

CASE STUDY

CAMBODIAN HORTICULTURAL EXPORTS BEGIN TO EMERGE

Cambodia's horticulture sector has undergone significant transformations in recent years. Dramatic improvements have been made in production capacity, due to the efforts of producers and the market actors supporting them as well as initiatives on the part of government and other development partners. Since 2017, Feed the Future Cambodia Harvest II has worked with a wide range of horticulture sector actors to further strengthen and develop the sector.

As a result, a growing number of Cambodian firms have successfully implemented increasingly sophisticated business practices and models, leveraging improvements across the horticulture sector to production capacity and product quality and quantity. Firms have invested time and financial resources into developing reliable supply chains, thereby enabling the development of processed and other value-added products. These developments have in turn encouraged many firms to seek opportunities for continued market expansion.

In particular, expanded access to overseas markets has emerged as a focus for a number of firms in the horticulture sector. A growing number of firms have found initial success in overseas markets, and projects such as Harvest II have increasingly aimed to help them build on this success. Throughout the past year, Harvest II has helped project partners understand export market requirements, develop and market products for international markets, and establish linkages to reputable overseas buyers.

Despite these developments, since the export market is a relatively new focus for many firms in the sector, a number of barriers remain. To better understand recent trends, current barriers, and future opportunities, Harvest II conducted key informant interviews (KIs) with ten private sector partners (Table I), working across crop subsectors and at various stages of export market development. Of the ten partners interviewed, three are woman-led and one is youth-led; all ten have received various forms of technical assistance from Harvest II, and nine of the ten have additionally received grant support. Hour-long conversations, and in some cases follow-up questionnaires, revealed the status of individual firms' export-oriented business activities, as well as barriers and opportunities in the sector as a whole.

Table I. Participants in Harvest II Key Informant Interviews

Firm	Representative	Subsector(s)
AgriOn	Khin Marith, <i>General Manager</i>	Vegetable
Cambodia Agriculture Cooperative Corporation	Kann Kunthy, <i>Managing Director</i>	Cashew
Chey Sambo Cashew Nut Processing Handicraft	In Laihourt, <i>Founder and Owner</i>	Cashew
Confirel Co., Ltd.	Thoeurn Techmeng, <i>Delegate Director</i>	Mango, other
KCCV Plantation Co., Ltd.	Chheng Sothavuth, <i>Chairwoman</i> Anthony Goh, <i>Business Development Partner</i>	Mango, longan
Kirirom Food Production	Chhorn Dalis, <i>Managing Director</i>	Mango
Misota Group	Tan Michel, <i>Founder and CEO</i> Kong Sokunkanha, <i>Manager of Business Development and Export</i>	Mango, other fruit
Natural Agricultural Village	Bun Sieng, <i>Founder</i>	Vegetable
Navita Healthy Food & Beverages Co., Ltd.	Uy Cheng Heng, <i>Co-founder</i>	Mango, longan
Song Do Foods	Robert Hoeve, <i>General Director</i> Nguyen Thanh Duy, <i>Director</i>	Cashew

Insights provided by project partners have been supplemented by Harvest II team member perspectives, project monitoring and evaluation (M&E) data, and information included in project reports.

KEY FINDINGS: STRONG FOUNDATIONS FOR EXPORT GROWTH, YET CHALLENGES REMAIN IN KEY AREAS

While agriculture has long occupied a prominent position in Cambodia's economy, it is only relatively recently that firms have begun to develop agricultural products, and horticultural products in particular, for export markets. Various factors have contributed to this trend, but as Harvest II partners attested, several key developments have been leading drivers of export-oriented business activities.

Much of Cambodia's recent success in exporting horticultural products to overseas markets is founded on prior investment in **strengthened supply chains** and **enhanced production capacity**. This has enabled firms to develop processed and differentiated products for export.

At the same time, access to export markets is critical for firms looking to grow. In addition, demand uncertainty during a time of Covid is forcing Cambodian agribusinesses to **diversify their markets**, while simultaneously providing a more **stable off-take for producers**, insulated from seasonal fluctuations in price and protected from the outsized power wielded by cross-border traders. Because many horticultural products must be processed before being exported, value-addition activities have expanded, further creating new jobs and opportunities in Cambodia.

While many firms have found initial success in developing products for overseas markets, a number of barriers have yet to be addressed. One key obstacle for many firms, limiting their ambitions to expand into additional overseas markets, is the **certification process**, which is seen as complex, disjointed, laborious, and expensive, with different overseas markets requiring a wide range of different certifications that each necessitate coordination with different certifying bodies.

Furthermore, despite recent progress, firms cite ongoing challenges establishing and maintaining supply chains capable of supplying factories with product of adequate quality, quantity, and reliability. They also face challenges carrying out processing operations sufficiently sophisticated to meet international buyers' demand. These challenges are due in part to relatively **undeveloped supporting services sectors**, including financing, logistics, and the provision and maintenance of processing equipment and machinery. On the market side, meanwhile, Cambodian agribusinesses encounter difficulties in establishing relationships with overseas buyers and **lack adequate actionable market information** about target market requirements, and Cambodian horticultural products suffer from a **lack of widespread global recognition**.

Each of these challenges entails a corresponding opportunity, and firms are optimistic, both about the future of the sector as a whole and about their own prospects. Continued **investment in and improvement of supporting services sectors** will help alleviate some of the current constraints on efforts to strengthen supply chains and build out processing capacity, while **improvements to certification processes** will enable more firms to access more markets. Concerted attention from government and other public and private sector partners, meanwhile, around **building global recognition** of Cambodian horticultural products will further contribute to the success of Cambodian firms in global marketplaces.

I. LEVERAGING STRENGTHENED SUPPLY CHAINS FOR INITIAL EXPORT SUCCESS

Improvements in recent years to agribusiness supply chain management practices, and to growers' production methods more generally, have proven foundational to firms' subsequent success in processing and other value-addition operations, in turn enabling the expansion into overseas markets.

1.1 IMPROVED SUPPLY CHAIN MANAGEMENT PRACTICES

A variety of different supply chain management practices have been implemented by firms, and Harvest II has been instrumental in encouraging and supporting the widespread adoption of such practices. Improved supply chain management practices enable firms to source products of higher quality and quantity with greater reliability – critical factors for processing and other value-addition operations.

Many firms employ contract farming with their producers, coordinating on the front end of the growing season to set the future price for a certain quantity of product of a specified quality. In guaranteeing a supply of product for buyers and a market for producers' product, both groups benefit from increased stability and predictable expenditures and income.



NAV, a wholesaler of certified fruits and vegetables had its first export orders placed on hold due to Covid-19. It's business model founded on inclusive supply chain principles, focusing on tight integration and support to producers. Through detailed farming contracts, the company supports producers in employing enhanced production methods, coordinates the type and timing of product supply, and facilitates quality and safety certifications processes for its suppliers. "I never buy vegetables without farming contracts," says Bun Sieng, founder and owner of NAV. She went on to say, "Farming contracts ensure that farmers have the product that I need, and ensure that farmers get a higher price."

Contract farming furthermore serves as the basis for many firms' implementation of additional supply chain management practices. Firms coordinate with contracted suppliers to implement production planning – identifying which crops are most suited to individual growers' specific circumstances, and coordinating production and harvesting schedules to ensure a relatively continuous supply of needed product.

Buyers are also able to support contracted suppliers in accessing financing, as financial institutions are more likely to offer loans at better rates to producers who have a demonstrated market for their products, and whose contracted buyers are able to serve as loan guarantors. Expanded access to financing in turn enables producers to further improve their growing practices and yields, and releases limitations on firms' working capital, enabling them to work with a greater number of suppliers.

Many firms additionally provide training to their supplier networks on topics such as improved growing methods and post-harvest handling, and routinely work with input supply companies and dealers to provide their suppliers with access to quality inputs at favorable rates. Even firms that work primarily through collectors, rather than through direct relationships with many individual growers, are able to offer many of these services to producers.

1.2 DEVELOPMENT OF PROCESSED AND VALUE-ADDED PRODUCTS

As supply chain management practices have improved, firms have increasingly been able to leverage supply chains providing higher-quality and more reliable products to develop processed and other value-added products, with a particular emphasis on products developed for overseas markets.



Chey Sambor Cashew (CSC), based in Kampong Thom Province, was founded by In Laihourt, who recognized the potential of Cambodia's nascent cashew processing sector in 2019. "I grew tired of the fluctuations in the price of raw cashew, determined by traders," she said, "and decided to start my own processing operations." Technical and grant assistance from Harvest II helped support Laihourt in founding CSC, and the company has gone on to export more than 26 metric tons of processed cashew through a buyer in Japan.

Traditionally, a number of Cambodian horticultural products have been exported in raw or minimally-processed form to neighboring countries, where they are further processed before being exported onwards to final consumer markets. This practice has manifested across a variety of different product subsectors, ranging from cashew, a high-value crop that is widely grown but not widely consumed in Cambodia, to mango, a widely-consumed fruit in Cambodia that is preferred in its fresh form, and that produces a seasonal oversupply that domestic markets – and even cross-border markets – are unable to absorb.



Navita, a fruit processing firm that began operations in 2020, collaborated with Harvest II to accelerate the development of its processed longan products, including longan in syrup and dried longan, as part of an effort to build resilience and inclusivity in the notoriously volatile longan sector. Local processing firms are able to offer higher prices and greater stability to Cambodian growers than are cross-border traders, and longan furthermore yields a better profit margin for firms than do some other prominent fruits. The company has exported a preliminary batch of product to a buyer in Australia, with plans to expand the agreement going forward.

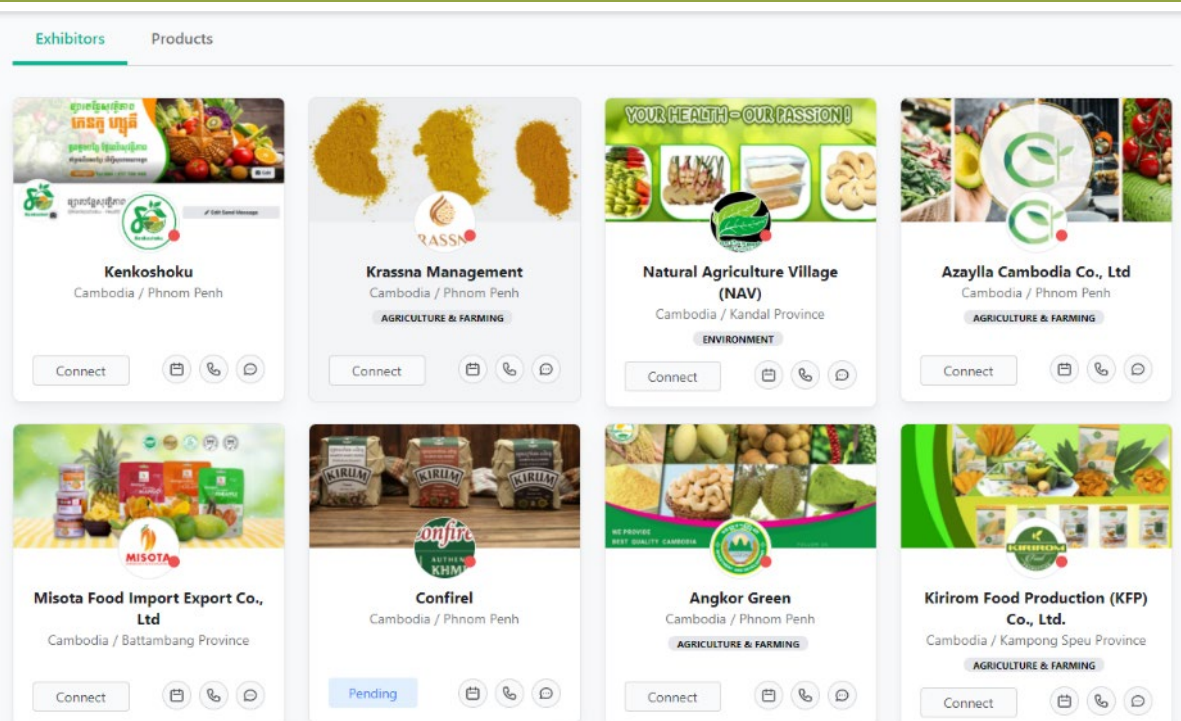
Recognizing the inherent opportunity in such supply chains, firms have begun to invest in domestic processing operations, seeking to add value locally rather than exporting lower value commodities. Cashew and mango, mentioned above, are particularly noteworthy in this context, as is longan, a fruit similar to lychee grown primarily in Cambodia's northwest provinces, bordering Thailand. Longan has traditionally been exported raw across the border to Thailand, where Thai companies process the fruit into a variety of forms – dried longan, longan in syrup, etc. – before reexporting it to end-buyers in third countries. With support from Harvest II, several Cambodian

firms have recently invested in processing machinery for longan and have successfully developed and marketed processed longan products – providing a more stable market and higher prices for Cambodian growers.

I.3 STRATEGIES FOR EXPANSION INTO OVERSEAS MARKETS

With supply chains capable of reliably supplying factories with product of adequate quality, and with processing operations sufficiently sophisticated to produce high-quality processed products, many Cambodian firms have focused on accessing overseas markets, and have begun to find initial, albeit in some cases limited, success.

In September 2021, Harvest II joined Cambodia Pepper and Spices Federation to help 25 Cambodian companies prepare for and participate in a virtual trade expo in Dubai focused on the Middle Eastern market. 25 participating companies received help in developing profiles on the expo's portal and were introduced to more than 50 potential buyers.



Many newer firms have initially worked with overseas buyers in Japan and South Korea. In these instances, buyers have visited firms' factories to assess product quality and observe processing operations and have been able to secure the necessary certifications required to export to these countries, thus obviating the need for more time-intensive and expensive third-party certifications.

Beyond these markets in Japan and South Korea, firms have employed a variety of tactics in seeking to expand into additional markets. Firms with more established export programs, such as Confirel and CACC, a sister company of well-known Amru Rice, have been able to leverage existing relationships with overseas buyers to establish purchase agreements for new products such as processed mango and organic cashew. Other firms have partnered with local export firms, which aggregate products from multiple companies for export. Finally, firms appreciate donor programs that offer opportunities to establish relationships with potential buyers through credible networking platforms such as trade fairs, business matching events, and virtual trade expos.

For those firms that have succeeded in accessing broader overseas markets, success in acquiring certifications has been critical, for which it has been essential to improve supply chain management practices. Complex international certifications, such as those for organic products, Geographical Indications (GIs), and Fair Trade, extend beyond simply processing activities at the factory level; they encompass the entirety of a firm's supply chain, including improved production practices at the farmer level and inputs provisioned by suppliers. Producers must be trained

on certification-compliant production and post-harvest handling practices, necessitating a close relationship with buyers – facilitated by such practices as contract farming, production planning, and technical assistance programs. Firms that have already supported their supplier networks in achieving domestic market-oriented certifications, such as Cambodia Good Agricultural Practices (CamGAP,) Participatory Guarantee Systems (PGS), and organic – each of which have been adopted by a range of firms with Harvest II encouragement and support – are able to build on that foundation as they aspire to more rigorous international certifications.

2. BARRIERS TO EXPORT EXPANSION

Despite the initial success that many firms have reported in accessing overseas markets for their products, several barriers are limiting opportunities for further expansion, and have yet to be systemically addressed.

2.1 LABORIOUS CERTIFICATION PROCESS

A central challenge cited by many firms is the certification process.

Whereas firms need relatively few certifications to begin processing activities in Cambodia and to be certified for export, the certifications required by importing countries are extensive, and are not overseen by any single institution or governing entity. Many firms report limited capacity, both in identifying which certifications are necessary and acquiring certification.

As a result, many firms have worked initially with buyers in overseas markets for which the certification process is less onerous. Firms specifically cite assistance provided by buyers from Japan and South Korea, who do not rely on third-party certifications but rather visit firms' factories in person to assess product quality and observe the safety, sanitation, and other aspects of firms' processing operations; certification is provided by these countries' own certifying bodies.

2.2 RELATIVELY UNDEVELOPED SUPPORTING SERVICES SECTORS

Despite improvements to firms' supply chains, and to producer capacity more broadly, multiple firms nonetheless cite continued challenges in reliably sourcing product, as well as in building their own factory capacity for sophisticated processing and packaging operations.

In many cases, the problem stems from a lack of supporting services. Access to finance for producers is still limited; they often need access to finance on the front end of the growing season to purchase inputs. Many firms must finance their suppliers themselves, an expensive process that ties up firms' working capital and limits the number of suppliers they can work with. In other cases, limited logistics services are the problem: products that cannot reliably be transported to a factory or collection point within a certain amount of time are at risk of spoiling. This is a pertinent issue in the longan sector, as longan has a limited shelf life.



Kirirom Food Production (KFP), a fruit processing company established in 2013, began exporting its products to buyers in China in 2014, and has gone on to expand its export activities to buyers in several other countries. Further expansion has been hindered, however, by the firm's limited packaging capacity, necessitating that KFP work primarily with intermediaries who buy KFP products in bulk and repackage them before selling them to distributors. "Even if we receive an order [directly from a distributor], we are not yet able to process our products in large quantities," says Chhorn Dalis, Managing Director of KFP. She went on to say, "We need to build the technical capacity of our staff, in terms of food technology and the proper use and maintenance of machinery; sourcing machinery from reputable suppliers is also a challenge."

Acquiring, operating, and maintaining equipment for processing operations is a challenge for multiple firms. Many pieces of processing equipment must be imported from other countries, a costly and time-consuming process; staff must be trained on safe and proper equipment operation; and machine maintenance and repair often require assistance from overseas specialists and engineers.

2.3 LIMITED GLOBAL RECOGNITION OF CAMBODIAN HORTICULTURAL PRODUCTS

Even for firms that have successfully overcome supply-side challenges, success in overseas markets is often hindered by a lack of global recognition of Cambodia as a producer of quality horticultural products.

Limited recognition of Cambodian products introduces challenges for firms seeking to establish relationships with buyers in new markets, or with new buyers in existing markets.

Cambodia's position as a relatively small country situated between two large regional neighbors whose products are widely recognized and sought after in global marketplaces contributes to the challenges faced by individual firms in accessing new markets. Thailand is widely recognized as a supplier of high-quality products, in horticulture as well as a multitude of other sectors, while Vietnam is seen in many overseas markets as a supplier of large volumes of horticultural products at a low price. Processing and export activities are well-established in both countries, with many firms operating at economies of scale and with extensive networks of buyers. Cambodian firms face difficulty in competing with firms from either of these countries – supplying products of superior quality to those of Thailand, or of comparable quality but at a favorable price; or supplying large quantities of products at a lower price than Vietnamese exporters.

2.4 IMPACTS OF THE COVID-19 PANDEMIC

Each of these barriers has furthermore been compounded by the Covid-19 pandemic, as domestic, regional, and global supply chains alike have suffered significant disruptions.

Multiple firms have reported the total or near-total loss of export contracts, due in large part to the astronomical rise of freight and shipping costs: neither overseas buyers nor Cambodian exporters could absorb the increased cost of shipping, and it was no longer economical to continue the purchase agreement.

In other cases, firms have managed to maintain existing export agreements, but have been unable to establish new agreements due to difficulties in connecting and communicating with new buyers. Platforms for meeting and connecting with new buyers are more limited, as trade fairs, expositions, and other events have been canceled and postponed; virtual and online versions of these events are sometimes seen as less effective than in-person events. While some firms have been able to send product samples to overseas buyers, others have encountered difficulties in making progress towards purchase agreements, as some buyers prefer to be able to visit suppliers' factories – rendered far more difficult by the travel limitations imposed during the pandemic.

3. OPTIMISM AND OPPORTUNITIES FOR FUTURE GROWTH

Despite ongoing challenges and barriers that have yet to be fully addressed, many firms currently engaged in export activities find reasons to be optimistic about the future growth of Cambodia's horticulture exports sector. Most of the barriers identified by project partners are not seen as insurmountable, and firms furthermore see strong potential in Cambodia's horticulture sector as a whole for the continued growth and expansion of export activities.

3.1 CONTINUED IMPROVEMENTS TO SUPPORTING SERVICES

The capacity of Cambodia's supporting services sector has been identified by some firms as an ongoing limitation on continued growth, and many partners see improvements to supporting products and services as a central opportunity.

Several new **financial products and services** have already been introduced and are being adopted by a growing number of firms. The Supply Chain Financing (SCF) model developed by AMK Microfinance Institution (MFI), a

Harvest II partner, allows larger firms, including input supply companies and horticulture buyers such as processors and exporters, to serve as “anchors” that can guarantee loans made to their suppliers, in the case of horticulture buyers, or to their dealers, in the case of input supply firms. As a result, growers and input dealers, through formalized partnerships with buyers and input supply firms, are able to access financing under terms that are typically not available to individual small enterprises seeking loans directly from financial institutions, while the larger “anchor” firms are not impeded by limitations on their working capital through loans to suppliers or the credit for inputs to dealers.



The Cambodian Agricultural Cooperative Corporation (CACC), working with Agricultural Cooperatives (ACs) in the cashew sector, has successfully supported its AC partners in accessing financing from MFIs, freeing up working capital for CACC and allowing it to work with a greater number of suppliers. CACC has organized trainings for ACs around modernized business and financial management practices; connected ACs to Banhji, a business management platform provider; and supported ACs in accessing loans using cashew crops stored in CACC facilities as collateral. “These activities help ease the financial burden for CACC,” says Kann Kunthy, Managing Director of CACC. “During the harvest season, ACs often need cash immediately – but as an exporter, we do not necessarily have cash available for all our partners at the same time. In supporting them in accessing financing from a different source, it helps to ease the financial burden for us during the harvest period.”

Improvements to other supporting services sectors, including **logistics, packaging, and factory machinery provision and maintenance**, hold similar promise, as continued improvements have the potential to reduce firms’ operating costs and help them become more competitive. A robust supporting services sector likewise has the potential to encourage expanded investment, both domestic and international, in horticultural supply chains and processing operations.

3.2 NICHE OPPORTUNITIES IN GLOBAL MARKETPLACES

Processors and exporters of horticultural products from both Thailand and Vietnam occupy well-established market positions, and many Harvest II partners see little point in trying to compete with regional neighbors in the areas for which they are known: Thai products are recognized worldwide for their high quality, while Vietnamese exporters are described as unmatched in their ability to supply large quantities of products for low prices.

Instead, Cambodian firms see particular opportunity in occupying more **niche, high-value markets**, including in products grown and processed according to more niche certifications – such as organic, GI, and Fair Trade – and in products developed according to specific requirements of individual buyers and specific preferences of consumers.

Several Harvest II partners are engaged in building organic-certified supply chains, particularly in cashew, that will enable them to establish a market position within a far less crowded market – and to furthermore sell a premium product at a higher price. Support to producers in navigating and completing the certification process is critical to this endeavor, and Harvest II has provided technical and financial support to several project partners towards this end.



Fruit processor Misota Group has leveraged its flexibility as a small-scale processor committed to high-quality products to access unique opportunities in overseas markets. The firm has partnered with a buyer in Japan to process mandarin orange, imported by the Japanese buyer to Cambodia for processing by Misota before being exported as a finished product back to Japan. “This was a source of great excitement and happiness for Misota,” says Kong Sokunkanha, Manager of Business Development and Export, “that, though Japan operates with a heavy focus on quality and has strict standards, we can nevertheless work with them successfully.”

Other firms see opportunity in coordinating closely with individual buyers to develop products that meet their specific requirements. While some firms have encountered challenges in connecting with overseas buyers willing to work with relatively small-scale processors, others have found their relatively small size and their close relationships with their suppliers to be an advantage, as their production and processing operations are more flexible and thus more easily adapted to buyers’ specifications.

Finally, many Cambodian firms see significant opportunity in the growing global demand for horticultural products that are seen as “safe” and “natural,” typically referring to minimal use of chemical pesticides, fertilizers, and other inputs. With many Cambodian supply chains still in relatively early stages of development, firms are recognizing opportunities to train producers on production methods that minimize chemical inputs, to develop robust supply chains certified in organic and other standards and thereby supply overseas markets with high-quality products grown and processed according to these more rigid requirements.

3.3 GLOBAL RECOGNITION FOR CAMBODIAN PRODUCTS

Many firms feel that their access to export market opportunities is hindered by a lack of recognition among many buyers of Cambodian horticultural products. Lessons from the development of a **globally-recognized brand identity** for Cambodian rice were suggested by some partners as instructive. A decade ago, Cambodian rice faced many of the same challenges that other Cambodian horticultural products do today, with overseas buyers largely unaware of Cambodia as a supplier of rice. Intentional government effort designed to expand rice production and export, alongside collaboration with public-sector partners in building brand awareness through marketing and other activities, helped transform Cambodia into one of the world’s top ten exporters of rice.

Harvest II partners cite the potential of similar efforts around Cambodian horticultural products. Government incentives in the horticulture sector have the potential to scale up investment in production and processing activities, while collaboration with other partners around efforts to build global recognition would expand Cambodian firms' access to export opportunities.

A NASCENT SECTOR FINDS ROOM TO GROW

This case study finds that Harvest II partners see opportunity in export markets, are continuing to build their individual capacities to compete, and are ready to work with others to strengthen the export capacity of the sector as a whole.

Firms have built their initial success in accessing overseas markets on improved supply chains and expanded production capacities, often implemented with Harvest II support. Such practices, alongside enhanced understandings of export market requirements and the capacity to meet them, will continue to play a foundational role as firms seek to expand production, introduce new products, and access additional markets.

With concerted effort from government and donor partners, horticultural products for export markets have potential to serve as a significant contribution to a robust and inclusive Cambodian horticulture sector.