers also reported receiving training in bookkeeping which many found useful in managing their farms. In addition to training, farmers attended exchange visits and got advice, remotely or on their farms, particularly when they had difficulties.

Short-term Outcome 1 – Climate-resilient, environmentally-sound and market-oriented production practices employed, and Medium-term Outcome 1 – Improved agricultural productivity, income, safety and diversity: Although results from STEER's endline survey are not yet available, qualitative field research indicated that behaviour change among the farmers reached was strong. While only 30-40% of farmers fully adopted the practices taught – and, therefore, experienced the highest increases in productivity - many more made some changes to their practices that contributed to improved productivity, profits, diversity and safety. The changes for vegetable producers were very significant, with farming households often moving from kitchen gardens, mainly for subsistence, to primarily commercial production. In contrast, improvements among banana and cashew producers were incremental. These producers made improvements but they were not as substantial as those among vegetable farmers. There are probably several reasons for this

difference. Banana and cashew farmers were already growing commercially. There were also more practice changes taught under the Activity that were applicable and accessible to vegetable production than was the case with banana and cashew production. For example, a drip irrigation system was financially within reach of many vegetable producers but not for those producing bananas or cashews because land areas for bananas and cashews are larger and crops are more dispersed. Among both vegetable, and banana or cashew producers, the primary reason for not adopting some practices was cost/availability of finance, with a secondary consideration being time to perform the practices.

While there is solid evidence to indicate that improvements in practices are a key driver of productivity increases, it should be noted that the figures on productivity in STEER reports should not be considered definitive as they do not take into account attribution. In other words, the attributable effects of the Activity on productivity could be higher or lower than those reported.

Value Chain Actor Capacity Building and Links

Output 2 – Locally based input supplier networks formation and support - Achieved: To achieve this output, STEER worked with 23 input suppliers, providing them with training in conjunction with the Koh Kong PDAFF, facilitating exchange visits and linking them to farmers. The STEER team found that it was more successful and less risky to work with existing suppliers rather than with new ones. STEER also connected input suppliers to input companies, which provided the suppliers with an additional source of technical information and training as well as enabling them to source better inputs, more consistently and at better prices.

Output 3 – Value chain interventions identified and delivered to increase linkages between value chain actors - Achieved: STEER helped to form and strengthen 39 producer groups, which provided farmers with a platform for cooperation in purchasing inputs and marketing produce. In some cases, the producer groups also coordinated cropping among members so as not to flood the market with particular crops or to increase volumes of particular crops to serve larger clients. The STEER team found that farmers in producer groups benefited more than others. Nevertheless, they found that intense support was required to enable the producer groups to function effectively. STEER reported that, as of March 2023, no producer groups had reached a mature stage and almost half were still at the earliest stage of development.

Output 4 – Value chain enterprise technical training, capacity and coaching support - Achieved: STEER provided training and grants to micro businesses that interact with farmers, including input suppliers, collectors, wholesalers and retailers, and linked them with farmers. STEER also supported two innovative businesses – cocopeat production and a spraying service. By working with all the horticultural market actors in the local area, STEER supported coordinated growth and development of the local horticulture sector. Furthermore, farmers mentioned that they could reach out to input suppliers, collectors, the PDAFF and project staff

directly or through a Telegram (social media) group established by the project to report challenges and get advice. Farmers also used Telegram for communicating with collectors, sending pictures of the produce that was ready for collection.

Short-term Outcome 2 – Enhanced producer access to quality input materials, information, and services; Short-term Outcome 3 – Increased linkages between producers and other value chain actors; and Short-term Outcome 4 – Improved knowledge and skills for value chain enterprise development: On the whole, the activities to strengthen local value chain actors who interact with farmers were successful in improving the capacity of these actors and linking them with the farmers reached under the Activity. Linking farmers to input suppliers, and building the capacity of those input suppliers, helped all farmers to get better access to appropriate inputs and advice. The efforts to connect farmers with collectors were more effective for vegetable farmers because these farmers previously had few connections to sell produce. For cashews and bananas, farmers already had existing relationships with collectors. These farmers often perceived that the collectors and buyers to whom STEER introduced them did not offer as good a deal as their existing collectors. For example, collectors STEER introduced often required a contract or only purchased high-grade produce rather than all of it.

Input suppliers reported a range of benefits from involvement in STEER, such as:

- New links with input companies that improved access to quality products, training and better prices
- Increased confidence and knowledge to provide farmers with advice about products to increase both productivity and safety
- Improved safety and display of their products
- More customers
- Shop expansion using a grant provided by STEER
- Improved management based on information and ideas gained through exchange visits
- Now wholesaling as well as retailing inputs.

Collectors reported a range of benefits from involvement in STEER, such as:

- Increased volumes
- New buyers
- Selling to more distant markets - for example Koh Kong market - when previously they were selling only to local, commune markets
- More reliable income
- Higher income.

While STEER was effective in building capacity and links among local market actors, there are some areas of concern. It remains uncertain to what extent the producer groups will be sustainable, particularly in performing some of their more complex activities. These include managing credit schemes, acting as an insurer for farmers' crops and effectively coordinating production through cropping calendars. The STEER team noted that producer groups struggled to manage these functions

effectively. In addition, the grant amounts to producer groups were probably insufficient to help farmers to make bigger investments or to compensate farmers in the event that the crops of all producers in a group were destroyed at the same time by a natural disaster. STEER did not identify alternative sources or build external links to ensure a sustained provision of these types of services.

Medium-Term Outcome 2 – Agricultural market systems strengthened to deliver demand-driven products, services and inputs: Evidence from the field research indicated that the local horticultural system was strengthened, particularly for vegetables but also, to a lesser degree, for cashews and bananas. Input supply improved considerably, both in terms of products and the advice available. Connecting input suppliers to companies outside of Koh Kong enabled them to better serve farmers. Collection and marketing improved significantly for vegetable farmers, but by much less for those producing cashews and bananas, as they continued to rely on existing connections. The links with new buyers from Phnom Penh did not work out for the most part, due to their procurement requirements or late payments. The innovative businesses were useful on a small-scale. At the local level, farmers now have improved access to inputs, markets and services.

However, integration with the broader horticultural system outside of Koh Kong was developed only to a limited degree. While input suppliers gained useful links to input companies, these companies did not improve the way they interacted with input suppliers. While some products reached Phnom Penh markets, it was primarily through chains of traders rather than through the buyers introduced by STEER. There were no links developed between Koh Kong market actors and service providers outside of Koh Kong, such as financial institutions or sources of updated information.

Child Protection

Output 5 – Child protection mechanisms supported - Achieved: STEER provided training for farmers about positive parenting, gender equality and child protection. STEER also worked with schools, provincial departments and others to act as focal points for child protection in communities. The work with schools, while valuable in its own right, was not well integrated with the rest of the project activities.

The inclusion of a child protection component has resulted in benefits for children and families. During focus group discussions, farmers said that they appreciated the child rights training as it had helped to promote child health and access to school. Several emphasised that children should be allowed to speak out and express their ideas and that there should not be any child labour or violence against children. A significant number of farmers specifically mentioned that they appreciated the positive parenting training. They reported that they now use more gentle language with their children and do not use physical violence to discipline them. Several mentioned the positive influence of this change on family dynamics. Farmers also reported that they now allow children to perform only light tasks rather than heavy labour. The gender equality training seems to have had less impact, although a few farmers mentioned that this had made them aware that

there should not be gender exclusive tasks but instead everyone should help each other out.

> *'The use of gentle language (by parents) enables children to be more understanding, receptive, respectful and obedient.'*
>
> Farmer reached by STEER

The Department of Education Deputy Director reported that the partnership with STEER had enabled his department to operationalise their child protection policy in a way that they had not previously been able to, due to a lack of funding. The Deputy mentioned that the school-based activities had the following benefits in the participating schools:

- Reduction in the use of bullying words and school fighting among children
- Increased awareness among parents about the value of sending children to school
- Improved relationships among teachers, students and parents
- Improved attention of principals and teachers to safety at school.

Long-Term Outcomes

Long-term Outcome 1 – Improved household agricultural value chain income generation and resilience; Long-term Outcome 2 – Improved household and child wellbeing: The benefits from STEER for farmers have been substantial. It is important to note, however, that some figures reported by STEER to date, such as income increases, have not taken attribution into account, and, therefore, cannot be considered accurate. The STEER team must be commended for choosing an approach to the endline survey that will take attribution into account. However, the findings are not yet available.

Farmers reported a range of benefits from their involvement in the Activity related to income and resilience:

- Increased income, steadier and more reliable income
- Ability to invest in their farms: purchase or rent more land, purchase or repair equipment, more 'daring' in accessing a loan to expand production (because of greater confidence that they can pay it back)
- Easier decision-making as money is less of a constraint
- Improved ability to mitigate adverse weather to some degree
- Improved relationships and exchange of experience, knowledge and advice through producer group meetings
- Reduced debt.

Farmers also reported a range of benefits related to household and child wellbeing:

- Improved health and nutrition due to spending more money on food, consuming quality and nutritious foods, consuming 'safe' vegetables, reducing exposure to chemicals in horticulture production, and increased ability to afford medical bills

- Improved ability to support children including sending them to school regularly, enabling them to attend school to higher grades, and in some cases, supporting them to study at university
- Reduced breaches of children's rights and improved parenting
- Improved engagement in social activities such as wedding parties and religious events
- Improved confidence: decision-making has become more 'daring'. In other words farmers are taking informed risks that allow them to build their farm businesses and make improvements in their households.

Most Effective Technical Approaches

During the focus group discussions, all farmers reached by the Activity consistently mentioned that the **technical training and advice about production practices** were among the most effective types of support from STEER because of the swift impact they had had on productivity, profits and health. All farmers also found advice on variety selection and **links to input retailers** particularly useful. Vegetable farmers found the following types of support helpful as well: coordination through a cropping calendar; application of a drip irrigation system; advice on harvesting and packing produce; and market linkages.

'We know the appropriate fertiliser programme of when and what amount to apply at each stage of crop growth. This helps us to save money by reducing wastage e.g. by applying a type of fertiliser at the wrong stage when the crop doesn't need it.'

Vegetable Farmer reached by STEER

Farmers mentioned the usefulness of the **social media group** STEER formed on Telegram as a platform for sharing information and seeking advice to tackle problems.

Grants to value chain businesses enabled them to increase working capital and make investments in equipment. These improvements enabled them to serve more farmers and, in some cases, improve the quality of their services to farmers. For example, one collector invested half of the USD1500 grant she received in working capital so that she could purchase more produce from farmers and used the other half of the grant to repair her motorcycle to expand her collection and marketing activities.

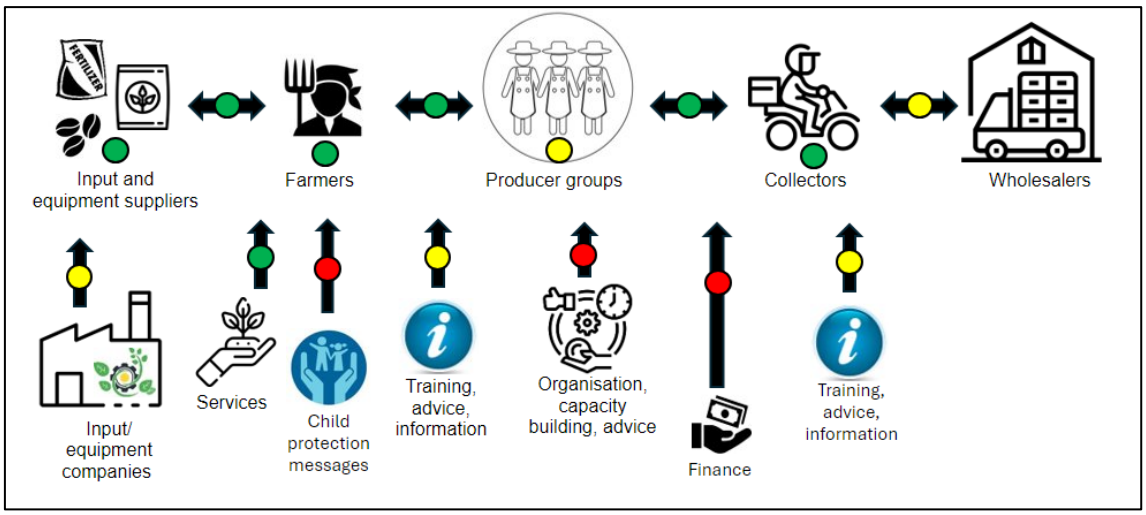
STEER specifically aimed to reach disadvantaged groups such as poorer farmers, indigenous communities and relocated families. In this respect, STEER's most effective approach was **working where disadvantaged populations are located**. **Promoting improved practices with no or low additional costs** or that could save farmers money, enabled poorer farmers to improve their practices. STEER also gave a limited number of **grants to poorer farmers**. This enabled those farmers to adopt practices that they might not otherwise have been able to, and to expand horticultural production.

Sustainability of Market Function Improvements

In order for improvements in a market function to be sustainable, there must be capacity, incentives and finances to support the improvement after the Activity ends. This section analyses whether these exist for the improvements that STEER facilitated in the Koh Kong horticulture market system.

Figure 2 provides a snapshot of the likelihood of sustainability for the functions that STEER addressed in the horticulture value chain and supporting markets. It uses the same traffic light system as appears in Section 4.1 of the main report.

Figure 2: Sustainability of Market Functions and Relationships Improved by STEER



Local Value Chains

The transactions in local value chains among input suppliers, farmers and collectors facilitated by STEER are likely to be sustainable because these market actors have the capacity, incentives and finances to continue them. The value chain market functions and transactions represent farmers' and local market actors' main sources of livelihood, and the new practices benefit them. As noted above, there are some concerns about the sustainability of producer groups, particularly their abilities to continue performing all the functions that STEER introduced. Nevertheless, the producer groups that persist are likely to continue playing a useful role in supporting farmers technically, and linking them to inputs and markets. STEER has effectively built the technical capacity of farmers, input suppliers and collectors to continue with the practices introduced.

STEER has built business skills among farmers, such as bookkeeping, and among producer groups, such as marketing and managing group sales. STEER also built business skills among other value chain actors to some degree. For example, STEER encouraged collectors to market their produce through social media and trained them how to check market prices and build a relationship with a wholesaler. Evidence indicates that the business skills capacity building was not always as

strong as the technical skills capacity building. It is also likely that STEER was unrealistic in its expectations for improvements in capacity among new entities, particularly producer groups, but also, for example, among new input suppliers. Nevertheless, business skills are likely to be sufficient to sustain current transaction levels.

Building links among local value chain actors has been an important part of STEER's capacity building. Input suppliers, farmers and collectors reported that these links benefited them and increased their incomes.

The sustainability within local value chains also supported some improvements outside of those directly reached by the Activity. Most farmers interviewed in FGDs had shared their practices with other farmers (ranging from 0-25 people each) and reported that some of those they shared with also improved their practices. The main constraints to other farmers in adopting practices were a lack of water and a small land size. While these were a barrier to the spread of improvements among farmers, 'copying' among farmers can still be considered as reasonably strong. Input suppliers interviewed also noted that other input supply businesses had started up in their areas, although the contribution of the Activity to this change could not be established through the research.

Value Chain Functions beyond Koh Kong

The links between Koh Kong market actors and value chain actors outside of Koh Kong are likely to continue to some degree. While the links between input suppliers and input companies benefit both, STEER did not influence the nature of the relationship between input companies and their suppliers, or specifically build the capacity of input companies to more effectively serve smallholder farmers or disadvantaged populations. This reduced the potential for these links to function without further support and was also a missed opportunity for scale and indirect impacts.

As noted above, the links that STEER facilitated between producer groups and wholesalers in Phnom Penh did not continue as envisioned, primarily because the business models and incentives between them were not aligned. Nevertheless, some Koh Kong collectors are effectively interacting with buyers in Phnom Penh, most commonly for crops where Koh Kong has a climatic advantage, or particularly desirable varieties, such as cucumbers and bananas.

Supporting Functions

The sustainability of supporting functions is mixed. The most effective services that STEER provided were **training, advice and information**. While the practices introduced are valuable, farmers and other market actors will need continued access to these to update their practices as their businesses and the context evolve. For example, climate change effects will intensify, market opportunities will change as infrastructure improves and farmers and other businesses may want to diversify into new crops. Without continued access to training, advice and information, the continued success and resilience of farmers and other market actors is threatened.

Farmers are likely to continue to get advice and information from input suppliers, producer groups, lead farmers, collectors and the PDAFF to some degree. But none of these actors are likely to provide sustained training. Thus, there are limitations to the advice and information that these sources are likely to provide.

Lead farmers say they will continue supporting other farmers as they get recognition from their support. However, some say they get frustrated when others do not follow their advice or if they get blamed by farmers who think they are applying new practices appropriately, yet still find that their crops do not flourish as expected. STEER have effectively built lead farmers' technical capacity. Lead farmers also have the financial capacity to guide other farmers as the land size requirements to become a lead farmer mean that they do not tend to be the poorest ones. However, it is likely that support from some lead farmers will diminish as they prioritise their own farms or other business activities.

Input suppliers are likely to continue to provide advice because it is in their interests to do so. STEER have effectively built the technical capacity of input suppliers to provide advice and have supported them to integrate advice more effectively into their business models.

The Telegram group that STEER established is likely to continue to be a source of advice and information, as the PDAFF, farmers and other market actors share their knowledge, as well as Activity staff: that latter group have offered continued assistance even after the Activity ends. The Telegram group is free and participants find it useful.

The **Koh Kong PDAFF** aims to continue to provide support for farmers and to expand support to additional districts, including field visits, troubleshooting advice and training for farmers new to a particular crop. STEER has effectively built technical capacity in the PDAFF and, by involving them in planning and activities, they have also built their management capacity. Providing farmers with training, advice and information is within the PDAFF's core mandate. However, PDAFF support to farmers is budget dependent and they frequently do not have enough time or budget for the level of support that they would like to provide.

Collectors will continue to provide market information to farmers because they have an incentive to get marketable produce. However, most local collectors do not have a broad view of markets so they probably will not always be able to spot and communicate new market opportunities to farmers.

The **Provincial Department of Environment** provided some training and information particularly related to environmental protection and farmer land encroachment on protected areas. They are unlikely to continue providing this support as they do not perceive training and information provision to be aligned with their core mandate in Koh Kong.

The biggest challenge is that local market actors have few avenues to get updated training, advice or information that they can pass on to farmers. With limited links between local stakeholders and sources of updated information, the usefulness of

the knowledge they provide to farmers will quickly wane. In addition, they will not be able to get training, advice and information to support the development of their own businesses or organisations. Input suppliers will get some updated training and information from input companies but this is unlikely to be sufficient, particularly without improved relationships.

Another important service that STEER provided has been **organising producer groups, building their capacity and advising them**. While Save the Children has been awarded another small Activity in Koh Kong under which some capacity building will continue, this support is not sustainable without donor funding. The Koh Kong PDAFF aims to continue this support but has limited budget to do so.

The **new services for farmers** that STEER supported, specifically the provision of cocopeat and crop spraying, while small-scale, are likely to continue. The service providers have gained the technical and managerial capacity to run their businesses and have a financial interest in sustaining them.

The **training for farming households on child protection** is unlikely to continue as it was provided by the Activity and there is no actor who will continue it. The Department of Women's Affairs does not see this as aligned with their core mandate and has no budget for it. The Provincial Department of Education will focus on the school-based child protection activities. These are likely to continue within the schools already involved, as they will be integrated into the work plan of each school. But the Provincial Department will not be able to monitor the activities as closely. The Department aims to expand the activities to additional schools in 2024 provided that budget is available.

STEER provided **financing** to producer groups, collectors, input suppliers and service providers in the form of grants. STEER did not link these market actors to financial institutions or other sustainable financial service providers. Therefore, this service is not sustainable. The producer groups provide **credit and insurance services** to farmers using the grant money from STEER as a revolving loan fund and reserve fund for crop failures. This may continue on a small-scale in capable producer groups. However, financial and insurance services typically require scale and specialised skills to work effectively, particularly for smallholder farmers. Therefore, the sustainability and effectiveness of these services over the long-term is unlikely.

In summary, the likelihood that improvements continue is strong within local value chains, moderate with links to value chain actors outside of Koh Kong, and relatively weak within support markets. The weak sustainability of support markets threatens the continued expansion and resilience of the local value chains.

Assessment of Activity Implementation Approaches

This section identifies STEER's implementation approaches that contributed to, or detracted from, both effectiveness and efficiency. Some of these approaches originated with the design of the Activity, while others were part of the Activity management.

Effective Implementation Approaches

Close partnership with PDAFF: One of STEER's most effective approaches was closely partnering with PDAFF at every step of the Activity, including planning and monitoring as well as implementation. For example, the PDAFF staff appreciated that the technical staff from the Activity and the technical staff from PDAFF had bi-monthly meetings throughout the Activity. Early in the Activity, STEER brought in staff from iDE to train PDAFF's technical staff including providing a training-of-trainers component. This early training enabled PDAFF staff to provide training for farmers under STEER, which built relationships and trust. A number of farmers interviewed mentioned that they had reached out to the PDAFF for technical support, in addition to project staff. The PDAFF staff understood and were involved in all aspects of the Activity, including not only the technical activities but also producer group formation and capacity building, facilitating market links, and the child protection activities. This involvement built ownership. The PDAFF now states that they are prepared to expand the approaches to additional districts in Koh Kong (provided that they have sufficient budget).

STEER's coordination with the Provincial Department of Environment, the Provincial Department of Women's Affairs, and the Provincial Department of Education, while useful, were not as effective as the partnership with the PDAFF. These other agencies had a more limited involvement with the Activity and their mandates are not as closely aligned with STEER's goal as is the case with the PDAFF. The limited involvement also created some friction. The Department of Women's Affairs felt that the PDAFF did not involve them in the Activity planning, while the Department of Environment felt that STEER did not effectively work with the district offices. However, the partnership with the Department of Education was appreciated as the child protection activities fit well with their mandate.

Strong collaboration with iDE: STEER worked with iDE over the first half of the Activity to build technical capacity among the Activity staff members, key partners such as the PDAFF, and market actors. The extended collaboration ensured robust technical inputs were provided for local value chain actors, which was a key strength of the Activity. The explicit and planned phasing out of iDE's support was also important in ensuring a transfer of skills to local market actors starting early in the Activity. It is notable that farmers who participated in STEER, while still relying on Activity and iDE technical staff, reached out more to sustainable market actors for advice than farmers who participated in the other two main Activities.

Addressing the challenges of working in a relatively remote location: STEER focused on relatively remote locations in order to reach poorer and more disadvantaged farming households. This was an essential part of their success in reaching those populations. Working in relatively remote locations with dispersed populations creates a number of management challenges. STEER experienced difficulty in keeping staff and filling vacant roles. Costs were higher due to the time required to reach remote locations. STEER managed these challenges effectively by being flexible and using creative approaches to solve problems. For example, when STEER had difficulty filling a key position, the management adjusted the roles and responsibilities of other staff to fill the gap. Working in remote locations is always more challenging and costly than it is in mainstream economic corridors, but is often an essential part of reaching disadvantaged populations.

Monitoring, reflection and adaptive management: The STEER team consistently gathered information on progress towards outcomes, such as the operational maturity of producer groups, the business changes among input suppliers and collectors and the support provided by lead farmers to other farmers. They also took practice and profit changes among farmers into account. In addition, the team regularly used this type of information to reflect on what was working well in the Activity and what was not. This reflection fed into adaptive management. For example, the team found that field days and exchange visits were useful for inspiring farmers, but that training and technical advice were essential to increase the likelihood that new practices would be adopted. So, the team adapted their approach, encouraging more avenues for training and technical advice from the PDAFF, District Agricultural Offices, input suppliers and lead farmers. This regular and internal process was instrumental in increasing positive results over the life of the Activity.

Passion: The STEER team showed that they are passionate advocates for inclusive growth in the local horticulture system in Koh Kong. This passion inspired involvement and built trust with public and private local market actors. A significant number of local market actors and farmers specifically noted that the passion and caring showed by STEER staff members made the Activity more effective.

Gaps in Implementation Approaches

Lack of sustainable and scalable business models: STEER did not give enough attention to building sustainable and scalable business models, particularly in support functions. This gap was rooted in two management practices. The first was focusing on capacity building to improve market functions but giving less attention to the other two essential ingredients of sustainability: incentives and sufficient financing. The second was partnering only with market actors in the local system without considering the potential of these actors or their business models to scale. This resulted in missed opportunities to work with, and influence, market actors with the potential to scale improvements, such as national input companies. In a similar vein, STEER did not sufficiently consider how successful business models in the local value chain could be scaled. For example, asking questions such as: Which Cambodian market actors or institutions could sustainably support collectors to start up in new areas or provide the Koh Kong PDAFF with updated technical

information? While STEER did need to test models before scaling them, having a strategy for scaling in place early in an intervention lays the foundation for scale. Furthermore, five years of the Activity's implementation period is a sufficient time to have pursued the scaling-up of at least some of the models, given the dynamism of the horticulture market in Cambodia.

Narrow definition of the 'system' STEER aimed to influence: Related to the point above, STEER defined the 'system' it aimed to influence narrowly – the local vegetable, cashew and banana value chains in the three districts where it worked. This definition not only reduced the potential for sustainability and scale, but also limited options for solutions to farmers' challenges. For example, STEER recognised that access to credit and insurance was essential for farmers to expand and improve their resilience. The solution devised was built on providing grants to local producer groups. STEER did not consider which businesses or institutions in Cambodia, but outside of Koh Kong, might be able to provide those services to farmers, through producer groups, more efficiently, sustainably and at scale. A broader definition of the 'system' that STEER aimed to influence could have led to more appropriate solutions to some challenges, contributed to improved sustainability and increased scale. It also had the potential to better prepare farmers to integrate successfully into wider markets as infrastructure to, and within, Koh Kong improves.

Gaps in the strategy for inclusion: The approaches that STEER used to reach disadvantaged populations were effective. In addition, STEER could have used additional strategies to reach and increase benefits for disadvantaged populations. In particular, the Review team did not see an analysis of the particular needs and demands of specific disadvantaged groups for inputs, services and relationships that might have led to adaptations in the way these were delivered to make them more accessible to, and beneficial for, disadvantaged farmers. For example, in other contexts, development projects have worked with equipment manufacturers on adapted equipment appropriate for women, and sourcing arrangements that take into account cultural differences between buyers and suppliers. Pinpointing adaptations that will enable disadvantaged populations to use and benefit from inputs, services and relationships, and working with market actors to realise those adaptations, increases the effectiveness of strategies for inclusion.

Inappropriate results framework: STEER's results diagram lays out logical causality between STEER's activities and expected benefits for farmers. However, there are several aspects of the results framework that did not support the effective management of the Activity. First, the labels on the levels encouraged a focus on achieving numerical targets for activities and use of services. Because the third and fourth levels were labelled 'medium-term outcomes' and 'long-term outcomes', these were not measured taking attribution into account until the endline. In fact, farmers were increasing productivity and generating increased incomes in the first season when they applied new practices, which started to take place in Year 2 of the Activity. Thus, the STEER team did not have sufficient, accurate information on outcomes to adapt their strategies more rapidly. Second, the framework does not emphasise sustainability, and there are few indicators relating to this. Most indicators relate to farmers; indicators related to market actors and business

models that provide inputs, services and market links to farmers are limited. Those that are, includes primarily a focus on services the Activity provided for these market actors rather than their business performance and sustainability. Third, the framework does not include supporting functions, such as advice, information, and finance, that are essential to farmers' continued expansion and resilience. Finally, the framework has no mechanism for assessing system changes beyond those reached directly by the Activity. Thus, the framework did not act as an effective tool for maximising sustainable and positive results from the Activity.

Lessons and Recommendations for STEER

This section reflects on lessons from STEER with broader applicability beyond this Activity. While STEER has already ended, Save the Children is implementing a small follow-on Activity in Koh Kong focusing on climate change adaptation. Thus, this section also provides recommendations for Save the Children that may be appropriate for this follow-on Activity.

No.	Lesson	Recommendation
1	In Cambodia, closely involving appropriate government agencies in Activities can support effectiveness and efficiency; a close partnership with government agencies is not incompatible with a focus on the private sector	Continue to work closely with the PDAFF; calibrate collaboration with other government agencies based on their core mandates and priorities
2	Robust technical inputs encourage behaviour changes and build credibility; however, market actors should take over the provision of technical advice as quickly as possible to avoid long-term dependence on Activity staff	Continue to supplement internal skills with additional technical expertise when needed, but always with an explicit, clear and timely exit plan with market actors taking over the provision of technical expertise for the long-term
3	Capacity is one essential aspect of a sustainable model; incentives and funding are equally important	To develop sustainable models, consider the capacity, incentives and sustainable financing of market actors for the envisioned improvements
4	Sustainable and scalable models are needed to improve resilience over the longer-term, increase scale and maximise the likelihood of wider system change	Explicitly look for market actors and mechanisms with the potential to be sustainable and scale improvements, recognising that they may be outside of local value chains

No.	Lesson	Recommendation
5	A broader definition of the 'system' an Activity aims to influence can expand opportunities for solutions to challenges, improve sustainability and increase scale	Maintain a geographic focus for smallholder farmers and local value chains but include provision for working with market actors outside of this geographic area for specific solutions to local challenges and to scale improvements
6	Disadvantaged populations may require adapted and sustainable inputs, services and relationships to implement improvements and to benefit from them equally as others	In addition to the measures currently being utilised to reach disadvantaged households, consider how inputs, services and relationships can be adapted for disadvantaged populations when required, and which market actors may have an incentive to serve to these populations sustainably
7	Including a child protection component in the Activity was effective in changing the behaviours of those reached, and safeguarding child rights was important to avoid harm such as child labour. Systemic change in this area would require a more systemic approach within the education and human rights ecosystem	Develop sustainable mechanisms to deliver child rights messages, particularly related to agriculture, to farming households. Reach out to organisations in the education and human rights ecosystem to pass on lessons learned and look for opportunities to integrate STEER's successful approaches into systemic programmes in these fields
8	Adaptive management is key to maximising positive results; it must be supported by an appropriate MERL framework	Continue regularly monitoring changes among market actors and farmers, reflecting on what is working and what is not, and adapting strategies and interventions. Support these practices with a MERL framework that emphasises outcomes, sustainability and system changes

Appendix F: Summary of Tier 2 Activities

Angkor Water Resilience by Live and Learn

Introduction

The Angkor Water Resilience (AWR) Activity is structured around two primary components:

1. Rehabilitation and enhancement of water and green infrastructure
2. Implementation of climate-resilient agriculture training and environmental education programmes

The first component encompasses initiatives aimed at improving water storage and movement infrastructure, enhancing green infrastructure, and providing water monitoring equipment. The second component focuses on supporting farmers through activities such as developing homestead gardens, promoting heritage crops, establishing compost and coir production facilities, and delivering environmental education programmes. Currently, the Activity is in its early implementation phase, with agricultural activities at the exploratory stage. Efforts are underway to recruit a consultant tasked with assessing the current status of gender equity, inclusiveness, labour mobility, and models for homestead gardening. One primary objective of infrastructure development is to supply water to temple moats to reinforce the foundations of ancient temples in the Angkor archaeological park. However, there is uncertainty regarding the feasibility and quantity of water that can be diverted from the system for agricultural purposes. Given that the target area is a heritage site, production activities are restricted to existing cultivated areas. Additionally, the specific technologies, practices, and equipment permitted by the APSARA authority (the Authority for the Protection of the Site and Management of the Region of Angkor) remain unclear at this stage. Further clarification is needed to determine the scope and limitations of agricultural activities within the project area. Below is a summary of the Activity:

- **Goal:** Water resources are effectively managed to enhance the resilience of communities within and around Angkor Park
- **Crops:** Homestead gardens and heritage crops such as *Damlong Daicla*, pineapple, *damlong pon, sakou, nonong, Cha Ohm, Dtrop, Braprei*
- **Partners:**
    - CSmart on melon and bean production, heritage crops production
    - The Climate Change Alliance
- **Geographical Locations:** Siem Reap
- **Types of beneficiaries:** Agricultural households
- **Timeframe:** 7 June 2023 - 15 November 2028
- **Budget:** NZD14.3m over five years

Analysis of Relevance

The Activity will be relevant to horticulture development in Cambodia in alignment with the portfolio's main Activities. It focuses on rehabilitating water infrastructure and promoting climate-resilient agriculture training and environmental education. While its primary goal is to strengthen the temple foundations through the water supply, it indirectly supports horticulture development. AWR's initiatives, including water management improvements, agricultural training, and support for homestead gardens, contribute to enhancing water availability, building resilience, and promoting sustainable practices conducive to horticultural production. Additionally, efforts to ensure gender equity and inclusiveness further facilitate the participation of diverse stakeholders, potentially bolstering the growth of the horticulture sector in Cambodia.

Analysis of Coherence

AWR introduces a fresh approach to community development, specifically targeting food security within vulnerable populations. While the Activity displays innovative potential, a closer examination reveals both strengths and potential misalignments with existing frameworks and initiatives. Unlike its predecessor, the Angkor Community Heritage and Economic Advancement (ACHA) project, which seamlessly integrated with other activities in the MFAT portfolio, AWR lacks coherence with the current one. It focuses primarily on food security rather than income generation, raising questions about its compatibility with MFAT's broader development goals in Cambodia. Additionally, while the ACHA project benefited from the robust technical support provided by iDE for agricultural activities, the scale and scope of AWR seems more modest, primarily targeting local communities. This narrower focus may necessitate a reassessment of its potential impact and scalability. However, the Activity does demonstrate promising aspects, particularly regarding participant engagement and expertise. The training participants exhibit strong relevance to food safety-related occupations, indicating a direct link between project objectives and community needs, and coherence with the rest of the portfolio. Their involvement in policy improvement and support for farmers through initiatives like CamGAP shows the Activity can benefit from work done by CQHI and underscores the project's potential for creating meaningful change at multiple levels. Nevertheless, there are concerns about the lack of direct engagement with key stakeholders. In summary, while Angkor Water Resilience holds promise for enhancing food security and community resilience, its coherence with the broader MFAT portfolio requires careful consideration. Further coordination and collaboration may be necessary to ensure coherence and to maximise the impact.

He Oranga Taurikura, A Thriving Life by Caritas

Introduction

The He Oranga Taurikura design in Cambodia builds upon its predecessor, seamlessly, with a focus on empowering indigenous communities. The Cambodia project is the largest among the He Oranga Taurikura projects with 51 villages and 22,000 participants. Its main components include enhancing food and water security, integrating livelihoods and income generation for smallholder farmers, and fostering climate resilience through improved seeds, techniques, and water management. Community land titling and empowerment to handle land disputes are prioritised, ensuring access to critical resources. The Activity also emphasises the formation and development of cooperatives, enabling farmers to collectively purchase inputs, market products, and to engage with large export companies, with a recent shift towards more formalised structures to ensure sustainability. Efforts to combat gender-based violence are included, albeit without specific budget allocation. Incorporating systems thinking and adaptive management, He Oranga Taurikura adapts based on evidence, and aims to enhance farmers' understanding of market dynamics, encouraging diversity in product offerings and facilitating direct engagement with market actors. Collaboration with provincial governments and wholesalers is emphasised with a focus on ensuring farmers' participation in decision-making processes. Ongoing initiatives, such as shade houses for off-season production, demonstrate learning and adaptation from successful models in other regions. Below is the summary of the project:

- **Goal:** Through Caritas Aotearoa New Zealand (CANZ) accompaniment of local partners, communities in the Pacific, Cambodia and Timor Leste will be more resilient and healthier, resulting in thriving lives
- **Partners in Cambodia:** Development and Partnership in Action (DPA)
- **Geographical Locations:** Cambodia, Timor-Leste, Papua New Guinea, Solomon Islands, Kiribati, Fiji, Tonga
- **Types of beneficiaries in Cambodia:**
    - Farmers and forest product producers (honey and resin)=> Indigenous people, three ethnic Khmer Loeu minorities across 36 villages (Kreung, Tampuan, Bunong and Jarai)
    - Agriculture and forest product cooperative leaders and representatives
- **Budget for Cambodia:** NZD1,553,768 over five years

Analysis of Relevance

He Oranga Taurikura holds significant relevance to horticulture development in Cambodia related to various aims:

- *Food and Water Security:* The Activity prioritises food and water security, essential components for successful horticultural production. By ensuring access to water and promoting climate-resilient agricultural techniques, such as improved seeds and water management practices, the Activity enhances the capacity of smallholder farmers to cultivate horticultural crops sustainably.
- *Livelihoods and Income Generation:* A key objective of the Activity is to integrate food and water security measures with livelihood and income generation activities for families, particularly smallholder farmers. By empowering farmers to produce surplus crops for sale at markets, He Oranga Taurikura directly contributes to the expansion of the horticulture sector, potentially increasing the availability of fresh produce and generating income for farmers.
- *Community Land Titling:* Securing land rights through community land titling initiatives is crucial for horticulture development. Access to land enables farmers to invest in long-term horticultural ventures, such as orchards and perennial crops, contributing to agricultural productivity and economic stability within communities.
- *Formation of Cooperatives:* He Oranga Taurikura emphasises the formation and growth of cooperatives among farmers, enabling them to collectively purchase inputs, market products, and to engage with larger export companies. This cooperative model fosters collaboration, knowledge-sharing, and collective decision-making, enhancing the competitiveness and market access of horticultural products produced by smallholder farmers.
- *Market Integration and Commercialisation:* By promoting market-oriented thinking among farmers and facilitating direct engagement with the PDAFFs and wholesalers, the Activity enables farmers to understand market dynamics and align their horticultural production with consumer demand. This integration into commercial supply chains enhances the sustainability and profitability of horticultural enterprises.
- *Incorporation of Systems Thinking:* The Activity's incorporation of systems thinking and adaptive management approaches ensures that horticulture development efforts are responsive to changing conditions and market trends. Farmers are encouraged to diversify their product offerings and adopt innovative practices to meet evolving consumer preferences, contributing to the dynamic growth of the horticulture sector in Cambodia.

Overall, the holistic approach to community development, food security, and economic empowerment of He Oranga Taurikura aligns closely with the goals and

priorities of horticulture development and MFAT's portfolio in Cambodia, fostering sustainable growth and resilience within the sector.

Analysis of Coherence

Unlike other Activities within MFAT's portfolio - where inclusion is not the key priority - He Oranga Taurikura is specifically working to support indigenous people, providing a useful complement to other Activities. However, He Oranga Taurikura does align with other Activities in the MFAT portfolio through its shared objectives of sustainable development and poverty reduction through the development of the horticulture sector. Its focus on enhancing food and water security, promoting climate-resilient agricultural techniques, and supporting livelihoods aligns with broader initiatives aimed at improving agricultural productivity and rural livelihoods in Cambodia. Additionally, the project's emphasis on community empowerment, land titling, and cooperative formation resonates with MFAT's efforts to strengthen governance structures and promote inclusive development practices across various sectors. By complementing and reinforcing the goals of existing MFAT Activities, He Oranga Taurikura contributes to a cohesive and coordinated approach to agricultural development in Cambodia.

Sustainable Produce to Market Value Chain Enhancement Project (Pro-Market) by ADRA (Adventist Development and Relief Agency)

Introduction

ADRA's activities in agriculture in Cambodia focus on enhancing food security, promoting sustainable farming practices, and improving the livelihoods of rural communities across many provinces. The primary goal has been to facilitate farmers' understanding of advancements in farming practices, including contract farming and market linkages. ADRA supported the formation of farmer groups to foster collaboration and address climate change challenges. While numerous agricultural cooperatives (ACs) have been developed in Pursat over the past two decades, they have predominantly focused on rice and cassava, whereas ADRA has emphasised contract farming for vegetables and fruits.

ADRA has supported the formation of farmer groups to empower medium-scale farmers and facilitate collaboration in addressing climate change issues. Additionally, these groups have provided opportunities for farmers to learn about the agribusiness aspects of farming, fostering economic growth and sustainability within the agricultural sector. As rice production dominated existing ACs, ADRA has promoted the concept of 'producer groups' to encourage diversification into vegetables and fruits. Additionally, the Activity has included an empowerment component aiming to cultivate self-reliance among farmers through advocacy capacity building. This has involved equipping farmers to engage with government agencies, voice their challenges, and establish relationships with local authorities. Due to delays caused by the COVID 19 pandemic, Pro-Market received an extension until September 2024 to fulfil its objectives. Below is the summary of the Activity:

- **Goal:** To sustainably grow the rural economy and economic resilience for communities in Pursat province, Cambodia, through improved agricultural production and enhanced value chains
- **Crops:** Vegetables, yellow watermelons, sweet peppers, yellow cauliflowers
- **Partners**:
    - ADRA Cambodia
    - iDE on market and value chain analysis (and updates)
    - Provincial Department of Agriculture, Forestry and Fishery (PDAFF)
    - Provincial Department of Commerce (PDC)
- **Geographical Locations:** Pursat

- **Types of beneficiaries:**
  - Community Horticulture Agents (CHA)
  - Producer Group members, producers and households

- **Timeframe:** 1 Jan 2019 to 31 Dec 2023 (Extension till September 2024)
- **Budget:** NZD2,993,273

Analysis of Relevance

Pro-Market aligns closely with the Royal Government of Cambodia's National Development Strategy Plan, focusing on increasing agricultural productivity and strengthening agri-business networks. The project also corresponds with New Zealand's development objectives, particularly within the agriculture sector, and supports the country's Strategic Plan, emphasising agriculture as a flagship investment priority in Cambodia.

Analysis of Coherence

Coherence was encouraged through the collaboration between ADRA and iDE during the design phase of Pro-Market. Two full-time iDE staff members were embedded within ADRA, contributing to the value chain analysis and the development of training materials. This partnership ensured that Pro-Market’s objectives and methodologies were aligned with broader development goals and best practices in the sector. Furthermore, Pro-Market supported cross-visits with CSmart and STEER, facilitating learning and exchange opportunities. Visits to locations such as Koh Kong and Siem Reap enabled Pro-Market farmers to gain exposure to sweet melon production, leading to the adoption of new practices by some farmers. These cross-visits not only enhanced staff capacity but also benefited field-level extension officers and group leaders, supporting the effective design and implementation of the Activity. Overall, the collaboration between ADRA, iDE, and other Activities such as CSmart and STEER promotes coherence by leveraging shared expertise and experience to inform Activity design and implementation, ultimately enhancing the effectiveness and efficiency of MFAT’s portfolio.

PROSAFE (Promoting Safe Food for Everyone) by the Mekong Institute

Introduction

In partnership with MFAT, since 2018 the Mekong Institute (MI) has spearheaded the MI Food Safety Capability Activity (Phase II) or Promoting Safe Food for Everyone (PROSAFE). Over the course of five years, this initiative has aimed to enhance regional and local expertise while providing vital support services for governmental, private sector, and academic institutions in Cambodia, Lao PDR, Myanmar, and Vietnam to tackle prevalent food safety challenges. Ultimately, the Activity endeavours to foster stronger collaboration among key stakeholders and implement integrated mechanisms to catalyse significant improvements in food safety perceptions and practices across the region. Below is a summary of the project:

- **Goal:** Key food safety actors collaborate to put in place integrated mechanisms leading toward significant changes in food safety perception and practices in the region
- **Crops:** Food items
- **Partners:**
    - Food Safety Training Institutes
    - Media
    - National level agencies
- **Geographical Locations:** Cambodia, Lao PDR, Myanmar, Vietnam
- **Types of beneficiaries:** Growers, processors, consumers
- **Timeframe:** 20 June 2018–31 October 2023
- **Budget:** NZD5,178,995 over five years

Analysis of Relevance

Food safety is crucial in food production and throughout the horticulture supply chain due to its impact on public health, consumer confidence, regulatory compliance, market access, and risk mitigation. Ensuring safe food products protects consumers from illnesses and maintains their trust in the food supply chain. Compliance with food safety regulations is essential for legal adherence and accessing domestic and international markets. Adhering to internationally recognised standards opens up trade opportunities and enhances economic growth. By implementing robust food safety measures, producers and suppliers mitigate risks, protect their reputation, and ensure business continuity. Overall, prioritising food safety is indispensable for safeguarding public health, promoting consumer confidence, and maintaining the integrity of the horticulture supply chain. The

Activity aligns with the focus on food safety in the three main activities of the MFAT portfolio and is relevant to the aims of the portfolio.

Analysis of Coherence

PROSAFE lacks coherence with other MFAT Activities due to limited collaboration with existing initiatives. For example, CQHI has focused on food safety and has worked closely with the GDA on the CamGAP certification. However, PROSAFE did not leverage CQHI's expertise in providing training, even though the Mekong Institute (MI) lacked the necessary in-house capabilities in this area. The absence of collaboration between PROSAFE and CQHI was a missed opportunity to bolster the effectiveness of capacity-building endeavours in the region. More broadly, increased collaboration between PROSAFE and other MFAT Activities could have improve the coherence of the portfolio.

Conclusion of Tier 2 Activities' Analysis

All of the Tier 2 Activities profiled were relevant to agricultural challenges and priorities in Cambodia. They were also relevant to MFAT's portfolio, particularly as all had some work related to horticulture and addressed common challenges in the horticulture sector, such as food safety and resilience to climate change effects. However, the coherence among the Activities was mixed. In some cases, collaboration among Activities promoted synergies and allowed Activities to benefit from each other's expertise. In other cases, the Activities missed opportunities to collaborate and utilise complementary expertise of other Activities. Without an overarching vision and strategy guiding MFAT's support for agricultural development in Cambodia, efforts to collaborate and promote coherence tend to be uneven. A vision and strategy could both promote more collaboration and ensure that Activities complement each other. Furthermore, MFAT could play a more proactive role in encouraging collaboration among Activities where there is potential for clear benefits.

Appendix G: Schedule of the Review

Table 1: Phase 1 Consultations

Dates	Phase 1 Respondents
05 February 2024	• Gabrielle Isaak, Senior Policy Officer ASEAN
05 February 2024	• Siritharin (Kaew) Chareonsiri, Senior Development Programme Coordinator, in charge of CQHI and CSmart • Natthanun (Nan) Patcharapunchai, Development Programme Coordinator, in charge of STEER, Mekong Institute, Angkor Park and ADRA • Matthew Allen, First Secretary (Development) Cambodia, Lao PDR, Thailand
06 February 2024	• Khong Sophoan, Director, Cambodia Agribusiness Development Facility (CADF) • Kevin Robbins, Country Director iDE Cambodia • Seng Kim Hian, Agriculture Director supporting CSmart and STEER
07 February 2024	• Susie Newman, Lead International Development Unit, PFR • Declan Graham, Program Manager, CQHI • Stephanie Montomery, Australian Agronomist (based in Battambong), PFR Program Manager
07 February 2024	• Keryn Banks, International Program Manager, Save the Children NZ • Sithon Khun, Head of MERL, Save the Children Cambodia • Phira Hoy, Child Poverty Program Manager (formerly program manager for STEER)
08 February 2024	• Cristine Werle, Adviser-MERL • Alasdair Shariff, MERL

Table 2: Schedule of remote interviews and consultations conducted

Week starting	Stakeholders for meetings
19 February 2024	• Andy Hunter, MFAT (DEVECO) • Laura Kuepper, MFAT (GDS)
26 February 2024	• Guy Redding, MFAT (DEVECO) • Jacquie Dean, MFAT (GDS) • CQHI - Plant and Food Research team workshop • Save the Children NZ managers • Natthanun Patcharapunchai, MFAT (Tier 2 Activity Manager) for Mekong Institute PROSAFE and Angkor Water Resilience • Caritas He Oranga Taurikura manager

Week starting	Stakeholders for meetings
18 March and 25 March 2024	• Tony Banks, MFAT (DEVECO) • Gabrielle Isaak, MFAT (GDS) • Cristine Werle and Alasdair Shariff, MFAT (DCI) • Matthew Allen, Siritharin Chareonsiri, Natthanun Patcharapunchai, MFAT (BKK) • Gareth Smith, MFAT (DEVECO) • Institute of Environmental Rehabilitation and Conservation (CQHI partner) • Eco Agri-Center (CQHI partner) • ADB • EU • FAO
08 April 2024	• Development and Partnership in Action (DPA) (Tier 2) • The Angkor Water Resilience project, Live and Learn Organization (Tier 2)

Table 3: Schedule of Cambodia field research conducted

Days	**Activity/ Location**	**Morning**	**Afternoon**
Review Team Pair 1 and FGD Facilitators, Week of 3 March 2024			
3 March 2024	Phnom Penh	FGD Facilitator and Note-taker training Planning and Logistic preparation	
4 March 2024	CQHI Kandal	• PDAFF Kandal • Svay Brateal AC • FGD with producers (in Sa Ang)	• Input suppliers in Kien Svay and Sa Ang • FGD with producers (in Sa Ang)
5 March 2024	CQHI Svay Rieng	• Svay Rieng Agro-products Cooperative (SAC) • FGD with SAC producers (in Svay Chrum)	• SAC project agronomist and input supply manager • Svay Rieng market input suppliers and retailers • FGD with SAC producers (in Svay Chrum)
6 March 2024	STEER Koh Kong	Travel to Koh Kong	• STEER team workshop • FGD with banana producers (Botum Sakor)
7 March 2024	STEER Koh Kong	• PDAFF • PD of Environment • FGD with banana producers (in Thmor Bang)	• PD of Education • PD of Women's Affairs • Vegetable wholesaler/retailer • Kong Kong provincial market observation • FGD with cashew producers (in Botum Sakor)
8 March 2024	STEER Koh Kong	• Seller of agricultural materials (input depot) • Wholesaler of vegetables • FGD with vegetable producers (in Botum Sakor)	• Banana trader • Thmar Bang market observation • FGD with vegetable producers (in Srae Ambel)

Days	**Activity/ Location**	**Morning**	**Afternoon**
9 March 2024	STEER Koh Kong	• Vegetable trader • Cashew trader • Crop care and maintenance service provider • Input supplier • FGD with cashew producers (in Srae Ambel)	• Vegetable trader • Cashew trader • Travel to Phnom Penh
10 March 2024	Phnom Penh	Collate notes	Review team meeting
Review Team Pair 2 and FGD Facilitators, Week of 3 March 2024			
3 March 2024	Phnom Penh	FGD Facilitator and Note-taker training Planning and Logistic preparation	
4 March 2024	CSmart Siem Reap	Travel to Siem Reap	• CSmart team workshop • Cocopeat producer • FGDs with producers (one in Siem Reap, one in Soutr Nikum)
5 March 2024	CSmart Siem Reap	• PDAFF Siem Reap • Input sellers • Collectors • FGD with producers (in Soutr Nikum)	• Input seller • Aggregator • Melon Association • Siem Reap Farmers Market • FGD with producers (in Soutr Nikum)
6 March 2024	CSmart Siem Reap	• Solar irrigation company • Input company • FGD with producers (in Chi Kraeng)	• CSmart Project Designer • Lead farmers • FGD with producers (in Chi Kraeng)
7 March 2024	CSmart Banteay Meanchey	• Travel to Bantey Meanchey • PDAFF • Lead farmers • FGD with producers (in Preah Netr Preah)	• Input suppliers • Lead farmers • FGDs with producers (in Thma Pouk)
8 March 2024	CSmart Banteay Meanchey	• Non-partner input company • Collector • FGDs with producers (in Serei Saophoan)	Travel to Phnom Penh
9 March 2024	Phnom Penh	Collate notes	Collate notes
10 March 2024	Phnom Penh	Collate notes	Review team meeting
Review Team, Week of 11 March 2024			
11 March 2024	Phnom Penh	• iDesign • iDE Country Director • Natural Garden	• Natural Agricultural Village
12 March 2024	Phnom Penh	• Solar Green Energy (Cambodia) Co. Ltd. • Kasethan Lors Thmey • GDA Management team • Plant Protection, Sanitary and Phytosanitary Department	• AEON supermarket • MAPPACIFIC Cambodia Co. Ltd • Institut Pasteur du Cambodge • CAPRED

Days	Activity/ Location	Morning	Afternoon
13 March 2024	Phnom Penh	• MAFF • Lucky supermarket • CASIC • Angkor Green Investment and Development	• Chip Mong supermarket • SDC • Swisscontact
14 March 2024	Phnom Penh	• MASE II project • IFAD (ASPIRE) • Agrinnovation • Ministry of Environment • ADRA	• Malison Group Co. Ltd. • Review team workshop
15 March 2024	Phnom Penh	• East West Seed International • USAID • Royal University of Phnom Penh (climate change expert)	• Azaylla (Cambodia) Co. Ltd. • MAFF • DFAT

Table 4: Post-field Research Workshops

Dates	Post-field Research Workshops
03 April 2024	Workshop with STEER team
04 April 2024	Workshop with CSmart team
05 April 2024	Workshop with CQHI team
09 April 2024	Sense-making workshop with MFAT team

Appendix H: List of Sources

1 Documents

Cambodia Quality Horticulture Initiative (CQHI)

List of CQH Partners and Beneficiaries (2024)

NZ MFAT (2022). Activity Monitoring Assessment - Cambodia Quality Horticulture Initiative

Plant and Food Research (2016). Cambodia Quality Horticulture Activity Design Document

Plant and Food Research (2018). Cambodia Quality Horticulture - 2017 Annual Report

Plant and Food Research (2019). Cambodia Quality Horticulture Project - 2018 annual progress report

Plant and Food Research (2020). Cambodia Quality Horticulture Project – 2019 annual progress report

Plant and Food Research (2021). Cambodia Quality Horticulture Project – 2020 annual progress report

Plant and Food Research (2022). Cambodia Quality Horticulture Project – 2021 annual progress report

Plant and Food Research (2022). Cambodia Quality Horticulture Proposal for a two-year extension

Plant and Food Research (2023). Cambodia Quality Horticulture Project - 2022 annual progress report

Plant and Food Research (2023). Cambodia Quality Horticulture Initiative Extension - Six-month Activity progress report

Plant and Food Research (2024). Cambodia Quality Horticulture Initiative Extension - 2023 annual progress report

Plant and Food Research (n.d.). Activity summary video

Systems approach to Transformative Economic Empowerment and Resilience (STEER)

List of Beneficiaries

No author (n.d.). Helping Farmers Create Climate-Smart Gardens

No author (n.d.). Resilient Agriculture Techniques for Planting Bananas Open New Markets for Farmers

No author (n.d.). Successful Farmer Lead Villagers out of Poverty Through Commercial Agriculture, Securing a Bright Future for Their Children

No author (n.d.). Systems approach to Transformative Economic Empowerment and Resilience Activity Design Document

No author (n.d.) STEER Updated Results Framework

No author (2024) Systems Approach to Transformative Economic Empowerment and Resilience Project (STEER) [presentation]

NZ MFAT (2023). Activity Monitoring Assessment Cambodia Systems Approach to Transformative Economic Empowerment and Resilience

Save the Children (2022). STEER Project Phase out / Exit Plan

Save the Children (2023). Activity Progress Report: Systems Approach to Transformative Economic Empowerment and Resilience in Koh Kong, Cambodia (STEER) – Annual Report Year 4

STEER (n.d.). Activity Progress Report Year 1

STEER (n.d.). Activity Progress Report Year 2

STEER (n.d.). Activity Progress Report Year 3

Climate Smart Commercial Horticulture Cambodia (CSmart)

CADF (n.d.). CADF Overview July 2005 – September 2019

iDE (2020). Activity Progress Report Y1: Climate Smart Commercial Horticulture Cambodia (CSmart)

iDE (2020). CSmart Activity Design Document

iDE (2021). Activity Progress Report Y2: Climate Smart Commercial Horticulture Cambodia (CSmart)

iDE (2022). Activity Progress Report Y3: Climate Smart Commercial Horticulture Cambodia (CSmart)

iDE (2023). Activity Progress Report Y4: Climate Smart Commercial Horticulture Cambodia (CSmart)

iDE (2023). Mid-point Evaluation Report

iDE (Mar 2024). CSmart Progress Report

Khong. S. (n.d.). Climate-Resilient Horticulture Technologies and Practices

List of Clients, Adoptive Farmers

NZ MFAT (2022). Activity Monitoring Assessment CSmart

Output - 1 List of Participating Local Input Suppliers

Output - 2 List of Adoptive Farmers

Output - 3 List of Farmgate Collectors

Output - 3 List of Training for Collectors and Inputs Suppliers

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2 Respondents

Category 1: MFAT Managers and Staff (Wellington) including the Activity Manager and the MFAT Review Steering Group
Category 2: MFAT Managers and Staff Bangkok Post
Category 3: Other development partners, agencies and projects working in Cambodian agriculture
Category 4a: CQHI Implementing Partner - Plant and Food Research
Category 4b: CQHI collaborating organisations (private, public, civil society)
Category 5a: CSmart Implementing Partner - iDE
Category 5b: CSmart collaborating organisation (private, public, civil society)
Category 6a: STEER Implementing Partner - Save the Children
Category 6b: STEER collaborating organisation (private, public, civil society)
Category 7: Tier 2 Activity Implementing Partners
Category 8: National and Local Government Agencies
Category 9: Private sector leaders, civil society organisations, other Key Informants involved in agriculture in Cambodia
Category 10: Smallholder farmer beneficiaries

Agency	Surname	First Name	Role	Category
MFAT (DEVECO)	Hunter	Andy	Activity Manager Senior Adviser Agricultural Value Chains Review Steering Group	1
MFAT (DEVECO)	Oliver	Beth	Project Manager Review Steering Group	1
MFAT (DEVECO)	Redding	Guy	Lead Adviser, Industry and Innovation	1
MFAT (YGN) (previous DEVECO)	Banks	Tony	Previous Senior Advisor - Agriculture	1
MFAT (DEVECO)	Smith	Gareth	Unit Manager	1

Agency	Surname	First Name	Role	Category
MFAT (DEVECO)	Hotter	Nathan	Policy Officer	1
MFAT (GDS)	Dean	Jacquie	Divisional Manager	1
MFAT (GDS)	Isaak	Gabrielle	Senior Policy Officer ASEAN Review Steering Group	1
MFAT (ARD)	Kuepper	Laura-Madeleine	Policy Officer, Asia Regional Division	1
MFAT (DCI)	Werle	Cristine	Adviser - MERL Review Steering Group	1
MFAT (DCI)	Shariff	Alasdair	MERL	1
MFAT (BKK)	Allen	Matthew	First Secretary (Development) Cambodia, Lao PDR, Thailand Review Steering Group	2
MFAT (BKK)	Chareonsiri	Siritharin (Kaew)	Senior Development Programme Coordinator Review Steering Group	2
MFAT (BKK)	Patcharapunchai	Natthanun (Nan)	Development Programme Coordinator	2
Asian Development Bank	Piseth	Long	Senior Project Officer (Water Resources and Rural Development)	3
Asian Development Bank	Hem	Chanthou	Agriculture Specialist	3
Australian Department of Foreign Affairs and Trade	In	Sophearun	Agriculture portfolio, oversight of CAPRED	3
Australian Department of Foreign Affairs and Trade	Pun	Lee	Investment, oversight of CAPRED	3
CAPRED	Keogh	Paul	Facility Director	3
CAPRED	Kunthea	Kroesna	Agriculture and SME Coordinator, CAPRED	3
European Union	By	Sokunthea	Program Manager - Agriculture Value Chains and Food Systems	3
Food and Agriculture Organisation	Bell	Rebekah	Representative	3
Food and Agriculture Organisation	Ly	Proyuth	Program Manager	3
HEKS/Nurturing Climate Resilience	Winfried	Suess	Team Leader	3
International Fund for Agricultural Development (ASPIRE)	Sakphouseth	Meng	Country Programme Officer	3
Swiss Agency for Development and Cooperation	Hem	Sovannarith	Agriculture portfolio	3

Agency	Surname	First Name	Role	Category
Swisscontact	Pradhan	Rajiv	Country Director	3
Swisscontact	Rath	Setha	Deputy Team Leader	3
United States Agency for International Development	Doyle	Mark	Director, Sustainable Economic Growth Office (SEGO)	3
United States Agency for International Development	Bills	Nate	Foreign Service Officer	3
United States Agency for International Development	Ke	Sam Oeurn	Project Management Specialist	3
United States Agency for International Development	Theng	Vuthy	Agriculture Specialist	3
Plant and Food Research	Newman	Suzie	Head - International Development	4a
Plant and Food Research	Montgomery	Stephanie	Program Manager - International Development	4a
Plant and Food Research, CQHI Team	Graham	Declan	Business Development Manager, CQH Programme Manager and Quality Assurance Lead	4a
CQHI Team	Kang	Sideth	Local Project Coordinator	4a
	Khin	Sophoeun	Local Project GAP Agronomist	4a
	Hickey	Mark	Local Agronomist, Sustainable Production, agronomy	4a
	Fullerton	Bob	Plant Pathologist – Sustainable Production, plant diseases	4a
	Walker	Graham	Entomologist - Sustainable Production, plant pests	4a
	Fletcher	Graham	Project Food Safety	4a
	Gupta	Sravani	Project Food Safety	4a
	Doerflinger	Fran	Post Harvest	4a
	May	Chris	Project M&E Lead	4a
Azaylla	Parth	Borkotoky	CEO	4b
EAC	Thlang	Sovann	CEO	4b
ERECON	Kumiko	Kawabe	Extension Director	4b

Agency	Surname	First Name	Role	Category
Institut Pasteur du Cambodge	SRENG	Navin	Head of Laboratory	4b
Input retailer in Kien Svay	Chhea	Rithy	Input supplier	4b
Input retailer in Sa Ang	An	Vantha	Input supplier	4b
Kasethan Lors Thmey	Ros	Kimsan	CEO	4b
MASEII project	Im	Thano	Manager	4b
Natural Agricultural Village	Bun	Sieng	Director	4b
Natural Garden	Neak	Tharen	CEO	4b
Svay Brateal AC board	Thou	Chansophea	Treasurer	4b
Svay Brateal AC board	Chon	Bunthoeurn	Chief Inspector	4b
Svay Brateal AC board	Vet	Vannoeur	Board member in charge of rice	4b
Svay Brateal AC board	Pom	Maly	Secretary	4b
Svay Rieng Agro-products Cooperatives (SAC)	Mao	Sitha	Chief of the AC	4b
SAC	Nut	Samean	Deputy Chief of AC	4b
SAC	Va	Chhean	In charge of marketing	4b
SAC	Put	Piseth	Accountant	4b
SAC	Sar	Sophy	Input retailer	4b
SAC	Hang	Vuthy	Agronomist	4b
International Development Enterprises (iDE)	Robbins	Kevin	Country Director	5a
International Development Enterprises (iDE)	Seng	Kim Hian	Agriculture Director	5a
CSmart Team	An	Chanratha	Climate Smart and Marketing Intervention Lead	5a
	Chan	Somanea	Farm Food and Environment Safety Manager	5a
	Khong	Sophoan	Project Director	5a
	Chhoeun	Sopheap	System Development Manager	5a
	Srey	Bophea	Finance & Admin Manager	5a
	Tuot	Senghorng	Climate Resilience Horticulture Manager	5a
CADF/CSmart	Hunte Todd	Bruce	CSmart Advisor, Former CADF/CSmart Director	5a

Agency	Surname	First Name	Role	Category
Agrinnovation	Kith Visal	Visal	Key person of the Agrinnovation, CEO of the Bronx Technology	5b
AGRO Solar	Soeung	Vay	Country Director	5b
AGRO Solar	Bos	Sandra	Head of Products	5b
Angkor Green	Pich	Phearon	Regional Sales Manager	5b
Association	Vy	Salut	Association member	5b/10
Cocopeat business initiative	Long	Kean	Operator/owner of cocopeat business	5b
Cocopeat business initiative	Koeut	Mom	Operator/owner of cocopeat business	5b
Collector/aggregator	Chhaem	Rithy	Collector	5b
Collector/aggregator	Sao	Dy	Collector/aggregator (informal org)	5b
Collector/aggregator	Rim	Hay	Collector	5b
Collector/aggregator	Vong	Sophal	Collectors	5b
Collector/aggregator	Saim	Vichet	Collector/aggregator (informal org)	5b
Collector/aggregator	Bou	Savdy	Collector/aggregator (informal org)	5b
East West Seed International (EW)	Chhor	Nonin	Country Rep	5b
iDesign	Mak	Sayphearak	Manager Research and Operations	5b
iDesign	Moung	Vandy	Design Strategist	5b
Input material retailer	Bun	Phanna	Suppliers in Siem Reap	5b
Input materials retailer	Heul	Chamrom	Local input supplier	5b
Input materials retailer	Ang	Savyan	Local input supplier	5b
Input materials retailer	Nuch	Sambo	Local input supplier	5b
Input materials retailer	Chhaet	Chhoeun	Local input supplier	5b
Lucky Supermarket	Keo	Ny	Assistant Manager, Vegetable and Fruits Sourcing	5b
Lucky Supermarket		Shawn	Head of Meat, Fruits and Vegetable Sourcing	5b
Malisan Group Co.,Ltd.	Soy	Than	Technical Manager	5b/6b
MAPPACIFIC Cambodia Co., ltd	Yong	Tylong	Operation Marketing and Sale Manager	5b
Melon Association	Van	Ean	Chairman	5b

Agency	Surname	First Name	Role	Category
NEW DEAL Irrigation (Cambodia) Co. Ltd.	Krum	Von	Managing Director	5b
Siem Reap Farmer Market	Saing	Sivnhem	Owner	5b
Solar Green Energy (Cambodia)	Ol	Chin	Project Manager	5b
Training farm/lead farmer	Voeun	Sophea	Training farm/lead farmer	5b/10
Training farm/lead farmer	Oun	Phon	Training farm/lead farmer	5b/10
Training farm/lead farmer	Meiy	Piseth	Training farm/lead farmer (disable)	5b/10
Training farm/lead farmer	Chhab	Seima	Training farm/lead farmer	5b/10
Training farm/lead farmer	Thon	Tum	Training farm/lead farmer	5b/10
Training farm/lead farmer	Lang	Rathvanna	Training farm/lead farmer	5b/10
VAHAY Co. Ltd.	Keo	Sophany	Sole distributor of KNOWN-YOU-SEED and ADVANCE SEEDS	5b
Save the Children NZ	Banks	Keryn	International Programmes Manager	6a
	Callen	Fiona	M&E Manager NZ	6a
Save the Children Cambodia	Sithon	Khun	Head of MERL	6a
STEER team	Hoy	Phira	Child Poverty Program Manager	6a
	Sok	Samnang	Provincial/STEER Project Manager	6a
	Khiev	Va	Project Coordinator	6a
	Sorn	Vandy	Agronomy Advisor	6a
	Khlin	Theavy	Project Assistant	6a
	Kum	Samnith	Project Officer	6a
	Som	Tola	Project Officer	6a
	Khe	Longkeat	MEAL Coordinator	6a
Wholesaler vegetables	Ny	Kimlearng	Wholesaler/retailer	6b
Seller of agricultural materials (input depot)	Lak	Hak	Input Supplier	6b
Vegetable trader	Sat	San	Collector	6b
Banana trader	Phon	Dany	Collector	6b
Vegetable trader	Neak	Kea	Collector	6b
Vegetable/cashew trader	Kong	Mom	Collector	6b

Agency	Surname	First Name	Role	Category
Seller of agricultural materials (input depot)	Yan	Tory	Input Supplier	6b
Service provider of crop care and maintenance	Cheal	Sout	Service provider	6b
Cashew trader	Mom	Veasna	Collector	6b
Vegetable retailer	Khorn	Srey Mao	Retailer	6b
ADRA (for Pro-Market)	Mark	Schwisow	Country Director	7
ADRA (for Pro-Market)	Try	Kimlong	Project Coordinator	7
ADRA (for Pro-Market)		Vinich	Project Manager	7
Caritas (for He Oranga Taurikura)	Bras	Phil	Senior Project Coordinator	7
MFAT (for Prosafe and Ankor Water Resilience)	Patcharapunchai	Natthanun (Nan)	Development Programme Coordinator	7
Live and Learn International (for Angkor Water Resilience)	Kong	Sim	National Project Manager	7
DPA (for He Oranga Taurikura)	Mam	Sambath	Executive Director	7
CASIC	Chan	Saruth	Chair of Executive Board	8
CASIC	Heng	Choulong	Chief of ICT, Dept. of Agriculture Extension	8
GDA Management Team	Ngin	Chhay	Director General	8
GDA Plant Protection, Sanitary and Phytosanitary Dept.	Ker	Monthivuth	Director	8/4b
GDA Plant Protection, Sanitary and Phytosanitary Dept.	Heng	Chhunhy	Deputy Director	8/4b
GDA Plant Protection, Sanitary and Phytosanitary Dept.	Ouch	Sothy	Deputy Director	8/4b

Agency	Surname	First Name	Role	Category
GDA Plant Protection, Sanitary and Phytosanitary Dept.	Tray	Bunthorn	Officer (Quality and Safety promotion office)	8/4b
GDA Plant Protection, Sanitary and Phytosanitary Dept.	Yoeurn	Chanvanyi	Officer (Admin office)	8/4b
MAFF	Hean	Vanhan	Secretary of State	8
MAFF	Prak	David	Secretary of State	8
MOE (Ministry of Environment)	Chuob	Paris	Under Secretary of State	8
PDAFF Banteay Meanchey	Pang	Vannaseth	Director	8
PDAFF Kandal	Buntuon	Simona	Director	8/4b
PDAFF Kandal	Duong	Kimchheang	Deputy Chief of Agriculture Extension, Green Gold	8/4b
PDAFF Kandal	Khaem	Rin	Chief of Agronomy Office	8/4b
PDAFF Kandal	San	Voeurn	Chief of Agriculture Legal Office	8/4b
PDAFF Kandal	Chhor	Kimheak	Agronomist, Green Gold	8/4b
PDAFF Koh Kong	Em	Sotheara	Acting Director	8/6b
PDAFF Koh Kong	Sok	Sam At	Deputy Director	8/6b
PDAFF Koh Kong	Leng	Chansophea	Chief of Admin. Office	8/6b
PDAFF Koh Kong	Phorn	Samphos	Chief of Agronomy Office	8/6b
PDAFF Koh Kong	Huong	Chamroeun	Chief of Regulation Office	8/6b
PDAFF Koh Kong	Soeng	Ly	Chief of Extension Office	8/6b
PDAFF Koh Kong	Nhim	Sarun	Chief of Rubber Plant Office	8/6b
PDAFF Koh Kong	Kong	Minea	Chief of Agro-Industry Office	8/6b
PDAFF Siem Reap	Hay	Veasna	Deputy Director	8
PD of Education Koh Kong	Sok	Vin	Deputy Director in charge of cooperation with donor funded projects	8/6b
PD of Environment Koh Kong	Horn	Kimhang	Chief of Environmental Knowledge and Information	8/6b
PD of Environment Koh Kong	Keat	Soriya	Deputy Chief of Environmental Knowledge and Information	8/6b

Agency	Surname	First Name	Role	Category
PD of Environment Koh Kong	Ha	Visansaengdav	Deputy Chief of Environmental Knowledge and Information	8/6b
PD of Environment Koh Kong	Long	Sopheap	Deputy Chief of Environmental Protection	8/6b
PD of Women Affairs Koh Kong	Sok	Sotheary	Director	8/6b
PD of Women Affairs Koh Kong	Chhean	Chanty	Chief of HH economic development office	8/6b
AEON Supermarket	Cheat	Vichet	In charge of operations	9
AEON Supermarket	Rith	Daroth	In charge of orders	9
Chip Mong Supermarket	Mey	Damith	Supervisor/merchandiser	9
Forward Company, Non-partners private sector	Chan	Tol	Sale and Technical officer	9
Royal University of Phnom Penh	Seak	Sophat	Head of Department	9

3 Focus Group Discussions

The focus group discussions were conducted with smallholder farmer beneficiaries under Category 10 of the respondents list.

Project	Province	Number of FGDs	Total Respondents	Female	Male
CQHI	Kandal	2	10	5	5
	Svay Rieng	2	11	2	9
STEER	Koh Kong	6	45	22	23
CSmart	Siem Reap	6	50	37	13
	Banteay Meanchey	3	22	10	12
	Total	**19**	**138**	**76**	**62**