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@General Directorate of Agriculture (GDA)/
Ministry of Agriculture, Forestry and Fisheries (MAFF)

DEVELOPMENT OF STANDARDS AND SCHEME FOR GOOD AGRICULTURE PRACTICES (GAP) IMPLEMENTATION AND CERTIFICATION BASED ON ASEAN GAP

July 2020

SDGs:



Countries:

Cambodia

Project Codes:

TCP/CMB/3608

FAO Contribution:

USD 224 000

Duration:

1 May 2018 – 31 December 2019

Contact Info:

FAO Representation in Cambodia

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Implementing Partner

General Directorate of Agriculture (GDA), Ministry of Agriculture, Forestry and Fisheries (MAFF).

Beneficiaries

MAFF, Ministry of Health and Commerce, Accreditation Committee of Cambodia, national certification bodies, farmers, producers and private sector stakeholders in horticulture.

Country Programming Framework (CPF) Outputs

Output 1.4: Improved capacity of targeted stakeholders to formulate and adopt legislations, regulations, standards and implementation arrangements in line with international and regional standards



BACKGROUND

Due to the growing demand for higher quality and safer food products by consumers, it has become more common for both importing countries and domestic buyers to require certification for the use of good agricultural practices (GAP) in food production and distribution. As such, Association of Southeast Asian Nations (ASEAN) countries have a common GAP framework for the production, harvesting and postharvest handling of fresh fruits and vegetables (ASEAN GAP). The ASEAN GAP aim to prevent or minimize hazards associated with (i) food safety, (ii) environmental impacts, (iii) worker health, safety and welfare and (iv) produce quality.

Several ASEAN countries have developed voluntary GAP standards or follow standards that are modelled on the ASEAN GAP. In Cambodia, however, there is an urgent need to develop and implement national GAP in order to comply with international requirements and bolster trade, particularly within the ASEAN free trade area.

Food safety standards in Cambodia have largely focused on end products and are often not considered mandatory. However, stakeholders in Cambodia's agriculture sector have recognized that in order to compete with other ASEAN countries and benefit from access to the common market area, GAP need to be better incorporated into all farming activities. The development and implementation of Cambodia's GAP (CamGAP) will create a demand for reliable, high-quality inputs, increase the value of farms and develop the skills of farmers. Ultimately, the formulation of CamGAP will draw upon concepts in the ASEAN GAP, which were formulated based on international regulatory frameworks, including those of the International Plant Protection Convention (IPPC), Codex Alimentarius Commission and World Organisation for Animal Health (OIE).

Given the challenges being faced in Cambodia, this project was designed to institute CamGAP for horticultural produce and operationalize the associated national certification and accreditation systems. This, in the long term, is expected to promote the optimization of farming resources, as well as access to market opportunities for producers.

IMPACT

The project aimed to increase the incomes of farmers through the adoption of good hygiene and production systems that will result in safer and higher quality horticultural produce in Cambodia.

ACHIEVEMENT OF RESULTS

The project facilitated the development of a credible and internationally recognized system for GAP in Cambodia, which includes higher food safety standards and stronger certification and accreditation procedures.

As part of the project inception meeting, as well as through bilateral meetings with key stakeholders and interviews with selected farmers, a qualitative baseline assessment of GAP and awareness on related areas was conducted. Subsequently, based on the ASEAN GAP, the domain for CamGAP was developed through the review and updating of existing guidelines, training manuals and tools. A broad range of outreach materials were produced and then disseminated, including the food safety module, food safety leaflet, GAP poster and GAP notebook.

Technical officers from the GDA/MAFF, Provincial Department of Agriculture, Forestry and Fisheries of (i) Battambang, (ii) Kampong Cham, (iii) Kandal, (iv) Siem Reap and (v) Tboung Khmum (PDAFFs) and NGOs received capacity development training on GAP inspection and auditing. In addition, general training on GAP was delivered to technical officers from Government departments. The technical officers served as master trainers that delivered local food safety trainings, which provided farming communities with efficient services based on their specific needs, developed the knowledge and skills of farmers, and familiarized farmers and other stakeholders with the application of CamGAP standards for farm certification. Additionally, the project promoted public dialogue on GAP through organization of the National Forum on “Integrated Pest Management and Food Safety” in conjunction with the GDA and International Rice Research Institute (IRRI).



A total of 258 farmer/producers, private sector actors and extension officers, including 185 women, from the five target provinces were trained on GAP application. The trainings ultimately (i) introduced CamGAP for fresh vegetable production, harmonizing the control of food safety by farmers and commercial producers during production, harvesting and postharvest handling, (ii) introduced the process for certifying CamGAP farms; and (iii) assisted producers, packers, supply chain businesses, trainers, Government extension staff and various institutions in understanding CamGAP food safety requirements for agricultural products that are for consumption/sale. Moreover, five pilot GAP farms were established under the project – one in each of the target districts.

Following review of the existing system by a national consultant, the National Certification System for CamGAP farms was established and made functional. Through the development, documentation and publishing of training materials, a strong basis was established for training programmes on GAP technical standards, criteria for the national certification body and the certification process.

IMPLEMENTATION OF WORK

The project was implemented in accordance with the originally approved budget. Certain activities were delayed or not carried out, however, due to difficulties in recruiting international consultants. Risks to the successful implementation of the project were identified during its formulation and effectively managed throughout its implementation. The risk of low participation in the project by Government ministries was mitigated by involving them in activities from its inception. The risk of poor coordination between stakeholders was avoided through effective discussion at meetings, seminars and workshops. Finally, the risk of the new GAP standards not being accepted was mitigated through the continued sensitization of stakeholders, as well as their high engagement in project initiatives.



FOLLOW-UP FOR GOVERNMENT ATTENTION

Although the project supported the adoption of GAP throughout Cambodia and the related National Certification System was established, future efforts should focus on finalizing the establishment of the National Accreditation System. Additionally, the Government is required to endorse the GAP Certification Manual developed under the project. This will prove an essential step in operationalizing GAP initiatives throughout the country.

SUSTAINABILITY

1. Capacity development

Project efforts were implemented in a manner that strengthened existing organizational structures in Cambodia. Notably, the project worked closely with the Department of Plant Protection, Sanitary and Phytosanitary (DPPSPS), which is mandated to (i) review and update CamGAP audit and inspection procedures and (ii) evaluate CamGAP certification applications from farmers and producers. In addition, the project strengthened capacity for the implementation of GAP by training technical officers from both national and provincial structures as master trainers. These expertise are expected to remain within the Government and continue to ensure that farmers and producers meet CamGAP standards for food safety.

2. Gender equality

The project was designed to meet the needs of both men and women. Emphasis was placed on encouraging women to become actively involved in the training efforts delivered under the project – both as master trainers and as training recipients.

3. Environmental sustainability

The project developed the capacity of farmers and raised their awareness on CamGAP for the safe production of fruits and vegetables. This included a range of environmentally friendly production practices, which aim to minimize the impact of agriculture on the environment.



4. Human Rights-based Approach (HRBA) – including Right to Food and Decent Work

Although the advancement of human rights was not a primary objective of the project, the long-term impact of the efforts undertaken will include improved access to safe and nutritious food. Additionally, training and awareness-raising initiatives supported the engagement of farming communities.

5. Technological sustainability

The GAP promoted under the project primarily involve basic technologies and methodologies that are accessible to farming communities. Moreover, the training materials produced were based on ASEAN GAP and will remain part of national institutions. The strengthened national capacity for training farmers and producers on CamGAP standards and requirements places Cambodia in a strong position to further disseminate relevant skills and knowledge throughout the country, supporting the production of higher quality and safer foods that can meet the demands of both domestic and global markets.

6. Economic sustainability

Food safety remains a high priority in Cambodia and the MAFF continues to promote CamGAP as it seeks to mobilize additional resources for supporting the production of safer fruits and vegetables. Once farmers and producers have received technical training on GAP and certified their farms, they do not necessarily require additional technical support. However, to comply with CamGAP standards, there is often a requirement for the dedication of more time and resources to farming activities. Therefore, it is essential that farmers have reliable access to markets and higher returns on their produce to continue to incentivize their adoption of CamGAP.

DOCUMENTS AND OUTREACH PRODUCTS

- ☐ Report of Inception Workshop. H Chhunhy.
- ☐ Final Report of Letter of Agreement with General Directorate of Agriculture (GDA).
- ☐ CamGAP Certification Manual (in English and Khmer). P Vuth. October 2019
- ☐ Food safety module. GDA. 2019.
- ☐ GAP notebook. GDA. 2019.
- ☐ Food safety leaflet. GDA. 2019.
- ☐ GAP poster. GDA. 2019.



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Increased farm incomes through adoption of good hygiene and production systems that results in the enhancement of safety and quality of the fresh horticulture produce from farms in Cambodia		
Outcome	Safe products, as well as facilitation of trade through a credible and internationally acceptable GAP system (covering standards, certification and accreditation), are ensured		
	Indicator	1. Forty Master Trainers of GDA technical officials trained and established in inspection and auditing of GAP 2. Farmers from the existing agricultural cooperatives and others in selected areas are trained in GAP application regarding hazards along the horticulture supply and value chain 3. National GAP Certification systems and Accreditation System set up and functional	
	Baseline	1. 0 2. 0 3. 0	
	End Target	1. 40 2. 250 3. 1	
	Comments and follow-up action to be taken	1. Partially achieved. Twenty technical officers from the GDA, as well as extension officers and internal inspectors from the five target provinces (Battambang, Kampong Cham, Kandal, Siem Reap and Tboung Khmum) were trained as trainers. These trainers were able to (i) build the capacity of Government officers for the organization of local training on food safety (under CamGAP practical guidelines), in turn providing farming communities with relevant and efficient services in response to local needs and further improving farmers' knowledge and skills, and (ii) train farmers/producers and stakeholders in CamGAP application for food safety to certify farms. 2. In total, 258 farmer/producers, private sector actors and extension officers, including 185 women, from the five target provinces were trained on GAP application. The purposes of the trainings were to (i) introduce CamGAP for fresh vegetable production, following the ASEAN GAP for food safety module, and harmonize the control of food safety by farmers and commercial producers during production, harvesting and postharvest handling, including transport from farms to packaging and sale locations; (ii) introduce the process involved in certifying CamGAP farms; and (iii) assist producers, packers, supply chain businesses, trainers, Government extension staff, various institutions and the private sector to understand CamGAP food safety requirements for agricultural products for consumption/sale. 3. The National Certification system was set up and functional, whereas the Accreditation System was still being addressed at project closure.	
Output 1	Baseline Assessment on GAP conducted		
	Indicators	Target	Achieved
	Inception workshop and baseline assessment conducted		Partially
Baseline			
Comments	The inception workshop was conducted. The baseline assessment on GAP was partially completed.		
Activity 1.1	Conduct the project inception workshop		
	Achieved	Yes	
	Comments	The inception workshop was organized on 18 July 2018 and presided over by a delegate of the Royal Government of Cambodia/Director-General of the GDA and the FAO Representative in Cambodia. A total of 32 participants from the DPPSPS, Department of Industry Crops, Department of Horticulture and Cash Crops, Department of Agricultural Extension, National Laboratory of Agriculture, Cambodian Agricultural Research and Development Institute (CARDI), Royal University of Agriculture (RUA), Prek Leap National School of Agriculture, Kampong Cham National School of Agriculture, PDAPP from each of the five target provinces, United States Agency for International Development, German Agency for International Cooperation, Cambodia–Australia Agricultural Value Chain Program and Japan International Cooperation Agency. The workshop aimed to (i) inform all stakeholders about the project activities and work plan; (ii) seek cooperation and valuable inputs from stakeholders to ensure that the project outputs are captured and incorporated into the work plan; and (iii) define clear roles and responsibilities among key stakeholders.	

Activity 1.2	Baseline assessment on GAP and its awareness in Cambodia		
	Achieved	Partially	
	Comments	The full baseline survey of farmers was not conducted due to time constraints. However, a qualitative baseline assessment was conducted with key stakeholders to identify gaps and challenges in terms of GAP awareness and practices in Cambodia. This supported the effective planning of project interventions and was completed during the inception workshop, bilateral meetings with key stakeholders and in-depth interviews with farmers selected for piloting GAP demonstration farms.	
Output 2	National GAP domain developed and technical training conducted		
	Indicators	Target	Achieved
	1. GAP outreach materials produced and disseminated 2. Technical officers received training on inspection and auditing on GAP 3. Public dialogue organized	1. 2200 copies of outreach materials disseminated 2. 20 technical officers received training 3. One nationwide public dialogue organized	Yes
Baseline			
Comments			
Activity 2.1	Establishment of domain on GAP for Cambodia		
	Achieved	Yes	
	Comments	The project followed a participatory approach to develop the CamGAP domain. Existing guidelines, training manuals and training tools (in Khmer) were reviewed and updated based on ASEAN GAP standards to ensure they were relevant and could be implemented by farmers. Overall, 2 200 copies of outreach materials were disseminated, including 500 copies of food safety modules, 1 000 copies of the food safety leaflet, 500 copies of the GAP poster, and 200 copies of the GAP notebook.	
Activity 2.2	Capacity development on inspection and auditing on GAP		
	Achieved	Yes	
	Comments	Over 20 participants, including six women and technical officers from the GDA/MAFF, PDAFFs of the target provinces and NGOs, were trained on CamGAP auditing, with the main objective of building the capacity of participants that are responsible for CamGAP auditing or are part of the CamGAP Certifying Body, in turn, ensuring they are capable of evaluating and certifying CamGAP farms for food safety. Participants (i) became familiar with the guidelines and role of the CamGAP auditing service and (ii) strengthened CamGAP certification authority by developing their capacity to check and evaluate food safety for all agricultural produce before it is traded on local and international markets.	
Activity 2.3	General training on GAP for general technical officers and practitioners from government and NGOs, etc.		
	Achieved	Yes	
	Comments	At least 15 participants, including five women and technical officers from the GDA/MAFF, PDAFFs of the target provinces and NGOs, received general training on GAP. The training aimed to (i) present GAP for fresh vegetable production, according to the ASEAN GAP on food safety module, to better control the food safety measures performed by farmers and commercial producers; (ii) enhance the harmonization of GAP on food safety techniques in target provinces to support associations in fruit and vegetable production, covering production, harvesting and postharvest handling (from farms to sites where produce is packaged for sale); and (iii) assist producers, packers, supply chain businesses, trainers, Government extension staff and various institutions to understand CamGAP food safety requirements for agricultural products for consumption/sale. As a result, trainees that were familiar with general GAP could apply for related jobs.	

Activity 2.4	Public dialogues		
	Achieved	Yes	
	Comments	<p>Together with the GDA and IRRI, the project supported the organization of the National Forum on “Integrated Pest Management and Food Safety” in Siem Reap Province on 28–29 October 2019. A total of 166 participants attended, including 27 women. The attendees included policy-makers, donors, farmers, IPM trainers, agriculture experts, NGO/IO staff, researchers and lecturers.</p> <p>The event aimed to (i) share the results, achievements and lessons learned regarding the National IPM Program, plant protection practices, GAP, organic crop production practices and related activities on food safety and agro-ecological practices in Cambodia; (ii) present and discuss successful case studies, research findings and other innovative programmes that support GAP and sustainable development; (iii) discuss examples of the integration of IPM and good practices for food safety along the food chain; (iv) strategically discuss the way forward for scaling up IPM and related programmes for sustainable and ecological agricultural production and food safety; and (v) prepare policy statements and advocacy materials for ecological agricultural production and future resource mobilization.</p> <p>The event concluded with the minister of the MAFF voicing support for IPM and the implementation of related measures to ensure food safety. Recommendations were provided to continue promoting IPM, crop diversification, the cultivation of highly competitive crops for niche markets, smart production technologies and practices, the adoption of CamGAP standards and other standards (i.e. organic production and the Sustainable Rice Platform), stronger market linkages, e-extension services, and stronger enforcement of sanitary and phytosanitary measures. Finally, the adoption of the “Public–Private–Development Partner–Community Partnership” approach was supported, which aims to ensure better incomes for producers and higher quality and safer products for consumers, while protecting the environment (green development).</p>	
Output 3	Training and preparation of farmers in selected areas organized		
	Indicators	Target	Achieved
			Yes
Baseline			
Comments	A total of 256 farmers/producers and private sector actors, including 185 women, from the provinces of Battambang, Kampong Cham, Kandal, Siem Reap and Tboung Khum, received training.		
Activity 3.1	Development of Codes of Practice for horticultural crops		
	Achieved	No	
	Comments		
Activity 3.2	Training		
	Achieved	Yes	
	Comments	<p>Over 20 technical officers from the GDA, as well as extension officers and inspectors from the five target provinces were trained as trainers to (i) develop capacity on GAP for food safety (according to CamGAP guidelines), in turn, providing farming communities with relevant and efficient services in response to local needs and further improving farmers' knowledge and skills and (ii) train farmers/producers and other stakeholders in CamGAP application for farm certification.</p>	
Activity 3.3	Monitoring		
	Achieved	Yes	
	Comments	Monitoring was jointly implemented by farmers and trainers from the PDAFFs	
Activity 3.4	GAP pilot farms		
	Achieved	Yes	
	Comments	<p>Five pilot farms, in Battambang, Kampong Cham, Kandal, Siem Reap and Tboung Khum, were established – one pilot farm for each of the target provinces.</p>	

Output 4	National Certification systems set up		
	Indicators	Target	Achieved
			Yes
Baseline			
Comments	The National Certification System was set up and functional.		
Activity 4.1	Setting up of Certification Committee		
	Achieved	No	
	Comments	The Certification Committee was not set up due to the mandate of the GDA and existing regulations in the Kingdom of Cambodia	
Activity 4.2	Review of existing certification mechanism		
	Achieved	Yes	
	Comments	The review was performed by a national consultant.	
Activity 4.3	Adaptation of the regional certification process		
	Achieved	No	
	Comments	The activity was not carried out because an international consultant was unable to be recruited. This would have been necessary for adapting the regional certification process.	
Activity 4.4	Exposure/study visit		
	Achieved	No	
	Comments	Under the project, five officials from the GDA were expected to travel to other countries in the region so that they could better understand the modalities of national certification systems and incorporate them into the Cambodian system. Due to time constraints, however, the exposure visit was not organized.	
Activity 4.5	Development of procedure and documents for Certification Body to carry out certification		
	Achieved	Partially	
	Comments	Relevant documents were drafted in English and Khmer.	
Output 5	GAP Accreditation System established based on regional GAP standard guideline		
	Indicators	Target	Achieved
			No
Baseline			
Comments			
Activity 5.1	Review of existing accreditation mechanism		
	Achieved	No	
	Comments		
Activity 5.2	Development of procedure and documents for Accreditation Body		
	Achieved	Partially	
	Comments		

Output 6	Scheme owner, accreditation and certification body staff and pool of trainers trained		
	Indicators	Target	Achieved
			Yes
Baseline			
Comments			
Activity 6.1	Development of Training material		
	Achieved	Yes	
	Comments	GAP materials were developed, including the (i) CamGAP Guidelines for Food Safety module; (ii) GAP poster; (iii) GAP leaflet and (iv) GAP Record Book.	
Activity 6.2	Training programmes on GAP technical standard, certification body criteria and certification process; and accreditation/approval criteria and process		
	Achieved	Yes	
	Comments	Over 20 participants, including seven women/technical officers from the GDA/MAFF, PDAFFs of the target districts and NGOs, were trained on the CamGAP technical standards, certification criteria and the certification process. Participants were familiarized with CamGAP auditing criteria and their technical capacities were strengthened on checking and evaluating, according to the CamGAP standards for food safety, agricultural produce before it is traded on local and international markets.	
Activity 6.3	Awareness programme		
	Achieved	Yes	
	Comments	A total of 208 farmers/producers, including 151 women from the target provinces, participated in the awareness programme on CamGAP. Participants gained general knowledge on food safety and quality for agricultural products, as well as on handling processes. Participants were able to apply this knowledge in their daily lives.	
Activity 6.4	Documentation and publication of training material		
	Achieved	Yes	
	Comments	The training materials were documented, published and shared with beneficiaries in the five target provinces.	

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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