

## **ANNEXES**

**Draft Project Design Matrix (PDM)**

Title of the Project: Project for Improvement of Reliability of Safe Crop Production in the Northern Region (“IRSaC” Project)

Term of Cooperation: 5 years from dispatch of first long term expert

Project Site: The Northern Region of Vietnam: “2 Cities and 11 Provinces” (Hanoi City, Hai Phong City, Hung Yen Province, Hai Duong Province, Ha Nam Province, Thai Binh Province, Phu Tho Province, Vinh Phuc Province, Quang Ninh Province, Hoa Binh Province, Bac Ninh Province, Nam Dinh Province and Ninh Binh Province).

Implementing Organization: DCP/MARD, DARDs (in the Project site)

November 7, 2015/ PDM-ver.0

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Overall Goal</b></p> <p>Agricultural products in the Northern Region of Viet Nam are improved in term of safety and reliability.”</p> <p>*Improvement of products in term of safety and reliability, thereby, it enables to promote cultivation of safe crops paid much more attention and achieve the promotion of related industries.</p>	<p>1) To indicate the significance of agricultural products in term of safety and reliability</p> <p>2) To show the quality of agricultural products to meet domestic requirements and export (For example)</p> <p>1) Increased (expanded) areas and/or productions of safe crop production in the Northern Region of Viet Nam</p> <p>2) Increased numbers of farmer groups, agriculture cooperatives and enterprises who acquired Basic GAP/VietGAP/ GlobalGAP in the Northern Region of Viet Nam</p> <p>3) Reputation of safe crop productions (safety vegetable) in the Northern Region of Viet Nam from buyers/consumers</p>	<p>* MARD/DARD reports (focus on Basic GAP/VietGAP/ GlobalGAP)</p> <p>* Interview &amp; sample survey results gathered the voice of buyers/consumer</p> <p>* Questionnaire/ Interview (comparison between baseline data at the beginning of the Project and follow-up survey at the end of Project)</p>	<p>1. The current agricultural legal policy on safe crop production and food safety does not change.</p>
<p><b>Project Purpose</b></p> <p>Safe crop productions (safety vegetable) in target sites in the Northern Region of Viet Nam are promoted.”</p> <p>*Promotion of safe crop production, then, channel of the value chain is promoted.</p>	<p>To indicate the promoted situation of safe crop productions in target sites in the Northern Region (For example)</p> <p>1) Increased (expanded) areas and/or productions of safe crop production</p> <p>2) Increased numbers of BasicGAP which applied and utilized by farmer groups, agriculture cooperatives and enterprises in target sites</p> <p>3) Reputation of safe crop productions (safety vegetable) in target sites from buyers/consumers (increased number of new contract agreement and its content)</p>	<p>* Market (value chain) analysis survey report</p> <p>* MARD/DARD reports</p> <p>* Questionnaire/Interview</p> <p>* Comparison between baseline data at the beginning of the Project and follow-up survey at the end of Project</p>	<p>1. Necessary budget for safe crop production activities is ensured at central/ provincial level.</p>

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Outputs</b></p> <p>1) “The capacity of monitoring and management on safe crop production for relevant organization (DCP/MARD, DARD in respective province/city, district, and commune) is improved.”</p> <p>2) “The good patterns (as model) on safe crop production (safety vegetable) following GAP (Basic GAP) with supply chain (market linkage between production and consumption) is proposed.”</p> <p>3) “Awareness of relevant organization/people, mainly producer and buyers (consumer and traders; such as wholesalers and retailers) on safe crop production and food safety is raised.”</p>	<p>1-1) Increased/enhanced capacity of quality management and monitoring safe crop productions from DCP to the province, district and communes on the target sites</p> <p>1-2) Increased capacity of quality control and management of safe crop productions by the participated farmers</p> <p>1-3) Disclosure of monitoring/inspection</p> <p>2) Analysis and assessment of Various/different pattern/types as good practices (success story) of supply chain on safe crop production (from producers into consumers)</p> <p>3) The level of awareness on safe crop (food safety, environment-friendly and safe crop production) by relevant stakeholders (relevant organization/people in public, mainly producers and buyers)</p>	<p>CPMU/PPMU Reports</p> <p>* MARD/DARD reports (quality management and monitoring results)</p> <p>* Training Reports</p> <p>* Questionnaire/Interview</p> <p>* Farmer records (PGS, ICT, etc.)</p> <p>* Interview to farmers</p> <p>* Disclosure documents of monitoring/ inspection</p> <p>* CPMU/PPMU Reports</p> <p>* MARD/ DARD reports/ Documentation</p> <p>* Interview to experts</p> <p>* Basic GAP guidelines</p> <p>* Comparison between baseline data at the beginning of the Project and follow-up survey at the end of Project</p> <p>* Interview to the participants on campaign event</p> <p>* Safe crop brochure</p>	<p>1. No severe natural disasters or economic crisis occur that have serious impact on food production and prices.</p> <p>2. The price and condition of agricultural product are not drastically fluctuated.</p> <p>3. The violation of contract and bankruptcy of buyers is not frequently.</p>

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Activities</b></p> <p>1.1 To create unit of CPMU (Central Project Management Unit) within DCP/MARD (in order to manage and implement of the Project effectively in central level)</p> <p>1.2 To create PPMU (Provincial Project Management Unit) within the respective province selected as “Pilot province(s)/city” and “Semi Pilot province(s)” (in order to manage and implement of the Project effectively in local level)  * The PPMU is consisted with relevant sub-department(s) in DARD as well as collaboration with other departments/centers which is necessary to implement the Project effectively.</p> <p>1.3 To review/analyze and identify bottlenecks in the existing situation and problems for safe crop production in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.4 To select the target group (=Agriculture production entities; Agriculture Cooperative, Agriculture Production company/enterprises, and Farmer Groups) in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.5 To collect relevant documents, materials and data on safe crop production including GAP, training materials, brochures</p> <p>1.6 To design crop production systems in order to ensure quality and safety  * “Crop production system” includes format of record keeping, method of record confirmation, scientific pesticide residue testing, PGS (Participatory Guarantee System, and introduction of ICT (Information and Communication Technology), etc.</p> <p>1.7 Based on the systems designed in the Activity 1.6 above, to introduce the system as trial activities in the pilot province(s) by joint collaboration between CPMU and PPMU</p> <p>1.8 Based on the trial Activities 1.7 above, to modify and improve the systems in order to make the system workable</p> <p>1.9 Against PPMU in the respective “Semi Pilot province(s)”, to conduct workshop/seminars regarding to the system constructed in the Activity 1.8 above by CPMU</p> <p>1.10 To introduce the system above even in the “Semi Pilot province(s)” under the guidance and instruction by CPMU</p> <p>1.11 In the Pilot province(s) and Semi Pilot province(s), to summarize the results of activities carried out, and then to formulate action plans (including activities and budget) which are enable to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 1, the “Knowledge-sharing province(s)/city” are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s) , even to share the experience each other.</p>		<p><b>Inputs</b></p> <p><u>Vietnamese Side</u>  &lt;Project Staff&gt;  - Counterpart and administrative staffs</p> <p>&lt;Facilities/Buildings&gt;  - Suitable office space with necessary equipment/facilities for Japanese experts</p> <p>&lt;Expenses for operation and management&gt;  - Counterpart Fund necessary for the implementation of the Project</p> <p><u>Japanese Side</u>  &lt;Dispatch of Japanese Experts&gt;  Long-term Experts:  - Project Chief Advisor  - Project Coordinator/ Training/ Public Relations  Short-term experts: As required</p> <p>&lt;Equipment/Machinery/Vehicle &gt;  - As necessary equipment  - Other items are to be discussed</p> <p>&lt;Training in Japan/ Third</p>	<p>1. The majority of the Project counterparts in charge of safe crop production in central and pilot province(s) do not change.</p> <p>2. The cooperation from government organization and people committee in relevant province(s) and city and the counterpart budget is secured.</p>

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<p>2.1 To conduct survey on “Market (value chain) analysis” (such as “Market Trends &amp; Competitiveness”, “Value Chain Mapping/Diagram”, “Constraints &amp; Opportunities”, “Stakeholders’/ Actors’ relationship” and “Governance Structures &amp; Public-private relations”)</p> <p>2.2 In conjunction with the Activity 1.4, and also based on the results of Market analysis survey above, to identify the potential buyers of the agricultural products produced by target groups (product processing entity, distribution entity, sales entity) in the Pilot province(s) and Semi Pilot province(s) or large consumption areas (Hanoi, etc.)</p> <p>2.3 Together to provide the results of the Market analysis survey to the producers in the respective province, to conduct sales promotion activities on safe crops (in particular, vegetables follows BasicGAP) based on the requests by processing and sales entity * “Promotion activities on safe crop production” is called as Matching activities like market/price information sharing and supports of business opportunities between producers and buyers</p> <p>2.4 To examine the pre-processing and delivery method of collection shipment (including the transportation method)</p> <p>2.5 To introduce the pre-processing and delivery method of collection shipment above even in the “Semi Pilot province(s)” under the guidance and instruction by CPMU</p> <p>2.6 In the Pilot province(s) and Semi Pilot province(s), to summarize the results of activities carried out, and then to formulate action plans (including activities and budget) which are enable to continue the Project activities even after the termination of the Project * For the above-mentioned Activity 2, the “Knowledge-sharing province(s)/city” are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p>		<p>countries&gt;</p> <ul style="list-style-type: none"> <li>- Training of Vietnamese staffs in Japan/third countries as required</li> </ul>	
<p>3.1 To review and analyze past experiences of promotion activities on safe crop production and food safety, and draw good practices and lessons learned.</p> <p>3.2 To implement raising awareness activities on safe crop production and food safety, focus on human health, environment and agricultural promotion toward customers (safe vegetable buyers/consumers) through mass media in nationwide * Awareness activities = such as awareness raising campaign event, utilization of social media</p> <p>3.3 To implement specific raising awareness activities on safe crop production and food safety toward the target groups and organization related to the Activity 1 and Activity 2 * For example;</p> <ul style="list-style-type: none"> <li>- To produce poster and video to the buyers on the importance of safe crop and its quality management in production process</li> <li>- To arrange study tours or the sharing experiences and learning the “good practice” among target group on vegetable joint selling</li> <li>- To assist the exchange between producers and consumers to build buyer/ consumer’s trust and confidence in order to increase awareness and recognition of safe vegetable</li> </ul> <p>3.4 To grasp the consumers’ voice/opinion (information on fake high-quality vegetable products, consumer needs through “Customers protection union”, etc.), and support activities on communication and information given by Vietnamese government</p>			<p><b>Pre-conditions</b></p> <ol style="list-style-type: none"> <li>1. The cooperation from buyers (collector, trader, wholesaler, retailer, etc.) of safe crop production is secured.</li> </ol>

**Project Design Matrix (PDM)**

Title of the Project: Project for Improvement of Reliability of Safe Crop Production in the Northern Region (“IRSaC” Project)

Term of Cooperation: 5 years from dispatch of first long term expert

Project Site: The Northern Region of Vietnam: “2 Cities and 11 Provinces” (Hanoi City, Hai Phong City, Hung Yen Province, Hai Duong Province, Ha Nam Province, Thai Binh Province, Phu Tho Province, Vinh Phuc Province, Quang Ninh Province, Hoa Binh Province, Bac Ninh Province, Nam Dinh Province and Ninh Binh Province).

Implementing Organization: DCP/MARD, DARDs (in the Project site)

April 17, 2017/ PDM-ver.1

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Overall Goal</b></p> <p>Agricultural products in the Northern Region of Viet Nam are improved in term of safety and reliability.”</p> <p>*Improvement of products in term of safety and reliability, thereby, it enables to promote cultivation of safe crops paid much more attention and achieve the promotion of related industries.</p>	<p>1) Areas and productions of reliable safe crop production in the Northern Region of Viet Nam is increased.</p> <p>2) Numbers of farmer groups, agriculture cooperatives and enterprises who acquired Basic GAP/ VietGAP/ GlobalGAP in the Northern Region of Viet Nam is increased.</p> <p>3) Numbers of buyers/shops of safe crops in the Northern Region of Viet Nam is increased.</p>	<p>* MARD/DARD reports (focus on Basic GAP/ VietGAP/ GlobalGAP)</p>	<p>1. The current agricultural legal policy on safe crop production and food safety does not change.</p>
<p><b>Project Purpose</b></p> <p>Safe crop productions (safety vegetable) in target sites in the Northern Region of Viet Nam are promoted.”</p> <p>*Promotion of safe crop production, then, channel of the value chain is promoted.</p>	<p>1) At least three kinds of supply chain models for safe crops are developed in the target sites.</p> <p>2) Percentage of farmers who join joint sales of safe crop is increased to 50% in the target sites.</p> <p>3) The area for reliable safe crop production in the target sites is increased to 180ha.</p>	<p>1) Safe crop supply chain development manual</p> <p>2) Baseline/Endline survey</p> <p>3) Baseline/Endline survey</p>	<p>1. Necessary budget for safe crop production activities is ensured at central/ provincial level.</p>
<p><b>Outputs</b></p> <p>1) “The capacity of monitoring and management on safe crop production for relevant organization (DCP/MARD, DARD in respective province/city, district, and commune) is improved.”</p>	<p><u>For Producers</u></p> <p>1-1) The number of target groups applying and utilizing Basic GAP/ VietGAP is increased to at least 16.</p> <p>1-2) 320 number of producers in target sites attend Basic GAP trainings.</p> <p>1-3) 80% of producers in target sites record on field diary properly according to Basic GAP.</p> <p>1-4) 100% of target groups in target sites conduct internal audit to evaluate group members’ activity.</p>	<p>1-1) PPMU monitoring report</p> <p>1-2) PPMU monitoring reports</p> <p>1-3) Baseline/Endline survey</p> <p>1-4) PPMU monitoring reports</p>	<p>1. No severe natural disasters or economic crisis occur that have serious impact on food production and prices.</p> <p>2. The price and condition of agricultural product are not drastically fluctuated.</p> <p>3. The violation of contract and bankruptcy of buyers is not frequently.</p>

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>2) “The good patterns as model on safe crop production (safety vegetable) following GAP (Basic GAP/VietGAP/Global GAP) with supply chain is proposed.”</p> <p>3) “Awareness of relevant organization/people, mainly producer and buyers (consumer and traders; such as wholesalers and retailers) on safe crop production and food safety is raised.”</p>	<p>For Government staff</p> <p>1-5) 48 number of field officers are trained as trainer of Basic GAP.</p> <p>1-6) 35 samples of soil and water analysis are conducted.</p> <p>1-7) 60 samples of pesticide residue inspection are conducted.</p> <p>1-8) 70 times of internal audits are attended by field officers.</p> <p>1-9) Monitoring report is prepared by PPMU every 3 months.</p> <p>1-10) Evaluation report is prepared by CPMU before every JCC meeting.</p> <p>1-11) Action plan is prepared by PPMU and CPMU.</p> <p>2-1) 20 number of matching events are conducted</p> <p>2-2) 40 number of linkages between producers and buyers are made in target sites.</p> <p>2-3)The stakeholder coordination meetings for each target group which include producers, buyers and members of DARD are held at least twice a year.</p> <p>2-4) Monitoring report is prepared by PPMU every 3 months.</p> <p>2-5) Evaluation report is prepared by CPMU before every JCC meeting.</p> <p>2-6) Action plans is prepared by PPMU and CPMU.</p> <p>3-1) The awareness program for consumers, producers and buyers are conducted 15 times by CPMU and PPMU.</p> <p>3-2) 5 promotional materials for awareness activities are developed.</p> <p>3-3) The number of participants in the awareness activities exceeds 500.</p>	<p>1-5) PPMU monitoring reports</p> <p>1-6) PPMU monitoring reports</p> <p>1-7) PPMU monitoring reports</p> <p>1-8) PPMU monitoring reports</p> <p>1-9) PPMU monitoring reports</p> <p>1-10) CPMU evaluation reports</p> <p>1-11) Action plans</p> <p>2-1) PPMU monitoring reports</p> <p>2-2) PPMU monitoring reports</p> <p>2-3) PPMU monitoring reports</p> <p>2-4) PPMU monitoring reports</p> <p>2-5) CPMU evaluation reports</p> <p>2-6) Action plans</p> <p>3-1) CPMU and PPMU monitoring report</p> <p>3-2) CPMU and PPMU monitoring report</p> <p>3-3) CPMU and PPMU monitoring report</p>	

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Activities</b></p> <p>1.1 To create unit of CPMU (Central Project Management Unit) within DCP/MARD in order to manage and implement of the Project effectively in central level</p> <p>1.2 To create PPMU (Provincial Project Management Unit) within the respective province selected as “Pilot province(s)/city” and “Semi Pilot province(s)” in order to manage and implement of the Project effectively in local level</p> <p>* The PPMU is consisted with relevant sub-department(s) in DARD as well as collaboration with other departments/centers which is necessary to implement the Project effectively.</p> <p>1.3 To review/analyze and identify bottlenecks in the existing situation and problems for safe crop production in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.4 To select the target groups (=Agriculture production entities; Agriculture Cooperative, Agriculture Production company/enterprises, and Farmer Groups) in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.5 To collect relevant documents, materials and data on safe crop production including GAP, training materials, brochures</p> <p>1.6 To design crop production systems in order to ensure quality and safety</p> <p>* “Crop production system” includes the activities, such as format of record keeping, method of record confirmation, scientific pesticide residue testing, PGS (participatory Guarantee System, and introduction of ICT (Information and Communication Technology), etc.</p> <p>1.7 Based on the systems designed in the Activity 1.6 above, to introduce the system as pilot activities in the pilot province(s) by joint collaboration between CPMU and PPMU</p> <p>1.8 Based on the Activities 1.7 above, to modify and improve the systems in order to make the system workable</p> <p>1.9 Against PPMU in the respective “Semi Pilot province(s)”, to conduct workshop/seminars regarding to the system constructed in the Activity 1.8 above by CPMU</p> <p>1.10 To introduce the system above even in the “Semi Pilot province(s)” under the guidance and instruction by CPMU</p> <p>1.11 In the Pilot province(s) and Semi Pilot province(s), to evaluate the results of pilot activities carried out, and then to formulate action plans (including activities and budget) which enable MARD/DARD to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 1, the “Knowledge-sharing province(s)/city” are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p>		<p><b>Inputs</b></p> <p><u>Vietnamese Side</u> &lt;Project Staff&gt;</p> <ul style="list-style-type: none"> <li>- Counterpart and administrative staffs</li> </ul> <p>&lt;Facilities/Buildings&gt;</p> <ul style="list-style-type: none"> <li>- Suitable office space with necessary equipment/ facilities for Japanese experts</li> </ul> <p>&lt;Expenses for operation and management&gt;</p> <ul style="list-style-type: none"> <li>- Counterpart Fund necessary for the implementation of the Project</li> </ul> <p><u>Japanese Side</u> &lt;Dispatch of Japanese Experts&gt;</p> <p>Long-term Experts:</p> <ul style="list-style-type: none"> <li>- Project Chief Advisor</li> <li>- Project Coordinator/ Training/ Public Relations</li> </ul> <p>Short-term experts: As required</p> <p>&lt;Equipment/Machinery/Vehicle&gt;</p> <ul style="list-style-type: none"> <li>- As necessary equipment</li> <li>- Other items are to be discussed</li> </ul> <p>&lt;Training in Japan/ Third countries&gt;</p> <ul style="list-style-type: none"> <li>- Training of Vietnamese staffs in Japan/third countries as required</li> </ul>	<p>1. The majority of the Project counterparts in charge of safe crop production in central and pilot province(s) do not change.</p> <p>2. The cooperation from government organization and people committee in relevant province(s) and city and the counterpart budget is secured.</p> <p><b>Pre-conditions</b></p> <p>1. The cooperation from buyers (collector, trader, wholesaler, retailer, etc.) of safe crop production is secured.</p>
<p>2.1 To conduct survey on “Market (value chain) analysis” (such as “Market Trends &amp; Competitiveness”, “Value Chain Mapping/Diagram”, “Constraints &amp; Opportunities”, “Stakeholders’/ Actors’ relationship” and “Governance Structures &amp; Public-private relations”)</p> <p>2.2 In conjunction with the Activity 1.4, and also based on the results of Market analysis survey above, to identify the potential buyers of the agricultural products produced by target groups (product processing entities, distribution entities and sales entities) in the Pilot province(s) and Semi Pilot province(s) or large consumption areas (Hanoi, etc.)</p> <p>2.3 Together to provide the results of the Market analysis survey to the producers in the respective province, to conduct sales promotion activities on safe crops (in particular, vegetables follow GAP), making contract and planning collection and delivery activities based on the requests by processing and sales entity</p>			



Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>* "Promotion activities on safe crop production" is called as Matching activities like market/price information sharing and supports of business opportunities between producers and buyers</p> <p>2.4 To examine the pilot activities of collection, pre processing and delivery in Pilot provinces.</p> <p>2.5 To introduce the pilot activities of collection, pre processing and delivery above even in the "Semi Pilot province(s)" under the guidance and instruction by CPMU</p> <p>2.6 In the Pilot province(s) and Semi Pilot province(s), to evaluate the results of pilot activities carried out, and then to formulate action plans (including activities and budget) which enable MARD/DARD to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 2, the "Knowledge-sharing province(s)/city" are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p>			
<p>3.1 To review and analyze past experiences of promotion activities on safe crop production and food safety, and draw good practices and lessons learned.</p> <p>3.2 To implement raising awareness activities on safe crop production and food safety, focusing on traceability and trust building toward customers (buyers/consumers) through various tools</p> <p>* Awareness activities = such as awareness raising campaign event, utilization of social media</p> <p>3.3 To implement specific raising awareness activities on safe crop production and food safety toward the target groups and organization related to the Activity 1 and Activity 2</p> <p>3.4 To grasp the consumers' voice/opinion and support communication activities of Vietnamese government</p>			

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Term of Cooperation: 5 years from dispatch of first long term expert

Project Site: The Northern Region of Vietnam: “2 Cities and 11 Provinces” (Hanoi City, Hai Phong City, Hung Yen Province, Hai Duong Province, Ha Nam Province, Thai Binh Province, Phu Tho Province, Vinh Phuc Province, Quang Ninh Province, Hoa Binh Province, Bac Ninh Province, Nam Dinh Province and Ninh Binh Province).

Implementing Organization: DCP/MARD, DARDs (in the Project site)

June 21, 2019/ PDM-ver.2

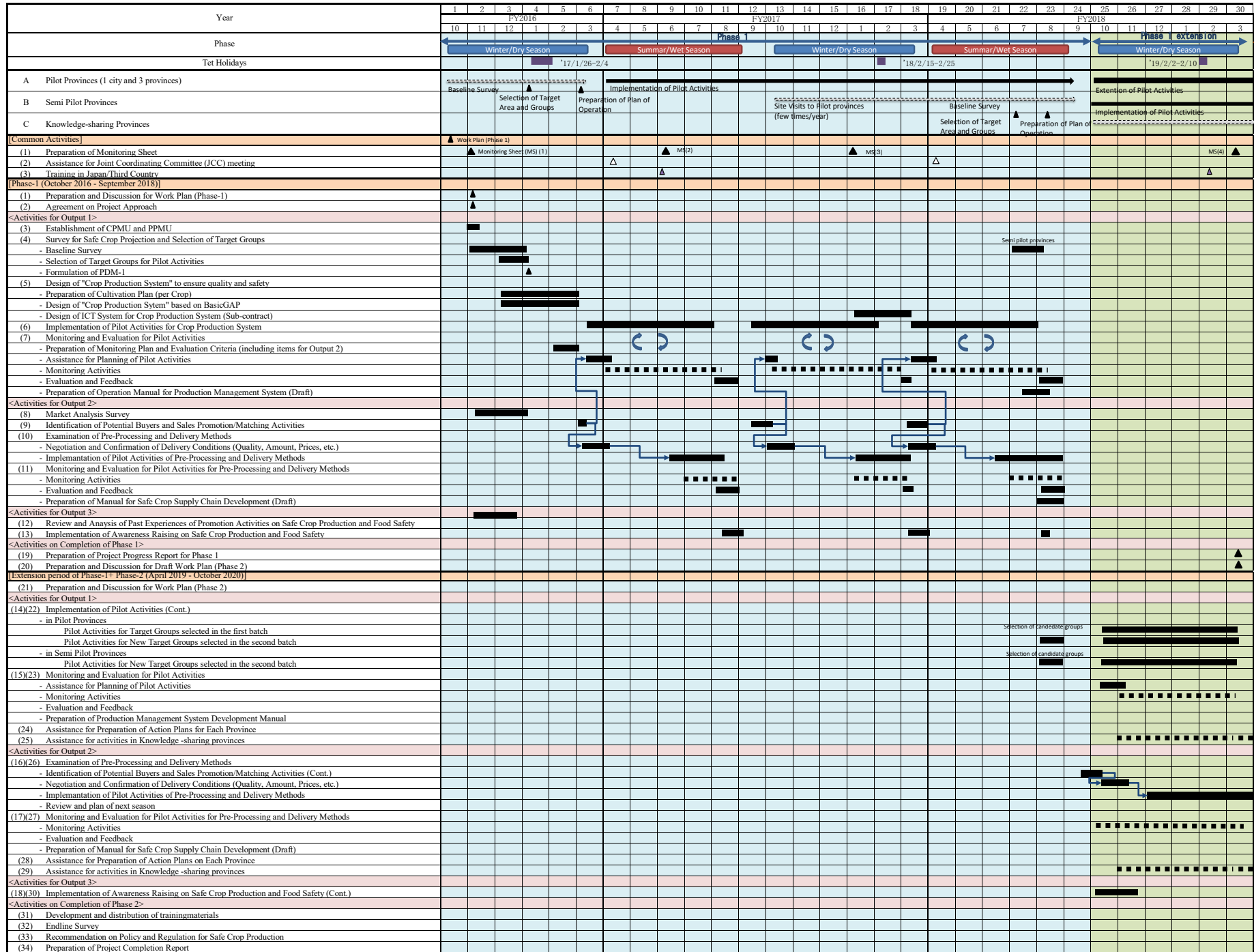
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<p><b>Project Purpose</b></p> <p>Safe crop productions (safety vegetable) in target sites in the Northern Region of Viet Nam are promoted.”</p> <p>*Promotion of safe crop production, then, channel of the value chain is promoted.</p>	<p>1) At least three kinds of supply chain models for safe crops are developed in the target sites.</p> <p>2) Percentage of farmers who join joint sales of safe crop is increased to 50% in the target sites.</p> <p>3) The area for reliable safe crop production in the target sites is increased to 180ha.</p>	<p>1) Safe crop supply chain development manual</p> <p>2) Baseline/Endline survey</p> <p>3) Baseline/Endline survey</p>	<p>1. Necessary budget for safe crop production activities is ensured at central/ provincial level.</p>
<p><b>Outputs</b></p> <p>1) “The capacity of monitoring and management on safe crop production for relevant organization (DCP/MARD, DARD in respective province/city, district, and commune) is improved.”</p>	<p><u>For Producers</u></p> <p>1-1) The number of target groups applying and utilizing Basic GAP/ VietGAP is increased to at least 16.</p> <p>1-2) 320 number of producers in target sites attend Basic GAP trainings.</p> <p>1-3) 80% of producers in target sites record on field diary properly according to Basic GAP.</p> <p>1-4) 100% of target groups in target sites conduct internal audit to evaluate group members’ activity.</p> <p><u>For Government staff</u></p> <p>1-5) 48 number of field officers are</p>	<p>1-1) PPMU monitoring report</p> <p>1-2) PPMU monitoring reports</p> <p>1-3) Baseline/Endline survey</p> <p>1-4) PPMU monitoring reports</p> <p>1-5) PPMU monitoring reports</p>	<p>1. No severe natural disasters or economic crisis occur that have serious impact on food production and prices.</p> <p>2. The price and condition of agricultural product are not drastically fluctuated.</p> <p>3. The violation of contract and bankruptcy of buyers is not frequently.</p>

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>2) “The good patterns as model on safe crop production (safety vegetable) following GAP (Basic GAP/VietGAP/Global GAP) with supply chain is proposed.”</p> <p>3) “Awareness of relevant organization/people, mainly producer and buyers (consumer and traders; such as wholesalers and retailers) on safe crop production and food safety is raised.”</p>	<p>trained as trainer of Basic GAP.</p> <p>1-6) 35 samples of soil and water analysis are conducted.</p> <p>1-7) 60 samples of pesticide residue are checked by authorized laboratory.</p> <p>1-8) 500 samples of pesticide residue are checked as quick test by PPMU.</p> <p>1-9) 70 times of internal audits are attended by field officers.</p> <p>1-10) Monitoring report is prepared by PPMU every 3 months.</p> <p>1-11) Action plan is prepared by PPMU.</p> <p>2-1) 300 number of matching events are conducted</p> <p>2-2) 110 number of linkages between producers and buyers are made in target sites.</p> <p>2-3) The coordination meetings for each target group with buyers are held at least once a year to receive feedback or discuss future trading.</p> <p>2-4) Monitoring report is prepared by PPMU every 3 months.</p> <p>2-5) Action plans is prepared by PPMU.</p> <p>3-1) The awareness program for consumers, producers and buyers are conducted 15 times by CPMU and PPMU.</p> <p>3-2) 5 promotional materials for awareness activities are developed.</p> <p>3-3) The number of participants of general school students in Hanoi exceed 64,000.</p>	<p>1-6) PPMU monitoring reports</p> <p>1-7) PPMU monitoring reports</p> <p>1-8) PPMU monitoring reports</p> <p>1-9) PPMU monitoring reports</p> <p>1-10) PPMU monitoring reports</p> <p>1-11) Action plans</p> <p>2-1) PPMU monitoring reports</p> <p>2-2) PPMU monitoring reports</p> <p>2-3) PPMU monitoring reports</p> <p>2-4) PPMU monitoring reports</p> <p>2-5) Action plans</p> <p>3-1) CPMU and PPMU monitoring report</p> <p>3-2) CPMU and PPMU monitoring report</p> <p>3-3) CPMU and PPMU monitoring report</p>	

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Activities</b></p> <p>1.1 To create unit of CPMU (Central Project Management Unit) within DCP/MARD in order to manage and implement of the Project effectively in central level</p> <p>1.2 To create PPMU (Provincial Project Management Unit) within the respective province selected as “Pilot province(s)/city” and “Semi Pilot province(s)” in order to manage and implement of the Project effectively in local level</p> <p>* The PPMU is consisted with relevant sub-department(s) in DARD as well as collaboration with other departments/centers which is necessary to implement the Project effectively.</p> <p>1.3 To review/analyze and identify bottlenecks in the existing situation and problems for safe crop production in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.4 To select the target groups (=Agriculture production entities; Agriculture Cooperative, Agriculture Production company/enterprises, and Farmer Groups) in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.5 To collect relevant documents, materials and data on safe crop production including GAP, training materials, brochures</p> <p>1.6 To design crop production systems in order to ensure quality and safety</p> <p>* “Crop production system” includes the activities, such as format of record keeping, method of record confirmation, scientific pesticide residue testing, PGS (participatory Guarantee System, and introduction of ICT (Information and Communication Technology), etc.</p> <p>1.7 Based on the systems designed in the Activity 1.6 above, to introduce the system as trial activities in the pilot province(s) by joint collaboration between CPMU and PPMU</p> <p>1.8 Based on the trial Activities 1.7 above, to modify and improve the systems in order to make the system workable</p> <p>1.9 Against PPMU in the respective “Semi Pilot province(s)”, to conduct workshop/seminars regarding to the system constructed in the Activity 1.8 above by CPMU</p> <p>1.10 To introduce the system above even in the “Semi Pilot province(s)” under the guidance and instruction by CPMU</p> <p>1.11 In the Pilot province(s) and Semi Pilot province(s), to summarize the results of trial activities carried out, and then to formulate action plans (including activities and budget) which enable MARD/DARD to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 1, the “Knowledge-sharing province(s)/city” are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p>		<p><b>Inputs</b></p> <p><u>Vietnamese Side</u> &lt;Project Staff&gt;</p> <ul style="list-style-type: none"> <li>- Counterpart and administrative staffs</li> </ul> <p>&lt;Facilities/Buildings&gt;</p> <ul style="list-style-type: none"> <li>- Suitable office space with necessary equipment/ facilities for Japanese experts</li> </ul> <p>&lt;Expenses for operation and management&gt;</p> <ul style="list-style-type: none"> <li>- Counterpart Fund necessary for the implementation of the Project</li> </ul> <p><u>Japanese Side</u> &lt;Dispatch of Japanese Experts&gt;</p> <p>Long-term Experts:</p> <ul style="list-style-type: none"> <li>- Project Chief Advisor</li> <li>- Project Coordinator/ Training/ Public Relations</li> </ul> <p>Short-term experts: As required</p> <p>&lt;Equipment/Machinery/Vehicle&gt;</p> <ul style="list-style-type: none"> <li>- As necessary equipment</li> <li>- Other items are to be discussed</li> </ul> <p>&lt;Training in Japan/ Third countries&gt;</p> <ul style="list-style-type: none"> <li>- Training of Vietnamese staffs in Japan/third countries as required</li> </ul>	<p>1. The majority of the Project counterparts in charge of safe crop production in central and pilot province(s) do not change.</p> <p>2. The cooperation from government organization and people committee in relevant province(s) and city and the counterpart budget is secured.</p> <p><b>Pre-conditions</b></p> <p>1. The cooperation from buyers (collector, trader, wholesaler, retailer, etc.) of safe crop production is secured.</p>
<p>2.1 To conduct survey on “Market (value chain) analysis” (such as “Market Trends &amp; Competitiveness”, “Value Chain Mapping/Diagram”, “Constraints &amp; Opportunities”, “Stakeholders’/ Actors’ relationship” and “Governance Structures &amp; Public-private relations”)</p> <p>2.2 In conjunction with the Activity 1.4, and also based on the results of Market analysis survey above, to identify the potential buyers of the agricultural products produced by target groups (product processing entity, distribution entity and sales entity) in the Pilot province(s) and Semi Pilot province(s) or large consumption areas (Hanoi, etc.)</p> <p>2.3 Together to provide the results of the Market analysis survey to the producers in the respective province, to conduct sales promotion activities on safe crops (in particular, vegetables follow GAP), making contract and planning collection and delivery activities based on the requests by processing and sales entity</p>			

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>* "Promotion activities on safe crop production" is called as Matching activities like market/price information sharing and supports of business opportunities between producers and buyers</p> <p>2.4 To examine the trial activities of collection, pre processing and delivery in Pilot provinces.</p> <p>2.5 To introduce the trial activities of collection, pre processing and delivery above even in the "Semi Pilot province(s)" under the guidance and instruction by CPMU</p> <p>2.6 In the Pilot province(s) and Semi Pilot province(s), to summarize the results of trial activities carried out, and then to formulate action plans (including activities and budget) which enable MARD/DARD to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 2, the "Knowledge-sharing province(s)/city" are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p>			
<p>3.1 To review and analyze past experiences of promotion activities on safe crop production and food safety, and draw good practices and lessons learned.</p> <p>3.2 To implement raising awareness activities on safe crop production and food safety, focusing on human health, environment and agricultural promotion toward customers (buyers/consumers) through mass media in nationwide.</p> <p>* Awareness activities = such as awareness raising campaign event, utilization of social media</p> <p>3.3 To implement specific raising awareness activities on safe crop production and food safety toward the target groups and organization related to the Activity 1 and Activity 2</p> <p>3.4 To grasp the consumers' voice/opinion and support activities on communication and information given by Vietnamese government</p>			

Annex 2 Work Schedule











Project Title: Project for Improvement of Reliability of Safe Crop Production in the Northern Region ("IRSaC" Project)

Duration / Phasing		Plan																						
		Actual																						
Monitoring Plan		Plan	2016			2017				2018				2019				2020				2021		
		Actual	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
Monitoring																								
Joint Coordinating Committee		Plan																						
		Actual																						
Set-up the Detailed Plan of Operation		Plan																						
		Actual																						
Submission of Monitoring Sheet		Plan																						
		Actual																						
Monitoring Mission from Japan		Plan																						
		Actual																						
Joint Monitoring		Plan																						
		Actual																						
Post Monitoring		Plan																						
		Actual																						
Reports/Documents																								
Work plan (1)		Plan																						
		Actual																						
Progress report (1) and draft work plan (2)		Plan																						
		Actual																						
Work plan (2)		Plan																						
		Actual																						
Project Completion Report		Plan																						
		Actual																						
Public Relations																								
Establishment and operation of website		Plan																						
		Actual																						
Issue of newsletter		Plan																						
		Actual																						

Annex 4 Assignment Schedule

Position	Name	Company	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
			FY2016						FY2017						FY2018																						
Phase			9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3				
Tet Holidays																																					
1	Team Leader/Food Value Chain	Mitsuru Nanakubo	Nippon Koei	(16)	(30)	(30)	(13)	(20)	(28)	(19)	(6)	(9)	(27)	(11)	(28)	(19)	(20)	(6)	(21)	(28)	(20)	(9)	(22)	(11)	(30)	(7)	(12)	(12)	(22)								
2	Co-Team Leader/Distribution Improvement/Marketing Promotion/Agricultural Finance	Chiyo Mamiya	KMC	(16)	(30)	(14)		(20)	(17)	(12)		(30)	(2)	(11)	(12)	(28)	(12)		(22)	(22)	(1)		(26)	(21)	(7)	(11)	(13)	(15)	(15)								
3	Cooperative Sales/Cooperative Purchase/Vegetable Production (2)	Hideki Maruyama	Nippon Koei	(16)	(10)			(16)	(11)	(23)			(31)	(31)	(24)	(10)	(9)	(24)	(2)	(13)	(18)	(2)	(15)	(10)	(21)	(31)	(20)	(15)	(11)	(8)	(15)						
3'	Cooperative Sales/Cooperative Purchase/Vegetable Production (2)	Hironori Inoue	Nippon Koei																																		
4	GAP System/Consumer Relations	Tamaki Tanaka	KMC		(4)	(16)			(13)	(26)	(1)	(14)	(1)	(14)	(6)	(9)			(1)	(28)			(15)		(8)	(14)		(25)									
5	Vegetable Production (1)	Shiro Arai	Nippon Koei			(14)	(13)	(16)	(10)	(15)	(5)		(2)	(25)													(26)										
6	Gender Relations (1)	Natsuno Matsuura	Nippon Koei		(25)	(3)			(2)	(27)																											
7	Coordinator/Gender Relations (2)	Yuko Togawa	Nippon Koei	(1)																																	
8	Coordinator/Marketing Promotion (2)	Takuto Hashimoto	KMC																																		
9	Coordinator/Cooperative Sales (2)/Vegetable Production (3)	Hiroki Takezawa	Nippon Koei																																		
Sub-Total																																					
1	Team Leader/Food Value Chain	Mitsuru Nanakubo	Nippon Koei	□	(3)																													□	(2)		
2	Co-Team Leader/Distribution Improvement/Marketing Promotion/Agricultural Finance	Chiyo Mamiya	KMC	□	(3)																													□	(4)		
3	Cooperative Sales/Cooperative Purchase/Vegetable Production (2)	Hideki Maruyama	Nippon Koei	□	(3)																													□	(6)		
3'	Cooperative Sales/Cooperative Purchase/Vegetable Production (2)	Hironori Inoue	Nippon Koei																																		
4	GAP System/Consumer Relations	Tamaki Tanaka	KMC																																		
10	Cooperative Sales (3)/Cooperative Purchase (2)/Vegetable Production (4)	Mitsuru Nanakubo	Nippon Koei																																		
Sub-Total																																					
Total																																					
JCC											Δ																										
Report																																					

Note: Work in Site Country Work in Site Country (own cost) Work in Japan

▲ Work Plan (Phase 1)      ▲ Monitoring Sheet (1)      ▲ MS(2)      ▲ MS(3)      ▲ MS(4)      ▲ Project Progress Report (Phase 1)      ▲ Draft Work Plan (Phase 2)



**Itinerary for JICA Knowledge Co-Creation Program**

Title : Establishment of Safe Vegetable Supply Chain

Period: 2017/6/12 to 2017/6/21 Number of Trainee:

Purpose : To learn system of production and distribution of safe vegetable in Japan

Output : 1) To understand activities by public sector for production and distribution of safe vegetable  
 2) To understand activities by producer for production of safe vegetable  
 3) To understand activities by buyer for distribution of safe vegetable

Date	Time	Type	Theme	Trainer	
				Name	Organization / Position
12-Jun	~		Trip (Hanoi -> Tokyo (Narita), VN310)	-	-
13-Jun	~		Trip (Hanoi -> Tokyo (Narita), VN310)	-	-
	~	Lecture	Briefing	To be Confirmed	JICA Tsukuba
14-Jun	10:00 ~ 12:00	Field Visit	Activity of Agricultural Corporate to produce safe vegetable	To be Confirmed	Agricultural Corporate Sawara Agricultural Products Supply Center
	15:00 ~ 17:00	Field Visit	Activity of "Sanchi" management, Distribution and Selling of Safe Agricultural Products (Example of Palsystem)	Tomoaki KUDO	GPS Co., Ltd./ Head of Business Division
15-Jun	9:00 ~ 11:00	Lecture	Activity and Current situation of JGAP (Japan GAP)	Yasuaki TAKEDA	Asia GAP Research Institute, Certificated Specified Nonprofit Corporation/ Managing director
	13:30 ~ 16:30	Field Visit	Case study of JGAP introduction	Yosuke TAMATSU KURI	Limited company Unionfarm / President
16-Jun	9:30 ~ 10:30	Lecture	Establishment of safe and secure food "Sanchi" by Japan Agricultural Cooperatives	To be Confirmed	Japan Agricultural Cooperatives Chiba Midori
	10:30 ~ 11:00		Transportation		
	11:00 ~ 12:00	Field Visit	Case study of safe and secure food "Sanchi" by Japan Agricultural Cooperatives	To be Confirmed	Asahi Collecting and Shipping Center
	14:00 ~ 15:00	Field Visit	System of Farmers' Store/ Direct selling store	To be Confirmed	Roadside Station "Kirari Asahi"
17-Jun	9:00 ~ 17:00		Preparation of Report etc		Trainees themselves/ Supervisor
18-Jun	9:00 ~ 17:00		Free day	-	-
19-Jun	9:30 ~ 12:00	Lecture	Activity of stable supply of safe vegetable thorough establishment of "Sanchi", by public sector	Goki TAZAKI	Independent administrative Agency: Agriculture & Livestock Industries Corporation, Vegetable Department / Section manager
	14:00 ~ 15:30	Lecture	Activity to establish Global Food Value Chain by public sector	To be Confirmed	Ministry of Agriculture, Forestry and Fisheries, International Affairs Department, Overseas Investment and Cooperation Division
20-Jun	10:00 ~ 11:45	Field Visit	Activity for Production and distribution of Safe vegetable, for dissemination of JGAP	Hidetoku ITOGA	Japan Agricultural Cooperatives, Central Union of Ibaraki, Center of Agricultural Extension Support, Vice-Director of the Center
	13:30 ~ 14:20	Field Visit	Activity to produce safe vegetable by producers group	Yu SONOBE	Japan Agricultural Cooperatives "Yawaraka" Green Onion producer group/ Representative
	15:00 ~ 15:50	Field Visit	Activity to produce safe vegetable by seed production company	To be Confirmed	Yanagawa Seed Production Research Co., Ltd.
21-Jun	10:00 ~ 13:55		Trip (Tokyo (Narita) -> Hanoi, VN311)	-	-



LIST OF PARTICIPANTS IN "Establishment of Safe Vegetable Supply Chain"

2017年度 国別研修「安全野菜生産チェーンの構築」コース研修員リスト

June, 13, 2017 to June, 21, 2017

No.	Photo (写真)	Country (国名)	Name (呼び名)	役職/所属先	
1		D1701839 Viet Nam ベトナム	<b>Mr. TRAN Xuan Dinh</b> チャン スアン ディン	Deputy Director General, Department of Crop Production, MARD, Director of CPMU ベトナム国 農業農村開発省 農産物生産局 副局長/中央プロジェクト運営管理委員会 会長	Hanoi
2		D1701838 Viet Nam ベトナム	<b>Mr. NGUYEN Hoang Viet</b> グエン ホアン ヴィエト	Chief of Administrative Office of Department of Crop Production, MARD, member of CPMU ベトナム国 農業農村開発省 農産物生産局 事務局長/中央プロジェクト運営管理委員会 職員	Hanoi
3		D1701840 Viet Nam ベトナム	<b>Mr. NGUYEN Van Dan</b> グエン ヴァン ザン	Expert of Food Crop Production Division, Department of Crop Production, MARD; Secretary of CPMU ベトナム国 農業農村開発省 農産物生産局 食用作物課 専門家/中央プロジェクト運営管理委員会 秘書	Hanoi
4		D1704837 Viet Nam ベトナム	<b>Mr. NGUYEN Van Doanh</b> グエン ヴァン ゴアイン	Director of Hung Yen Agriculture and Rural Development Department, Director of Hung Yen PPMU フンイエン省 農業農村開発局 局長/フンイエン省プロジェクト運営管理委員会 会長	Hanoi
5		D1701834 Viet Nam ベトナム	<b>Ms. VU Thi Ha</b> ヴ ティ ハー	Deputy Director of Ha Duong Agriculture and Rural Development Department, Deputy Director of Hai Duong PPMU ハイズン省 農業農村開発局 副局長/ハイズン省プロジェクト運営管理委員会 副会長	Hanoi
6		D1701836 Viet Nam ベトナム	<b>Ms. NGUYEN Thi Thoa</b> グエン ティ トア	Head of Crop Production Division, Ha Noi Department of Agriculture and Rural Development, member of Ha Noi PPMU ハノイ市 農業農村開発局 農産物生産部 部長/ハノイ市プロジェクト運営管理委員会 職員	Hanoi
7		D1701835 Viet Nam ベトナム	<b>Ms. TRAN Thi Nga</b> チャン ティ ガー	Sub-Department of Plant Protection, Ha Nam Agriculture and Rural Development Department, coordinator of Ha Nam PPMU ハナム省 農業農村開発局 植物防除課 職員/ハナム省プロジェクト運営管理委員会 調整員	Hanoi

MARD : Ministry of Agriculture and Rural Development



## Establishment of Safe Vegetable Supply Chain

### • Objective:

- Learning the experiences for GAP vegetable production, distribution activities, GAP certificated system (organizing and management) in Japan
- The activities of Farmer' farm; Agri cooperatives to the safe vegetable supply chain in JP
- From Jun, 13 to Jun, 21, 2017
- Expected Output:
  - To understand GAP in JP, process to enforce JGAP, Management and certification JGAP for Safe vegetable production
  - To understand distribution of safe vegetable by public sector and private sector
  - To understand activities by Buyer for distribution of safe vegetable

# Participants

Name	Position	Organization
Mr. Tran Xuan Dinh	Deputy General Director	DCP; MARD
Mr. Nguyen Van Doanh	General Director	DARD Hung yen Provice
Mrs. Vu Thi Ha	Deputy General Director	DARD Hai Duong .Pro
Mr. Mnguyen Van Dan	Officer	DCP, MARD
Mr. Nguyen Hoang Viet	Chief of office secretariat	DCP, MARD
Mrs.Nguyen Thi Thoa	Leader crop division	DARD, Hanoi .Pro
Mrs.Tran Thi Nga	Vice leader crop division	DARD, Ha nam. Pro



# Training Schedule

Date	Time	Type	Theme	Trainer
13/Jun	PM	Lecture	Opening ceremony, introduce resident in TBIC	Leader of TBIC
14/Jun	AM	Field visit	Activity of agricultural corpora to produce safe vegetable	Agri corporate Sawara product supply center
	PM	Field visit	Activities of "Sanchi" management, distribution and selling safe Agri product by Pal. system	Head of business division, GPS Co.Ltd (Green Plaza System)
15/Jun	AM	Lecture	Activities and current situation of JGAP; Activities certification JGAP	Asia Gap Research Institute;
	PM	Field Visit	Briefing JGAP introduction; Organic farming in green house; Product: baby tomato, Celery cabbage, ..	Ltd. Company Unionfarm
16/Jun	AM	Lecture and factory visit	To visit and study about Establishment; tranportation of safe and secure food "SANCHI" ; by Agri. Cooperative in JP	Agri. Cooperatives Chiba Midori Asahi collecting and Shipping center
	PM	Field visit	System of Farners' Store and direct selling shop	Kirari Asahi



# Training Schedule (cont.)

Date	Time	Type	Theme	Trainer
17-18/Jun		Saturday Sunday	Free day	Consutant' staff in Tokyo
19/Jun	AM	Lecture	Activity stable supply of safe vegetable through establishment oa "Sanchi", by pulic sector	Indipendent administrative agency; Agri and livestock industries coporation; Vegetable Dep/ Section Manager
	PM	Lecture	Activities to establish Globle Food Value Chain by Pulic sector	Ministry of AFF; International Affairs Dep.; overseas investment and cooperation division
20/Jun	AM	Field visit	Activities for production and distribution of safe vegetable, for dissemination of JGAP	JP Agri. Cooperatives, Central Union of Ibaraki; Center of Agri Extension support. (vice Dir of center
	PM	Field Visit F.V	-Activities to produce safe vegetable by producer group - Activities to produce safe vegetable by seed production company	JA cooperatives, "Yawaraka" Green Onion producer group -Yamagawa seed production research Co..Ltd
21/jun	AM	Closing	Final Report for all participants; action plan	All participants, TBIC

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## JA Sawara, 14/Jun



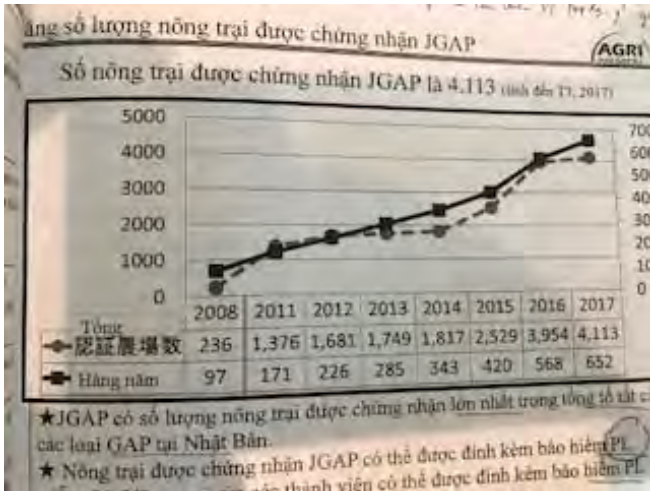
Visited a farmer who is a member of JA Sawara and observed farming practice for safe vegetable under GAP system



Internal monitoring; GPS systems (Green Plaza System)

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Jun, 15- Asia GAP research Institute; JGAP in L.td Copany Unionfarm



JGAP approach from producers and consumers; GAP always listen and edit

To study for Experience in building and managing GAP in Japan

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Jun, 16 - JA cooperatives Chiba, Midori; Case study of safe and secure food “Sanchi” and system of Farmer’s store



The Farmer’s store in Midori; direct selling store

Organic farming in Green house in Ibaraki

8

Jun, 19-IAA, Agri& Livstock, Industries cooperation  
MAFF, IAD;



To visit and study price stability fund



Activities to establish Globe Food Value Chain by Public sector

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## Findings (*phát hiện*)

- Agriculture group Sawara: Farmers are constantly creating and making endless efforts;
  - Cooperation, local community, mutual trust between producers and consumers; Education about safe agricultural production
  - Attach production with environmental protection: Reduce fertilizer, Pesticide amount
  - Supervision and self-examination: Featured internal monitoring
  - Constantly improving quality of product.
  - Each region has a safe production standard: Chiba GAP, IbakiGAP...
  - Clear production management system.
  - To built sales plans to plan production (Pal system). GPS area production management
  - The approach to developing GAP is very clear and there is discussion among stakeholders including buyers; Always adjust, add GAP standards
  - The distribution channels, consumption of safe vegetables in Japan are diverse and effective:
  - Price stabilization project: agriculture and livestock industry corporation (alic)
- \*safety standards certification: Global GAP, Other GAP

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## Output and Action Plan (1)

Output of the training in Japan			Actions to be implemented in the Project activity			
Main Theme		Detail	Issue in the Project Site	Action to be implemented	Time schedule	Output of the Action
1) To understand activities by public sector for production and distribution of safe vegetable	1	To built and GAP standards issued; adjusted GAP	To produce according to GAP (VietGAP, Basic GAP...)	Training, Guiding for farmer	Before, middle, and pre harvest season	Comments adjust the standards to suit practical. Increase producer' knowledge
	2	To Evaluate and Examine the production plan	To analyse soil, water, product	Choose the suitable area for safe production	Before production season	Result analyse of samples
	3	To organize production according to plan	To built plan	To organize production according to plan TOT	All production season	Production according to plan
	4	Support for quality control and GAP certification	To analyse vegetable sample	Take samples and analysed	Before harvest	Pesticide residues, metals ..
	5	To Support building sales systems, production to market plan	connected consumer	Looking for distributors: shops, supermarkets, ..	contract before season	Contract

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## Output and Action Plan (2)

Output of the training in Japan			Actions to be implemented in the Project activity			
Main Theme		Detail	Issue in the Project Site	Action to be implemented	Time schedule	Output of the Action
2) To understand activities by producer for production of safe vegetable	1	Production planning	Small scale, no plan	Train for producer built plan	Every years	production Plan
	2	To keep production processes	Still arbitrarily,	Proposed process and farmer training	Every years	Producer' knowledge will be increase
	3	Reduce insectice and fertilizer amount	The farmer intensive farming, used more fertilizer	Guide farmers to reduce fertilizer and pesticide	E.Y	Actually Reducing fertilizer and pesticide
	4	To clear information of production	No transparency of information, recordkeeping	Design notes, training production	E.Y	Raising the ratio of farmers notes and progress to the transparency of information
	5	Closing cooperation in the production and sales	Not Yet the chain supply	To look for the partner consumed, link building		Formation of sales channels

12

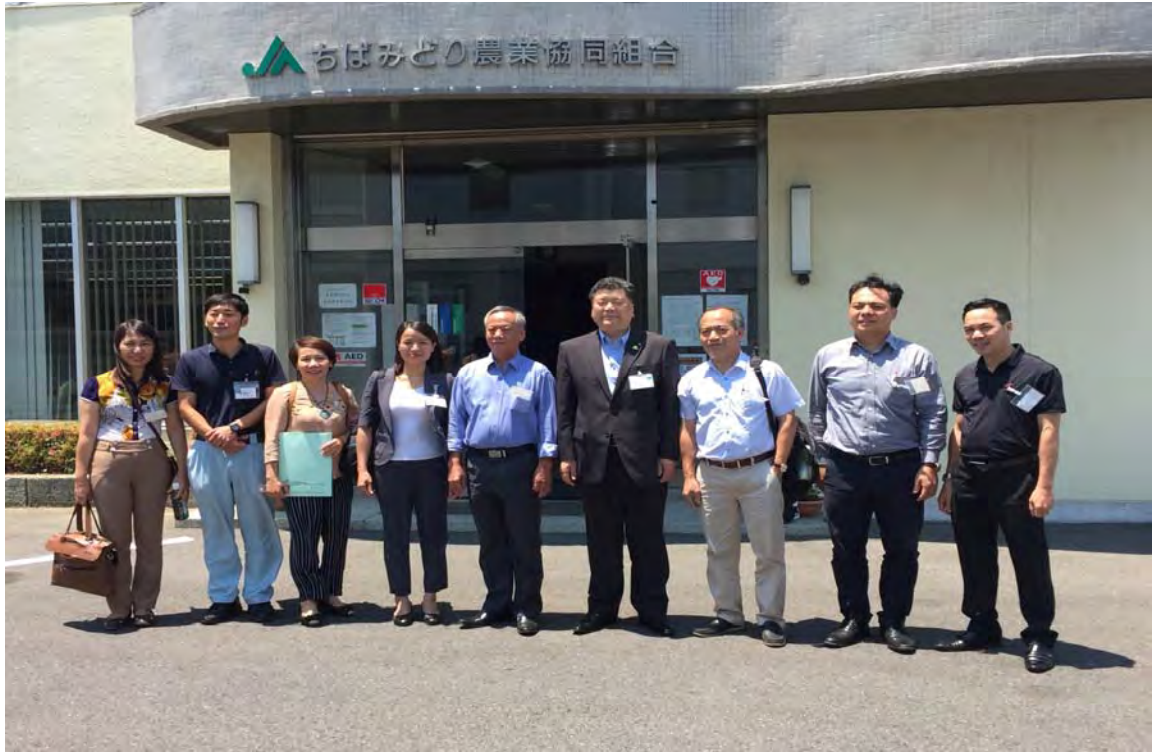
## Output and Action Plan (3)

Output of the training in Japan			Actions to be implemented in the Project activity			
Main Theme		Detail	Issue in the Project Site	Action to be implemented	Time schedule	Output of the Action
3) To understand activities by buyer for distribution of safe vegetable	1	The first is food safety	Need to improve	Satisfying the needs of consumers	all time	product safety certification
	2	Good quality	Quality is better	To improve uniformity, packaging	all time	Satisfaction of consumers
	3	Convenience and reliability	Distribution system for vegetable is not good	Step by step established a distribution system	All time	To Set up a distribution system in the point model
	4	To practice with farmer and understanding producer	Not yet	Workshop for customer	Suitable time	Understanding and sharing of consumers
	5	Understanding safe vegetables	Communication	TV, Newspaper, Website,	2008-2020	

### Recommendation on policy and regulation for safe crop production in Vietnam

- To enforce production line a standard general safety; **Adjusted VietGAP**
- The provinces can develop standards of agricultural production safety
- Reorganize agricultural cooperatives
- **Supplement and adjust policies to support the safe production**
- **Policies for associated companies to consume safe products**
- **Supporting for training to raise awareness on safe crop production**
- **Policies to support branding, establish new marketing channels, market opening**
- **Policies to support the production infrastructure and human resources training**

Thank you very much for your kind attention



# Chuỗi rau an toàn, nhìn từ Nhật Bản

▶ Nhật Bản là một nước công nghiệp cũng là một quốc gia có chiều dài từ Bắc xuống Nam tương tự Việt Nam, địa hình kéo tới hơn 25 vĩ độ; phía Bắc là khí hậu ôn đới, có nhiều tháng tuyết phủ, phía Nam khí hậu khá ấm áp. Diện tích đứng thứ 62 thế giới (Việt Nam thứ 66), tài nguyên không giàu, dân số trên 120 triệu người, hiện chỉ còn 3,9% số lao động làm nông nghiệp.

Hiện nay, Nhật Bản sản xuất rau quả trong nước mới đáp ứng khoảng 70 - 80% nhu cầu tiêu thụ nội địa, số còn lại phải nhập khẩu, tuy nhiên tiêu chuẩn kỹ thuật khá cao, đặc biệt việc kiểm tra chất lượng và an toàn thực phẩm, các chỉ tiêu phân tích, đánh giá lên tới hàng trăm. Nước này cũng xuất khẩu những mặt hàng rau quả cao cấp của họ tới các thị trường khác trên thế giới và được đánh giá cao về chất lượng, độ đồng đều, an toàn thực phẩm.

Vậy sản xuất và phân phối rau an toàn ở quốc gia này thế nào? Chúng ta sẽ học được gì từ kinh nghiệm của xứ sở mặt trời mọc? Xin được bàn luận và dẫn ra một số cách tiếp cận của họ.

## GAP Ở NHẬT BẢN THẾ NÀO?

Việc xây dựng tiêu chuẩn sản xuất an toàn ở Nhật Bản có Ủy ban chung về GAP. Dưới cơ quan này là một cơ quan chịu trách nhiệm về tập huấn, phổ biến GAP, họ đứng ra đào tạo Xây dựng sản xuất an toàn JGAP (Japanese GAP).

JGAP cho người sản xuất với gần 4.000 giảng viên. Một cơ quan chịu trách nhiệm về cấp phép, họ cấp cho 4 đơn vị chứng nhận với 123 chứng nhận viên. Các chứng nhận viên này có nhiệm vụ kiểm tra, đánh giá và giám sát người sản xuất có yêu cầu chứng nhận và chịu trách nhiệm về chất lượng chứng nhận trước cơ quan của họ.

Xây dựng JGAP, cách tiếp cận rất mở và là từ dưới lên; người sản xuất, các doanh nghiệp, hợp tác xã tham gia đóng góp cho việc xây dựng và ban hành tiêu chuẩn này. JGAP cũng thường xuyên được sửa đổi, điều chỉnh cho phù hợp với yêu cầu của thị trường, của người tiêu dùng.

Về việc chứng nhận, thời điểm này Nhật Bản được yêu cầu chứng nhận sản phẩm theo các tiêu chuẩn JGAP hoặc Globle GAP vì năm 2020 thế vận hội Olympic được tổ chức ở đất nước này, theo



Thu hoạch rau bằng cơ giới hóa

“*Nông dân Nhật Bản sản xuất rau an toàn bằng cả trái tim*”. Đây là câu mà chúng tôi được nghe tại một hợp tác xã sản xuất hành lá ở tỉnh Ibaraki. Và khắp nơi trên đất nước này, ý thức và nguyên tắc, tinh kỷ luật của người dân là như vậy. Đứng là chất lượng, mức độ an toàn phải từ cái tâm của người sản xuất.

*Quy trình gieo trồng, chăm sóc và sử dụng phân bón, thuốc bảo vệ thực vật, chế biến... nhất nhất tuân thủ hướng dẫn, sổ tay ghi chép đầy đủ và minh bạch. Với Việt Nam, tôi nghĩ kiên trì tuyên truyền, huấn luyện để “mua dấm thắm lâu” rồi người sản xuất mới có được ý thức như nông dân Nhật Bản.*

đó, các thực phẩm (rau, gạo, sữa, thịt...) phải được chứng nhận. Thực ra, họ không đặt nặng vấn đề chứng nhận vì tổn tiền của nông dân, cứ thấy cách thức nông dân Nhật làm, sự minh bạch trong việc thể hiện, ghi chép sản xuất và công khai thông tin sản xuất, nó còn có giá hơn cái tờ giấy chứng nhận kia nhiều. Ở Nhật, các tổ hợp tác hoặc HTX, doanh nghiệp rất chú trọng tới việc tổ chức trải nghiệm cho người tiêu dùng ở thành phố với các vùng, điểm sản xuất, đó cũng chính là hình thức du lịch trải nghiệm đồng quê để chia sẻ với nhau về nỗi cực nhọc của nông dân và họ làm thế nào để sản phẩm rau, thịt, sữa... đảm bảo an toàn thực phẩm. Chính vì vậy người tiêu dùng rất tin tưởng vào các sản phẩm nông sản của nước

họ sản xuất.

Tiêu chuẩn JGAP xây dựng dựa trên sườn của GlobleGAP và mang tính bao quát, tuân thủ các quy định của Luật An toàn thực phẩm, tuy vậy các tỉnh cũng xây dựng các tiêu chuẩn riêng của mình, các doanh nghiệp lớn cũng có tiêu chuẩn riêng về an toàn thực phẩm với sản phẩm rau quả của địa phương, công ty chẳng hạn như AEON.

Tiêu chuẩn này có thể đơn giản hơn, nhưng phần lớn là cao hơn tiêu chuẩn nền chung. Họ nói rằng, với nông dân cần đưa ra các điểm đơn giản, dễ hơn để thực hiện, và khi ý thức sản xuất an toàn đã ăn vào máu thịt thì tiêu chuẩn được nâng lên, nâng lên là để đáp ứng nhu cầu thị trường, nhu cầu ngày càng cao của người tiêu dùng, và bản thân doanh nghiệp, tổ hợp tác cũng như nông dân cũng luôn ý thức được rằng, cần phải làm tốt hơn và tốt hơn nữa để đảm bảo chữ tín với thị trường, trách nhiệm với xã hội và người tiêu dùng. Chưa khi nào người tiêu dùng quay lưng lại với sản phẩm mà nông dân sản xuất.

Hiện tại, các tiêu chí khuyến khích được đưa ra để đánh giá và bình chọn sản phẩm nông sản, đó là thân thiện với môi trường, giảm sử dụng phân bón hóa học và thuốc bảo vệ thực vật từ 30 - 50%. Thực ra trong cả một vụ trồng rau (ví dụ cải bắp), số lần phun thuốc bảo vệ thực vật trước đây bình quân là 6 - 7 lần, hiện với quy trình kỹ thuật mới đã rút còn 3 - 4 lần. CHIBA-ECO là một trong những tiêu chuẩn như vậy, nhưng phải nói rằng, nông dân tuân thủ nghiêm ngặt sử dụng thuốc bảo vệ thực vật, từ chủng loại, đến liều lượng và họ ghi chép tỷ mỉ, cảnh báo tỷ mỉ để không bị nhiễm chéo... (Còn nữa)

TRẦN XUÂN ĐỊNH

# Chuỗi rau an toàn, nhìn từ Nhật Bản

(Tiếp theo và hết)

## TỔ CHỨC SẢN XUẤT

Sản xuất rau, dù là các hộ nông dân hay các hợp tác xã, việc lập kế hoạch sản xuất dựa trên các đơn đặt hàng được làm rất cẩn trọng và chu đáo. Nông dân không hề sản xuất chạy theo phong trào, tất cả nhất định phải theo kế hoạch, mà kế hoạch này gắn với tiêu thụ ở trong vùng và liên vùng, được các cơ quan quản lý của ngành hướng dẫn và giám sát. Đây là những lý do không hề có chuyện "được mùa, mất giá" ở Nhật.

Hợp tác xã được tổ chức chặt chẽ và họ tham gia sản xuất kinh doanh đa ngành, kể cả tín dụng và du lịch.

Sản xuất ở Nhật cũng chuyên môn hóa sâu, vì vậy nó tạo được thương hiệu sản phẩm cho từng vùng, ví dụ dưa hấu là vùng Hokkaido hay Chiba, hành lá ở Ibaraki... Sản phẩm khi thu hoạch đưa vào siêu thị phải đảm bảo độ đồng đều cực cao, với hệ thống chế biến phân loại hiện đại; ngay cả cải bắp khi thu hoạch, những cây bắp cải dù rất bắt mắt, sạch sẽ nhưng khối lượng, kích thước nhỏ hơn quy định đều bị bỏ lại ruộng cây vùi làm phân bón.

Nhật Bản là quốc gia thuộc "tốp đầu" trong việc nghiên cứu về vi sinh vật, đặc biệt việc ứng dụng vi sinh trong phân bón. Phân bón cho sản xuất rau ở đây phần nhiều là hữu cơ vi sinh. Bón như thế nào, bao nhiêu đều dựa trên các khảo sát và phân tích dinh dưỡng đất một cách thường xuyên.

Câu hỏi được đặt ra là, trường hợp bất thuận, rau mất mùa, năng suất và sản lượng thấp, cung không đáp ứng cầu thì họ xử lý thế nào? Và trường hợp thời tiết thuận lợi, năng suất sản lượng rau cao, cung vượt cầu (yếu tố kéo giá)?

Chính sách điều tiết liên vùng của Nhật Bản rất tốt và khi vùng nào đó mất mùa do gặp thiên tai, rau, thực phẩm được nhà nước điều tiết và huy động từ các vùng khác, nhập khẩu và từ nguồn dự trữ. Còn trường hợp dư thừa, nhà nước trả tiền cho nông dân để có thể tiêu hủy, cây vùi luôn một phần diện tích rau làm phân bón. Do vậy mà không có tình trạng "dội chợ" như Việt Nam. Họ để đất nghỉ, bỏ hóa và có thể gieo trồng



Sơ chế và bao gói hành

mạch, kê hay cây họ đậu rồi cây vùi cải tạo đất được làm luân phiên, vì vậy đất của họ rất tốt, tơi xốp và rất giàu mùn. (Ở Việt Nam, đất để hoang hóa một vụ là có chuyện rồi; mặc dù lý do là sản xuất không hiệu quả, là ở những vùng xen kẹt, khó khăn cho canh tác...).

## QUỸ ỔN ĐỊNH GIÁ

Để ổn định giá cả thị trường, nhất là với rau, quỹ ổn định giá nông sản được chính phủ thành lập và giao cho một đơn vị điều hành có tên "Agricultural and Livestock corporation" viết tắt là "ALIC" thực hiện.

Quỹ này chịu trách nhiệm ổn định giá không chỉ với rau mà cả

giống như quỹ bình ổn giá song lại chủ động từ trước chứ không bị động, quỹ này tương tự bảo hiểm song họ không lo "vỡ quỹ" như ở Việt Nam. Không thể lợi dụng kê hở, càng không thể mượn cớ để trục lợi từ quỹ này. Quả là một cách làm mà ngay cả bảo hiểm cần học tập.

## PHÂN PHỐI SẢN PHẨM

Khâu bán và phân phối sản phẩm của Nhật Bản khá đa dạng. Hệ thống chợ đầu mối và những phiên đấu giá mang dáng dấp công nghiệp, hiện đại. Chỉ riêng Tokyo đã có tới vài chục chợ đầu mối với quy mô từ 20 đến trên 50ha và hệ thống kho lạnh kho mát hoàn hảo. Hệ thống phân phối khép kín với những quy định chặt chẽ từ sản xuất, thu mua và chế biến như PAL SYSTEM.

Hiện nay nhiều hợp tác xã tổ chức các cửa hàng bán sản phẩm nông sản cho xã viên, xã viên mang sản phẩm tới bày trên kệ hàng đã được hợp đồng, mỗi hộ có mã số, mã vạch riêng để truy nguyên nguồn gốc, và cửa hàng thu tiền, giúp nông dân, giá tùy thuộc chất lượng, mẫu mã để người tiêu dùng có thể chấp nhận, đây là hình thức bán hàng ủy thác hiện đang mở rộng.

Một kiểu bán trực tiếp (Direct Sale) cũng đã xuất hiện và một nhóm người tiêu dùng đặt hàng thẳng cho nông hộ, trang trại để lấy nông sản hàng tuần cho nhóm mình sử dụng. Kiểu này được đánh giá là có độ tin cậy vì quen biết và địa chỉ rõ ràng, giám sát được song lại đỡ công chúng nhận, bao gói.

**TRẦN XUÂN ĐỊNH**



Khu sơ chế bắp cải an toàn

các sản phẩm chăn nuôi. Mục tiêu là ổn định sản xuất cho nông dân, không để xảy ra tình trạng "khủng hoảng" các sản phẩm nông sản. 60% quỹ được nhà nước trung ương lo liệu; 20% do cấp tỉnh chịu trách nhiệm và 20% đóng góp từ doanh nghiệp tham gia và nông dân. Sản xuất của các doanh nghiệp hoặc hợp tác xã tham gia tự nguyện vào quỹ này chịu sự kiểm soát chặt chẽ của ALIC.

Kế hoạch sản xuất, tiêu thụ được xây dựng chi tiết và được kiểm duyệt bởi cơ quan quản lý nhà nước, ngay cả chủng loại rau cũng được chỉ định thì mới đủ tiêu chí tham gia. Thực chất



# Annex 5\_2 Training in Japan (2nd)

## Itinerary for JICA Knowledge Co-Creation Program

Title : Establishment of Safe Vegetable Supply Chain








Period: 2019/2/18 to 2019/2/23 Number of Trainee:

Purpose : To learn system of production and distribution of safe vegetable in Japan

Output : 1) To understand activities by public sector for production and distribution of safe vegetable  
 2) To understand activities by producer for production of safe vegetable  
 3) To understand activities by buyer for distribution of safe vegetable

Date	Time	Type	Theme	Trainer		Location	Hotel
				Name	Organization / Position		
17-Feb	~		Travel in Vietnam	-	-		-
18-Feb	1:45 ~ 7:20		Trip (Hanoi -> Fukuoka)	-	-	Fukuoka Prefecture	JICA Kyusyu
	10:00 ~ 12:30	Lecture	Administrative briefing	Aki CHIBA	Interpreter of the training		
	13:30 ~ 14:30	Lecture	Program orientation	Norie NODA	JICA Kyusyu/ Staff of training department		
	15:30 ~ 17:00	Site Visit	Safety control in the food processing factory of cut vegetable	Katsuyuki KUROSE	JA (Japan Agricultural cooperative), Factory in Miyata/		
19-Feb	7:00 ~ 9:00	Site Visit	Logistics and sales of safety crops in wholesaler market	Tomonori TSUBAKI	Fukuoka Daido Seika Co., Ltd./ Manager	Fukuoka Prefecture	Hotel in Kumamoto Prefecture
	10:00 ~ 12:45	Site Visit	Sales of crops in the retail shop (Aeon Fukuoka)	Hideki MARUYAMA	Nippon Koei Co., Ltd./ The project expert		
	14:00 ~ 16:00	Site Visit	Production of the safety crops	MATSUKAGE	Agripro Co., Ltd./ President		
20-Feb		Lecture	Promotion of safe crop production by local government (To be confirmed)		Local government of Kumamoto prefecture (To be confirmed)	Kumamoto Prefecture	Hotel in Kumamoto Prefecture
		Site Visit	Crop production by company which has GAP certification (To be confirmed)		Crop production company (To be confirmed)		
21-Feb		Site Visit	Development of "Sanchi" (large production area) which are introduced GAP (To be confirmed)		JA (Japan Agriculture Cooperative) in Kumamoto prefecture (To be confirmed)	Kumamoto Prefecture	Hotel in Kumamoto Prefecture
		Site Visit	Activity of local production for local consumption (To be confirmed)		Market which producers can directly sell crops (To be confirmed)		
22-Feb	8:00 ~ 10:00	Site Visit	Cultivation methods and agricultural materials for safe crop production without agrochemical usage	SHIMODA and Tsunehiro ABE	Mitsubishi Chemical Agri Dream Co., Ltd. and New Agri Kumamoto Co., Ltd	Kumamoto Prefecture	JICA Kyusyu
	13:30 ~ 15:00	Other	Preparation of Action Plan		All participants	Fukuoka Prefecture	
	15:00 ~ 16:30	Presentation	Presentation of Action Plan		All participants		
	16:30 ~ 17:00	Other	Evaluation of the training (To be confirmed)		All participants		
	17:00 ~ 17:30	Other	Closing ceremony		All participants		
23-Feb	9:00 ~ 17:00		Trip (Fukuoka -> Hanoi)				

別添 2 研修員リスト

番号	写真	研修生番号	氏名	役職/所属先
1		D1809844	Mr. CAO Duy Hoa	Officer/ Department of Agriculture and Rural Development, Vinh Phuc Provincial People's Committee
		Viet Nam		
2		D1809845	Ms. VU Thanh Quynh	Officer/ Crop Production Division, Department of Agriculture and Rural Development, Hanoi Provincial People's Committee
		Viet Nam		
3		D1809846	Ms. NGUYEN Thi Them	Deputy Head/ Crop Production Division, Sub-Dept. of Crop Production and Plant Protection, Department of Agriculture and Rural Development, Thai Binh Provincial People's Committee
		Viet Nam		
4		D1809847	Mr. TRAN Duc Nhan	Manager/ Sub-Department of Agro-Forestry-Fisheries Quality Assurance, Department of Agriculture and Rural Development, Hung Yen Provincial People's Committee
		Viet Nam		
5		D1809848	Mr. NGUYEN Xuan Nam	Technical staff/ Department of Agriculture and Rural Development, Hai Duong Provincial People's Committee
		Viet Nam		
6		D1809849	Mr. NGUYEN Tien Dinh	Deputy Manager/ Sub-Department of Crop Production and Plant Protection, Department of Agriculture and Rural Development, Ha Nam Provincial People's Committee
		Viet Nam		
7		D1809850	Ms. NGUYEN Thi Thu Huong	Deputy Head/ Legislation Division, Sub-Dept. of Agro-Forestry-Fisheries Quality Assurance, Department of Agriculture and Rural Development, Phu Tho Provincial People's Committee
		Viet Nam		

## 1. Findings from the training course in Japan

- Japan agricultural cooperative model: The Japanese agricultural cooperative model (JA) is characterized by the ability to perform multiple tasks. A local level cooperative can carry out a wide range of socio-economic services. Japanese agricultural cooperative is the focal point for applying science and technology... JA takes an important role in food value chain in Japan.
- The wholesale market in Kumamoto: The design of this market is logically to make sure all transportation fluently, the manager board also have good methods in managing the paying system with seller. I also impress on auction in market , this method can fooster selling agriculture product in market.
- Traceability system: I was impressed on traceability system in Japan; it is easy for the consumer to know how raw materials are cultivated or raised, using chemical fertilizers or antibiotics, harvesting time, management, production lines or quality control. In other words, all data related to the production process are publicly available.
- JGAP : Each prefecture in Japan has individual JGAP version base on the structure of JGAP, they can change to suitable with thier condition in order to encourage many farmers get this certificate . Traceability and integrity, from field to shipment, are mandated for agricultural products. By introducing GAP, farmer can reduce risks to your agricultural products, ensure quality and safety, and improve productivity while continuously moving toward the goal of sustainable agriculture.
- There is a common policy, but applying to each province, it has its own policy foreach province to implement special with policies on GAP, JGAP, ASIAGAP, GLOBAGAP.
- With high-tech vegetable production, farmers registered with local authorities will have support policy, maximum 30%.
- Farmers are protected by government for the value of agricultural production to ensure the profit for farmers.
- Farmers and local authorities discussed together to formulate policies for their own provinces and every year farmers submit to the provincial government one or two time to change policies to suitable for what farmers do.
- The provincial government builds up wholesale markets for traders, farmers, businessman and marketing to trade markets and pay service fees.
- Farmers formed up to the area, the concentrated production and buy machines to serve production to reduce input costs.
- Some processing companies associate with cooperatives and farmers to cover all farmers' good quality products.
- Farmers, buyers are very interested in stamps of traceability of vegetables with their own brand name.
- In particular, farmers, product purchasing area, and markets are interested in food safety and hygiene- farmers never use fertilizers and medicines of unclear origin.
- All collection points of new markets have cold storage to ensure that vegetables are not affected if the buyer has not yet delivery in time.
- The government encourages farmers to grow vegetables according to GAP because currently for GAP certified vegetables with higher selling prices and selling easier than products without GAP certification.

- GAP Training for Farmer from 3-4 times / year to understand, applying on theory and practice.
- Local authorities have a mechanism for trade promotion for farmers, trading inputs and sales in group. 100% of farmers use land and water before putting it into production.
- Way to implement JGAP in Japan (from JGAP, each city, province, district creates their own version of GAP).
- Wholesale market operation (Daido Seika vegetable and fruit company).
- The way to control the food safety in Fukuoka (the sample tests are taken at the market every day).
- Cherry tomato production following JGAP and apply high technology (the most impression is how to put CO<sub>2</sub> into the green house to increase photosynthetic efficiency for tomato, creating maximum yield, 150 ton/ha).
- The model of vegetable and fruit wet market of cooperatives in Japan.
- Model of application of high technology in safe vegetable production by hydroponic method and nursery bed treatment before seedling.
- In Japan, Agricultural production is very developed, there are many scientific and technological advances applied in production to help a lot reduce for the costs, the labor force to Vietnamese farmers.
- The processing and provide of agricultural products to come onto the market based on the needs of consumers to produce products satisfy the needs of consumers.
- Establishment of an agricultural auction market, this is the place where farmers buy and sell about agricultural products to cooperatives and production households.
- Agricultural production mainly uses machines, people only participate in light and meticulous jobs. This helps significantly reduced for labor costs and labour.
- Farmers are aware of compliance with Gap's regulations and always responsible for their products.
- Cooperative organization role is very important in the collection and interest for production households in Cooperative. In Vietnam, this matter is facing many difficulties problems.
- The products all have information about the manufacturer so that consumers can find and contact when they needed.
- The Government has policies to encourage famers to apply GAP in production, pre-processing, packing process. The policy mechanisms are consulted from the provincial level by getting comments from local people, then they are analyzed and summarized and submitted to competence authorities.
- Area/regional Development Promotion Committee are established to help famer to consume products. The Area development promotion committee assigns to company/individual/collective invest in preprocessing and facilities in washing, removing uneatable parts, sorting, packing, preservation, shipping and selling products.
- Establish different selling channels to promote product consumption: normal market, trade center, transaction and auction (big market).
- Farmers are encouraged to apply provincial GAP and JGAP and given high priority in selling products. The farmer can sell their products through Area/regional Development Promotion Committee (90%), a apart to be sell outside (10%).

## 2. Action plan

### Technical technologies or measures, which were learned applied to project activities.

- Consultant the Vietnamese cooperative about how to enhance the role of cooperative, specializes in production, process and consumption in order to be easy to deploy collective production process, check quality, build label of product and sign contracts with retailers about consuming products (vegetable shops, supermarkets, etc.). Making a market investigation before planting to ensure that all products will be met their consumers' need.
- Recommend to built system electronic traceability that providing quick and clear data. Information is required to report at anytime, anywhere: in the distribution system, at the border. Information can be obtained through a barcode scanner, on a tablet, and on a mobile phone. This helps to reduce the regulatory burden on importers in reporting information sources.
- Propagating for farmers to carry out activities on VietGAP through training courses, group meetings, field surveys at concentrated production sites and farmers in the province.
- Looking for distribution channels for farmers, selling through clues of markets, retail stores, selling through traders and intermediaries.
- Propaganda farmers should handle soil and water before planting.
- Encourage the formation of a group to buy input products for production and sales focused to reduce the cost of products.
- Encourage farmers to use fertilizers, medicines of origin and in the permitted list.
- Forming point models associated with new technical from JICA's program to propaganda for farmers to implement in the province by applying methods such as Soil treatment before sowing and using Non-woven coating for planting.
- The way to implement JGAP in Japan (from JGAP, each province, city, district has it own version of GAP).
- The operation of wholesale market (Daido Seika safe vegetable and fruit company).
- Cherry tomato production following JGAP and apply high technology (the most impression is how to put CO<sub>2</sub> into the green hose to increase photosynthetic efficiency for tomato, creating maximum yield, 150 ton/ha).
- The model of vegetable and fruit wet market of cooperative in Japan.
- Need to survey consumer's needs, then give business strategy (for business establishments) or production plan (for producers) suitable to provide agricultural products in accordance with consumers tastes.
- Japanese people are very responsible for their products. strictly follow the GAP regulations in production, so that Vietnamese people to learn. For Vietnam, the government management agency needs to propagate, instruct households to produce about safe vegetable production regulations, VIETGAP helps to raise people's awareness and responsibility for their products.
- Orient, guide cooperatives to market, collection and consumption of products for production households.
- It is possible to use various kinds of agricultural machinery in the production process such as: plows, ridge machine to reduce labor.

- Support: label, packaging, product traceability stamps for producer.
- Apply GAP certificate in production and preprocessing /packing process.
- Soil treatment before vegetable cultivation to eliminate grass, diseases sources in soil.

### **Activities will be implemented in project activities**

- Producing : Set up the traceability application to agriculture product which produce in project model to ensure that consumers can check the procedure from producing through processing until to selling point .
- Marketing: I think it is important to link marketing section and producing section. Design the small logo of project and labelling on this product . This is one of the advertising method for this project to customer. For example : In Hanoi, we use the some characteristic imagine in poster and using in two years for advertising campaign in schools. So , I think we can use this logo to attach to the vegetable bags so maybe when Hanoi citizens go to supermarket and see that logo then they know that these vegetables is safe.
- Propagating farmers to carry out activities on VietGAP through training courses, meetings with farmers, checking field diary.
- Encourage farmers to use fertilizers, medicines of origin and in the permitted list.
- There are plans to support farmers in some places to buy nonwoven coatings.
- Propaganda, encourage, mobilize the target groups to apply high technology in vegetable and fruit in the net house to produce off season vegetables and fruits and the CO2 technology application into the green house to increase photosynthetic efficiency for vegetable and fruit, creating maximum yield.
- Promote communication/ propaganda to widen the vegetable production area following VietGAP, basic GAP in the whole province area.
- Request to leaders to set up wet market where the famers can sell and introduce safe vegetable and fruits.
- Promote the knowledge and the benefit of vegetable followings GAP to the consumers to stimulate the consumption of safe vegetable, thus to encourage farmer to widen the safe vegetable following GAP.
- Apply GAP in preprocessing/packing process.
- Implement dissemination of soil treatment before vegetable cultivation.
- Strengthen propaganda, dissemination and guide for producers to understand the regulations on safe vegetable production of GAP. The propagating the benefits of producing safe agricultural products, thereby helping people to be conscious in the production process, responsible for their products.
- Should usually examination, monitor about vegetable production of farmers. sampling for product testing; Based on the results to given suitable advice to have been safe foods.
- If funds are available, research and prioritize the investment in some machines of agriculture, such as: small plows, ridge machine... This helps reduced for labor costs and labour. Support: label, packaging, product traceability stamps for cooperatives.

End

## Annex 5\_3 Training in Japan (3rd)


### Itinerary for JICA Knowledge Co-Creation Program

Title	Establishment of Safe Vegetable Supply Chain
Period	2019/11/18 to 2019/11/24 (7 days)
Number of Trainee	6
Purpose	To learn system of production and distribution of safe vegetable in Japan
Expected output	1) To learn about the production and distribution system of safe vegetables in Japan 2) To learn about the experience of vegetable production area development in Japan 3) To promote the introduction of advanced technologies and materials of Japanese companies contributing for safe vegetable production and food value chain development in Vietnam

Date	Time		Type	Theme	Trainer
17-Nov	24:20	~	Other	Trip ( Hanoi -> Tokyo (Narita), VN310)	
18-Nov	7:00	~ 10:30	Other	Narita International Airport -> JICA Tsukuba	
	11:00	~ 12:00	Field Visit	Briefing & Explanation of Training in JICA Tsukuba	Mr. Kurokawa, JICA Tsukuba
	15:00	~ 17:00	Field Visit	Activity in Farm Introducing GLOBAL GAP	Ms. Kobayakawa, AEON Agri Create Co, Ltd, Kashiwa Farm
19-Nov	10:00	~ 12:00	Field Visit	Activity of Agricultural Corporate to Produce Safe Vegetable	Mr. Katori, Agricultural Corporate Sawara Agricultural Products Supply Center
	15:00	~ 17:00	Field Visit	Activity of "Sanchi" management, Distribution and Selling of Safe Agricultural Products (Example of Palsystem)	Mr. Muto, GPS Co., Ltd./ Head of Business Division
20-Nov	10:00	~ 12:00	Field Visit	Horticultural Crop Cultivation by Using Advanced Greenhouse	Mr. Uetake, Genki Nojyo, Watanabe Pipe Co., Ltd.
	14:30	~ 16:00	Field Visit	Visit to Farmer Using Greenhouse	Mr. Nemoto, A greenhouse strawberry farmer
21-Nov	10:00	~ 12:00	Lecture	Activity and Current Situation of JGAP (Japan GAP)	Mr. Takeda, Asia GAP Research Institute, Certificated Specified Non-profit Corporation/ Managing director
	15:00	~ 17:00	Field Visit	Case Study of JGAP Introduction	Mr. Tamatsukuri, Unionfarm
22-Nov	12:00	~ 13:00	Other	Greeting with a parliament member	Mr. Suzuki, Member of the House of Representatives
	15:00	~ 16:30	Other	Activity of Vegetables Processing (Cut vegetables) by Agriculture Cooperative	Mr. Shibama, JA Yasato Vegetable Cut Center
	17:30	~ 18:00	Other	Closing Ceremony	All participants
23-Nov	11:00	~ 13:00	Field Visit	Food Service Using Safe Crops certified with GAP	Mr. Tomori, Grand Eat Ginza
	13:00	~ 16:00	Other	Free Activities	
24-Nov	10:00	~ 13:35	Other	Trip ( Tokyo (Narita) -> Hanoi, VN311)	

Source: JICA Project Team

**Participant List**  
**別添 2 研修員リスト**

No	Photo	ID	Name	Position/ Organization
1		D1957352	Mr.DUONG Van Dung	Official Staff, Food Crop Division, Department of Crop Production, Ministry of Agriculture and Rural Development
		Viet Nam		
2		D1957355	Mr.TRAN Nguyen Thap	Director, Sub Department of National Agro-forestry and Fisheries Quality Assurance, Department of Agriculture and Rural Development, Hung Yen Province
		Viet Nam		
3		D1957338	Mr.LE Thai Nghiep	Deputy Head of Crop Production Division, Department of Agriculture and Rural Development, Hai Duong Province
		Viet Nam		
4		D1957340	Mr.LE Van Diep	Deputy Head of Technical Division, Sub Department of National Agro-forestry and Fisheries Quality Assurance, Department of Agriculture and Rural Development, Ha Nam Province
		Viet Nam		
5		D1957342	Mr.NGUYEN Huu Hung	Director, YEN PHU Agriculture Service Cooperative
		Viet Nam		
6		D1957349	Ms.PHAM Thi Huyen Trang	Deputy Director (Marketing/Sales), THANH HA Safe Fruit and Vegetable One-Member Limited Company
		Viet Nam		



## 1. Findings from the training course in Japan

### 1. Mr. Duong Van Dung (MARD)

- Strengthen relationships of producers, consumers through site visit, direct dialogue.
- Strict internal control mechanism
- Consumption of products through a stable membership system, actively develop production plan and regulation in production.
- In the bag of products, there is a comment sheet of the buyer.
- Management of production tools in well organized and scientific manner, accessible to users' information.
- There is an automatic nutrient supply system for plants according to the light intensity.
- Supplementing solutions to enhance photosynthesis capacity of plants, providing nutrition according to each stage of plant development depending on plant growth and development stages, with adjustment of nutrient content and pH accordingly.
- Using the bedding with new materials, modern and appropriate equipment for each stage.

### 2. Mr. Tran Nguyen Thap (DARD, Hung Yen Province)

#### **GAP:**

- GAP system: JGAP, ASEANGAP, GLOBALGAP, ...: are researched and elaborated on the principle of eliminating risks in each stage of work of the production and business chain.
- Training, coaching, applying and managing GAP:
  - + Training and coaching: with spirit of small rains make long-term moister
  - + Application and management: Detailed specification; strict management

#### **Production – Business:**

- Production: Limited pests and diseases:
  - + Mainly use of organic fertilizer ( $\geq 70\%$ )
  - + Rotational cropping pattern: Cultivate different plant groups, species Example: Chrysanthemum,..
  - + Technique on using of vinyl roofed house, net house, mulch, hot water, temperature...
  - + Strict and scientific management of production; reasonable human resources arrangement.
- Business: Develop production plans according to market development needs
  - + Good application of GAP standards
  - + Production associated with the market: from small to large
  - + Building trust and close relationship between producers and consumers: Well organize events such as field visits, harvesting and processing of fresh products on the spot. Promotional months for newly harvested products, formulation of customer feedback sheets.
  - + Developing a system of supplying safe products to consumers
  - + Applying information technology to promote brands and sell goods online
  - + Develop discount programs, promotions for products with large quantities.

### 3. Mr. Le Thai Nghiep (DARD, Hai Duong Province)

#### **Production:**

- There are many safe production methods currently applied in Japan: Organic production, Global GAP, JGAP, GAP of each province, GAP of Agriculture Cooperatives in Japan, system of stipulated suitable agriculture standards of Company, distributors, organizations. These production methods are finally all safe production, which creates trust for consumers. Producers must strictly record dairy of crop type, cultivation method, method of chemical application, method of pre-processing, packaging, etc.
- For hydroponic production: Taking care: Based on light intensity to apply fertilizers
- Farmer households, cooperatives organize seasonal production with suitable climate, regularly rotate

without mono culture, so the crops develop well, less fertilizers and pesticides are applied, production is friendly to the environment.

- Production is based on plan of Companies, distributors, retail sellers: Plan is provided 6 months in advance, farmer households complete production plan and report to buyers 3 months in advance. 10 days before the products are available to supply to distributors, producers should inform distributors so that distributors can develop advertisement plan and sale plan.
- Plant protection drugs are in the list approved for use, are put in the cupboard with principle: liquid drugs are put at the bottom, powder drugs are put on the top. The cupboard is locked when not in use.
- Apply soil treatment measures by nylon covering
- Internal transportation system in the field is convenient for production and harvesting activities.
- Good drainage system, ensuring there is no stagnant water in case of heavy rain.
- Synchronously mechanized from soil preparation, watering, fertilization, transplanting to increase labor productivity, reduce cost, reduce product price.
- The models are effective for Cooperative, companies, or organizations which hire land for centralized production.

#### ***Harvesting activities:***

- Producer households, Cooperatives on behalf of farmers harvest products and sell products through 2 ways: Pack products following Company's requirement or sell raw products to companies, distributors, retail sellers so that they will pack products and directly sell to consumers
- Apply mechanization for harvesting products, sorting products right in the field. After harvesting, products will be pre-processed, stored in the warehouse, then are distributed to distributors and supermarkets by specialized vehicles.

#### ***For distributors, supermarkets and companies:***

- Based on purchase plan, based on forecast and survey of market demand to launch product promotion campaign, place orders with producer groups, use internet to advertise and promote products. They directly distribute products to consumer's hand, therefore, middleman cost is reduced, storage cost is reduced, which is beneficial for both producers and consumers.
- Organize the exchanges between producers and consumers, guide consumers how to grow vegetables, provide training on nutrition and product processing. From that, producers and consumers more understand each other, easy to share thought, create trust for consumers in term of product quality.
- Save information on electric system, labors will fulfill information on their activities on the system by themselves, after that, the information is aggregated and saved at main server.

#### **4. Mr. Le Van Diep (DARD, Ha Nam Province)**

##### ***Production:***

- The soil is supplemented with fertilizer mainly organic fertilizer to increase resistance to crops, organic fertilizer accounts for 60%. The soil is covered with plastic film on summer days to kill pests and diseases. The soil is porous due to good improvement.
- Irrigation water for vegetables is clean water used for eating, tested once a year, with automatic irrigation system. Applying nutrient solution to hydroponic plants is automatically applied depending on the intensity of the light, the principle is: high light intensity adds more nutrients and vice versa.
- Plant protection drugs in the permitted list, must be kept in the cabinet on the principle of liquid medicine put on the bottom, powder medicine on top, locked when not in use. For plants that use netting, spray them on the mulch.
- In-field roads are convenient for production and harvest activities.
- Good drainage system, ensuring that when there is heavy rain, water is not stagnant to affect vegetables.
- Applying mechanization in soil preparation, watering, and fertilizing is 100%. Having mechanized

harvesting equipment to improve labor productivity and reduce costs.

***Harvesting activities:***

- Applying mechanization to harvest products, sorting products right on the field, after harvested, products will be preliminarily processed and put into storage, the temperature of the storage ranges from 8-10 degrees, then transport by specialized vehicles to sale places

***Pre-processing:***

- Satisfied products will be sold to supermarkets or delivered to consumers, and oversized products will be provided to vegetable processing cooperatives for supplying to canteens with cheaper price, products are sliced, sterilized, vacuum packed, stored at 15 degrees and supplied to sales places within 96 hours
- Based on forecasts close to market demand to launch product promotion campaigns and place orders with production groups, using the internet to promote products. Distribute to consumers in specialized vehicles.
- Organizing communication events between producers and consumers, guiding consumers to grow vegetables, training in nutrition and product processing, so that producers and consumers understand each other better and are easy to share, creating consumer trust in product quality
- Store information on the electronic system, employees will fill in information about their activities on the system, then be aggregated and saved at the server.

**5. Mr. Nguyen Huu Hung (Yen Phu Agriculture Service Cooperative)**

- During the application of GAP, has to evaluate and check, remind the labors and Company staff at least 1 time. Especially, for workers and new staff have to be evaluated, checked, and reminded at least 2 times/ year
- Well manage harvesting tools, pre-processing tools and delivering tools. Especially, working labor in each stage.
- For example: Harvesting tools of this stage can't be used for another stage, labors must wear protective cloth, no smoking, not wear jewelry during the working time, etc.
- Do not raise cattle and poultry in the production area, well manage mouse, harmful insects and diseases - It is detected that net house can used for long term by farmer households.
- Apply production rotation to avoid insect, diseases in order to reduce the use of pesticides.
- Pre-processing house must be one-way (can be applied in Cooperative).
- Improve soil in order to make it soft and well drained
- Treat soil and eliminate the insect, disease and wild weed
- Crop rotation
- Develop plan for production and consumption
- Manage harvesting and pre-processing during GAP implementation
- Manage pesticides and protect environment

**6. Ms. Pham Thi Huyen Trang (THANH HA Safe Fruit and Vegetable One-Member Limited Company)**

***After visiting high-tech strawberry production model of farmer households in Ibaraki province, I have learned some cultivation methods as following:***

- First, raise bees to pollinate in green house
- Second, use some tools and facilities helpful for caring and pruning crops in net house in order to reduce labor cost.
- Third, when the weather is not sunny enough and cold, use electric lights to increase temperature for crops, stimulate flowers to bloom.
- Fourth, farmers are hard-working, working age in agriculture is from 22 - 80 years old.
- Fifth, invest machineries in agriculture to improve economic value, reduce working labor, reduce cost of

input in order to increase income for production households.

***Production:***

- Lack of labor in production
- Apply effective high technology
- How to compost to seriously protect soil
- Comply with GAP, JGAP and organic procedures, etc.
- Make production plan
- Self-manage safety production
- Keep and publicize production dairy
- Effectively rotate crops in order to avoid insects, diseases and renovate soil
- Treat soil by sun heat in the sunniest time of the year to kill soil-borne germination.
- Apply many machineries into production - mechanization in each stage from sowing seed, caring, watering, harvesting, etc.
- Produce following production plan ordered by customers

***Linkage for consumption:***

- Farmers can't make price decision
- Buy agro-products through Cooperative
- Comply with linkage rules set fourth by Cooperative and buyers
- Internal audit
- Receive orders sent by customers -> Make production plan -> Internal audit -> Collect products to the warehouse -> Deliver to consumption areas.
- Consider customer's responses to have production plan

***Product:***

- High requirements including not only quality, but also appearance and label
- Ensure the safety because most of products are directly eaten as raw products
- All stages from transplanting, caring to harvesting must ensure strict requirements of safety procedure and avoid physical, chemical and biological risk for products.
- Products are safe and have nice appearance.

***Customers***

- Diversify customers and be potential market for Tokyo, restaurants, industrial kitchens in Japan.
- High requirement for agro-products
- Online orders and ship to customer's houses
- Make production plan when customers provide orders
- Well take care customers to have two-way information and suitably adjust production => Satisfy customer's requirements - Sell products demanded by customers.

## **2. Action plan**

### 1. Mr. Duong Van Dung (MARD)

- Soil treatment with plastic sheet in the summer months, rotational cropping with non-family and antagonistic plants, product supply slips with feedback forms, seek customers to have an active production plan.
- Disseminate knowledge to JICA project participants in a spreading method.
- There is a close cooperation between Japanese and Vietnamese enterprises in technology transfer: seeds, equipment and machines in production, harvest, storage, processing and consumption of products.

### 2. Mr. Tran Nguyen Thap (DARD, Hung Yen Province)

- Increasing investment, training for producers, processors and markets associated with increased inspection.
- Improve, organize the management apparatus for the application of GAP standards in production and business of target groups
- Apply the above experiences to limit pests and diseases
- Need to promote the use of organic fertilizers to reduce chemical fertilizers
- Application of the above-mentioned market experiences to market development on the basis of appropriate planning.
- Always renovate designs, stamps to meet the needs of customers
- Strengthening friendly links between producers and consumers

### 3. Mr. Le Thai Nghiep (DARD, Hai Duong Province)

#### ***Application of technologies and technical measures:***

- Reduce production of off-season products, should produce seasonal products with suitable weather conditions, rotate many kinds of crops
- Guide producers increase the application of organic fertilizers to supplement more nutrition for soil, increase the resistance for crops.
- Guide groups to apply nylon covering in the hot summer days to kill harmful pests and diseases.
- Suggest producer groups to find a formula for adding nutrition for hydroponic plants. The nutrition content depends on the need of plants and light intensity.
- Guide farmer groups to use cupboard for keeping plant protection drugs: drugs are put into tray, the liquid drugs are at the bottom, the powder drugs are on the top.
- Advise the design of internal field road system to ease the production and harvesting of products, re-design the drainage ditch system in the production area to avoid stagnant water in case of heavy rain.
- Encourage producer groups to invest equipment, machines into production, spraying, harvesting, pre-processing, processing products.

#### ***For consumption and business matching:***

- Search, introduce, expand distributors, retail sale organizations of such products as rice, meat, fish, aquatic products and fruits who sell their product via on-line. Ask them to also sell vegetables on-line. Introduce them to visit safe production area, cooperative and organizations. They can place orders of products which have been pre-processed, sorted, labeled based on purchase requirement to directly sell on-line to consumer's hand.
- Support to organize the meeting and exchange between producers and consumers so that consumers can trust producers. Bring consumers and their relevant members to visit the field and experience production so that they can understand about safe production and they can share difficulties with producers.

#### 4. Mr. Le Van Diep (DARD, Ha Nam Province)

- Guide producers to increase organic fertilizer application to supplement nutrients for the soil, increase resistance to crops. Instruct groups to use plastic mulch to cover the soil on hot summer days to kill pests and diseases of vegetables. Suggest for producer groups to find a formula to add nutrients to hydroponic plants with nutrient content depending on the needs of the plant and light intensity.
- Instruct groups to use the pesticide containing cabinet so that the pesticide is put in the tray, the liquid drug is put on the bottom, the powder is on the top.
- Advise Thanh Tan Co-operative to design convenient in-field roads to produce and harvest products, redesign drainage systems so that the production areas will not be inundated during heavy rains.
- Introduce to groups of investment in equipment and machinery in production, spraying, harvesting, pre-processing and processing products.
- Advise vegetable buyers in Ha Nam to approach online sales, ship goods to consumers.
- Supporting the organization of communication/exchanges between producers and consumers so that consumers can share difficulties with producers and have faith with producers.
- Advise to help groups to invest in development of electronic boards for producers to fill in activities, this information will be updated to the server system, which is the product traceability information.

#### 5. Mr. Nguyen Huu Hung (Yen Phu Agriculture Service Cooperative)

##### ***Techniques applied for Project activities:***

- Use, invest glass house, net house in vegetable production
- Drip irrigation system
- Use computer to manage the crop caring procedure
- Increase the absorption for crops (vinegar + calcium)
- Apply mechanization into production

##### ***Action to be done in Project activities:***

- Renovate soil
- Manage the use of pesticides and protect environment
- Manage working tools, harvesting tools, pre-processing tools
- Regularly conduct internal audit following GAP standard
- Create regular relationship with customers

#### 6. Ms. Pham Thi Huyen Trang (THANH HA Safe Fruit and Vegetable One-Member Limited Company)

##### ***Techniques applied for Project activities:***

- Nurse seedlings before transplanting
- Invest some tools serving production such as: Irrigation machine, trolleys, trays, baskets to keep products, etc.
- Use, invest glass house, net house to produce high value crops such as: Net melon, baby tomato, baby cucumber, etc.
- Apply 4.0 technology to advertise and sell products through on-line channel.
- Manage labor source, working equipment and tools, irrigation process and caring process by computer software.

##### ***Methodologies applied for Project activities:***

- Actively attend training courses on safe vegetable production
- Field visit to actual models to take lessons learned
- Make production plan based on seasons and orders

- Find potential market.
- Sell products on-line
- Propagate, promote and encourage elderly labors in Vietnam to join production to increase income
- Establish safety chain: “From farm to dinner table”

***Action to be done in Project activities:***

- Re-arrange management structure: Clearly assign mission for each team and provide them with responsibility - connecting responsibility of each person into Company to develop company increasingly and sustainable.
- Company with VietGAP procedure and LoboGAP
- Regularly provide labor with trainings, so that they are aware of their responsibility so that they will produce safe products.
- Maintain production dairy, make detail production plan.
- Regularly exchange information with customers to receive their feedback and evaluation, create close relationship with customers.
- Update production information and market information, product appearance to satisfy customer’s demand.
- Renovate soil and protect environment

End

Annex 6 List of Equipment

物品名称 (Name of Property)	規格・品番 (Standard, Part Number)	個数 (Quantity)	検査合格日 (Date of Inspection Passed)	配置場所 (Location)	事業終了後の 取扱い (After Completion of Project: Handover/Return)
Projector	Panasonic PT-VW350	1	2016/11/2	Project site	Handover to the Counterpart



**MINUTES OF MEETING  
OF  
THE 1<sup>ST</sup> JOINT COORDINATING COMMITTEE  
ON  
THE PROJECT FOR IMPROVEMENT OF RELIABILITY OF SAFE CROP  
PRODUCTION IN THE NORTHERN REGION**

The Project for Improvement of Reliability of Safe Crop Production in the Northern Region (hereinafter referred to “the Project”) supported by Japan International Cooperation Agency (hereinafter referred to “JICA”) officially started in July, 2016.

The 1<sup>st</sup> meeting of Joint Coordinating Committee (hereinafter referred to “JCC”) was held on April 17, 2017 for the purpose of introducing Background of the Project Formation, Overview and Progress of the Project, reporting summary of the Baseline Survey, Market Survey and Consumer Survey, and seeking for an approval for the Selection of the Target Groups, Revision of the Project Design Matrix (PDM) (ver. 1) and Pilot Project Implementation Plan. The meeting also discussed about preparation of fund for the Project activities.

As a result of the meeting, the Vietnamese side and Japanese side shared common understanding upon the matters in the documents attached hereto.

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Hanoi, April 17, 2017

 	 
<b>Mr. Naoki Kakioka</b> Senior Representative Vietnam Office Japan International Cooperation Agency Japan	<b>Dr. Le Quoc Doanh</b> Vice Minister Ministry of Agriculture and Rural Development The Socialist Republic of Vietnam



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**PHÓ CHỦ TỊCH**  
**Nguyễn Văn Sửu**

**Mr. Nguyen Van Suu**  
Vice Chairman  
Hanoi People's Committee  
The Socialist Republic of Vietnam



**Mr. Nguyen Minh Quang**  
Vice Chairman  
Hung Yen Provincial People's Committee  
The Socialist Republic of Vietnam



**PHÓ CHỦ TỊCH**  
**NGUYỄN ANH CƯỜNG**

**Mr. Nguyen Anh Cuong**  
Vice Chairman  
Hai Duong Provincial People's Committee  
The Socialist Republic of Vietnam

**Mr. Truong Minh Hien**  
Vice Chairman  
Ha Nam Provincial People's Committee  
The Socialist Republic of Vietnam



**Mr. Pham Van Xuyen**  
Vice Chairman  
Thai Binh Provincial People's Committee  
The Socialist Republic of Vietnam



**Mr. Vu Chi Giang**  
Vice Chairman  
Vinh Phuc Provincial People's Committee  
The Socialist Republic of Vietnam



**Mr. Nguyen Thanh Hai**  
Vice Chairman  
Phu Tho Provincial People's Committee  
The Socialist Republic of Vietnam



**PHÓ CHỦ TỊCH**  
**Vũ Chí Giang**



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## I. GENERAL INFORMATION

- **Time:** from 13:30 to 16:55, Monday, April 17<sup>th</sup>, 2017.
- **Venue:** Conference hall 102, B6 Building, Ministry of Agriculture and Rural Development
- **Chairperson:** Mr. Vu Van Minh, Deputy Director General of International Cooperation Department, Ministry of Agriculture and Rural Development (MARD)
- **Meeting Agenda:** Attached in **Annex I**
- **List of Participants:** Attached in **Annex II**

## II. OPENING

1. Mr. Tran Xuan Dinh, Deputy Director General of Department of Crop Production (DCP), MARD, introduced participants and meeting agenda. He also gave an explanation about the situation while Record of Discussion of the Project has been signed and implementation of the Project has started already, all administrative procedures in Vietnam have been delaying after the replacement of Decree No. 38 by Decree No. 16 on Management and utilization of Official Development Assistance (ODA) and Concessional Loan of Donors and the Project has been facing a difficulty to arrange fund. He also stressed that MARD pay a lot of attention to the safe crop.
2. Mr. Vu Van Minh, Deputy Director General of International Cooperation Department, MARD, delivered opening remarks and shared current situation of the agriculture in Vietnam. He also emphasized that Vietnamese government has been paying attention to food safety issue and strengthening capacity and awareness of safe crop production of farmers. He hoped JCC meeting could be an opportunity for all stakeholders to agree on implementation plan to achieve project target.
3. Mr. Naoki Kakioka, Senior Representative of JICA Vietnam Office, delivered speech on behalf of JICA. He appreciated MARD to support the Project, value chain development and JICA generally. He gave an explanation about the background of the Project formation and mentioned common understanding that food safety and safe crop production are important issues in Vietnam. He stressed that motivation of Vietnamese side and budget and staff allocation are essential for the success of the Project. He highly suggested provinces to consider how to implement the Project, and requested all counterpart authorities to utilize available budget source to implement project successfully.
4. Mr. Tran Xuan Dinh, Deputy Director General of DCP, MARD presented brief summary of the previous project as a background of the Project formation.
5. Mr. Teruyoshi Kumashiro, Chief Advisor, gave a presentation on the overview, progress and upcoming plan of the Project. He also introduced a basic approach of the Project.
6. Mr. Mitsuru Nanakubo, Team Leader of Short Experts, reported summary of Baseline Survey.
7. Ms. Chiyo Mamiya, Co- Team Leader of Short Experts, reported summary of Market Survey and Consumer Survey.
8. Mr. Mitsuru Nanakubo made a presentation on the Selection of the Target Groups
9. Mr. Teruyoshi Kumashiro presented the Revision of the PDM
10. Mr. Mitsuru Nanakubo gave a presentation on the Pilot Project Implementation Plan.

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11. The chairperson sought for comments for each agenda, then approval from JCC members.
12. Mr. Phung Huu Hao, Deputy Director General of National Agro-Forestry, Fisheries Quality Assurance Department (NAFIQAD) gave some comments for the effective project implementation.
13. Mr. Vu Van Minh delivered closing remarks.

### **III. MAIN CONTENTS**

#### **1. Background of the Project formation**

Mr. Tran Xuan Dinh reported a summary of the previous project “Strengthening the Capacities for the Field of Management of Vietnam’s Crop Production Sector for Improving the Productivity and Quality of Crop’s Products in Vietnam” as a background of the Project formation.

Key recommendations from the previous project were 1) Building strategy in promoting safe crop production for small scale farmers in order to enable them to apply GAP, 2) Raising awareness of all stakeholders, 3) Building a trust in the safety of the products and 4) Creating a linkage to organize production following supply chain.

#### **2. Overview and progress of the Project**

Mr. Teruyoshi Kumashiro introduced overview, project implementation structure, and reported progress and upcoming plan of the Project with a flow of project implementation. He also presented four basic approaches for the three components of the Project, 1) production, 2) supply chain, 3) communication, and 4) cross cutting issues.

#### **3. Summary report of Baseline Survey**

Mr. Mitsuru Nanakubo reported objectives and main findings of Baseline Survey. Implications for pilot project from the Survey results were also presented.

#### **4. Market Survey and Consumer Survey**

Ms. Chiyo Mamiya reported objectives and main findings of Market Survey and Consumer Survey respectively. Implications for pilot project and communication activities derived from the Survey results were also presented.

#### **5. Selection of the Target Groups**

Mr. Mitsuru Nanakubo made a presentation on the selection of Target Groups. In the presentation, selection criteria for target groups agreed in the Record of Discussion of the Project, selection process and assessment results of the candidate target groups were stated clearly.

#### **6. Revision of the PDM (Annex III)**

Revision of the PDM was presented by Mr. Teruyoshi Kumashiro. Main points of the Narrative Summary revision and background basis for setting Objectively Verifiable Indicators were reported.

#### **7. Pilot Project Implementation Plan (Annex IV)**

Mr. Mitsuru Nanakubo gave a presentation on the Pilot Project Implementation Plan. In the presentation, objective of pilot project implementation, pilot project implementation flow chart, activities of pilot project, implementation structure with roles and responsibilities of relevant stakeholders and implementation schedule were announced.

#### IV. DISCUSSIONS

##### 1. Selection of Target Groups

- Representatives from Hanoi Department of Agriculture and Rural Development (DARD), Hai Duong DARD, Ha Nam DARD and Hung Yen DARD agreed on the target groups which were selected through the close cooperation between DARD and JICA project team.
- Selection of Target Groups was approved by the JCC members.

##### 2. Revision of PDM

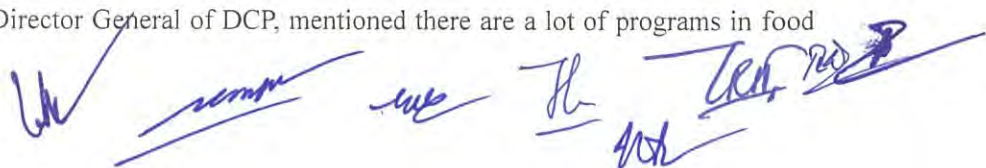
- Ms. Vu Thi Ha, Deputy Director of Hai Duong DARD, raised question relating to the Output 2 of the Project that while project activities mainly focus on Basic GAP, what is the positioning of Viet GAP and Global GAP which some target groups already applied and got certificates for. She also requested to include information regarding GAP and even organic vegetable production in the TOT (Training of Trainers) and TOF (Training of Farmers) of the project.
- Mr. Teruyoshi Kumashiro, Chief Advisor, commented although technical dissemination activities mainly focus on Basic GAP, the scope of the Project does not limit to Basic GAP only, but considers other GAPs inclusively as well.
- After discussion, JCC members approved Revision of the PDM.

##### 3. Implementation Plan of Pilot Activities

- Ms. Vu Thi Ha, Deputy Director of Hai Duong DARD, and Mr. Nguyen Van Phu, Deputy Director of Hung Yen DARD, raised concern about the needs for certificate in order to build trust with consumers and disseminate Basic GAP in a wide scope.
- Mr. Tran Xuan Dinh, Deputy Director General of DCP, commented application of Basic GAP is on a voluntary basis and the Project rather focuses on the marketing activities to encourage farmers to apply Basic GAP.
- Mr. Teruyoshi Kumashiro, Chief Advisor, mentioned issuing certificate is not the only way, the Project will take another approach to build trust.
- After discussion, Implementation Plan of Pilot Activities was approved by the JCC members.

##### 4. Preparation of Fund for the Project Activities

- Ms. Vu Thi Ha, Deputy Director of Hai Duong DARD, raised concern about the proper method to prepare the fund for the Project activities. In addition, regarding PPMU budget of pilot activities prepared by project team for pilot provinces (17 out of 28 activities), she mentioned that it is not so suitable because PPMU budget covers around 50% of total cost while budget allocation from Vietnamese side is maximum 10% of the aid budget according to financial management rule.
- Ms. Nguyen Thi Vang, Deputy Director of Ha Nam DARD introduced the situation of promoting safe crop production in Ha Nam. She also shared the case of Ha Nam in which PPMU secured some fund applying advance payment for initial project activities and requested Central Project Management Unit (CPMU) to accelerate the procedure of project approval for counterpart budget preparation by provinces.
- Mr. Tran Xuan Dinh, Deputy Director General of DCP, mentioned there are a lot of programs in food



safety issues in Vietnam and suggested DARD to integrate the Project activities with other activities to mobilise available fund without detailed estimation by CPMU.

- Regarding PPMU budget of pilot activities prepared by project team, Mr. Teruyoshi Kumashiro, Chief Advisor, answered that it covers only the direct cost of pilot activities, while the total aid budget includes costs such as experts, equipment/other operating costs and training in Japan in addition to the direct cost of pilot activities. Additionally he mentioned 10% budget allocation rule from Vietnamese side is applied for total project cost, not for the cost of each province and that it is also very difficult to estimate the above mentioned inclusive aid budget for each province.
- After discussion, MARD and DARD of Pilot and Semi-Pilot city and provinces confirmed to secure the fund for carrying out the project activities before as well as after approval of the project by the government of Vietnam.

#### **5. Other Comments**

Mr. Phung Huu Hao, Deputy Director General of NAFIQAD addressed following comments.

- Concerning the marketing, trust from consumers is essential for the stable market and the Project should consider branding of products and establishment of traceability.
- There is an inter-department close relationship at the central government, and NAFIQAD and Department of Plant Protection will assist the Project.
- Provincial DARD should mobilize Sub-department of NAFIQAD in the implementation of the Project activities.

#### **V. CONCLUSION AND CLOSING REMARKS**

Mr. Vu Van Minh made closing remarks:

- All JCC members approved Selection of Target Groups, Revision of PDM and Implementation Plan of Pilot Activities.
- All JCC members agreed on the preparation of fund for the Project activities.
- MARD highly values the Project addressing necessary issues, enhancing awareness of farmers and increasing trust of consumers.
- ICD requests DCP to summarize and submit report to MARD for continuous implementation of the Project and preparation of fund for the Project activities.
- On behalf of ICD and MARD, Mr. Minh appreciates JICA to implement projects for many years and hope the Project will be successful and achieve its objective.

The meeting ended at 16:55.

[End]

#### **ANNEXES**

Annex I: Meeting Agenda

Annex II: List of participants

Annex III: Project Design Matrix (PDM) (Version 1)

Annex IV: Pilot Project Implementation Plan



**Annex I: Agenda for Joint Coordinating Committee Meeting**  
**Project for “Improvement of Reliability of Safe Crop Production in the Northern Region”**

Date: April, 17, 2017

Time: 13:30 – 16:45

Venue: Conference Hall 102, B6 building, Ministry of Agriculture and Rural Development, 2 Ngoc Ha, Hanoi

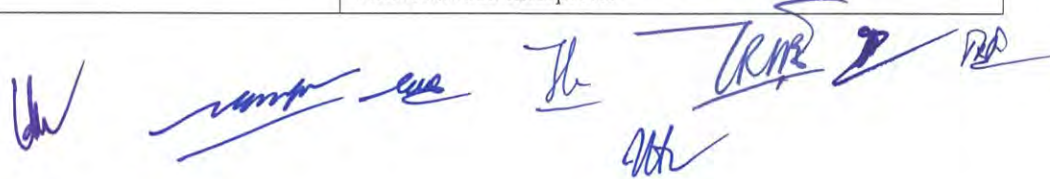
Time	Contents	Presenter
13:00 – 13:30	Registration	Organization board
13:30 – 13:40	Introduction of participants	Department of Crop Production
13:40 – 13:50	Opening remarks	Mr. Vu Van Minh, Deputy Director General of International Cooperation Department (ICD), Ministry of Agriculture and Rural Development (MARD)
	Welcome address	Mr. Naoki Kakioka Senior Representative JICA Vietnam Office
13:50 – 14:00	Background of the Project Formation	Mr. Tran Xuan Dinh Deputy Director General of Department of Crop Production
14:00 – 14:10	Overview and Progress of the Project	Mr. Teruyoshi Kumashiro Chief Advisor
14:10 – 14:30	Result of the Baseline Survey	Mr. Mitsuru Nanakubo Team Leader of Short Experts
	Results of the Market Survey and Consumer Survey	Ms. Chiyo Mamiya Co-Team Leader of Short Experts
14:30 – 14:40	Selection of the Target Groups	Mr. Mitsuru Nanakubo
14:40 – 14:50	Revision of the PDM	Mr. Teruyoshi Kumashiro
14:50 – 15:00	Tea break	
15:00 – 15:30	Pilot Project Implementation Plan	Mr. Mitsuru Nanakubo
15:30 – 16:30	Discussion and Approval - Selection of the Target Groups - Revision of the PDM - Pilot Project Implementation Plan - Preparation of Counterpart Fund	All Participants
16:30 – 16:45	Closing remarks	Mr. Vu Van Minh, Deputy Director General of ICD

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## Annex II: List of Participants

No.	Name	Title	Organization
<b>Ministry of Agriculture and Rural Development</b>			
1	Mr. Vu Van Minh	Deputy Director General	International Cooperation Department (ICD)
2	Mr. Phung Huu Hao	Deputy Director General	National Agro-Forestry, Fisheries Quality Assurance Department (NAFIQAD)
3	Ms. Do Thi Ngoc Huyen	Staff	NAFIQAD
4	Mr. Bui Xuan Phong	Staff	Department of Plant Protection
5	Ms. Hoang Thi Hong Van	Deputy Head of Division	Cooperative and Farm Division, Department of Cooperative and Rural Development
6	Mr. Tran The Cong	Staff	ICD
<b>Ministry of Industry and Trade</b>			
7	Mr. Duong Xuan Dieu	Staff	Department of Science and Technology
<b>Central Project Management Unit</b>			
8	Mr. Tran Xuan Dinh	Deputy Director General	Department of Crop Production (DCP)
9	Mr. Nguyen Van Dan	Staff	Food Crop Division, DCP
10	Mr. Tran The Tuong	Deputy Head of Division	Quality Management and Environment Division, DCP
<b>Pilot and Semi-Pilot City/Provinces</b>			
11	Mr. Nguyen Xuan Dai	Deputy Director	DARD, Hanoi City
12	Ms. Nguyen Thi Thoa	Head of Division	Crop Production Division, Department of Agriculture and Rural Development (DARD), Hanoi
13	Ms. Vu Thi Ha	Deputy Director	DARD, Hai Duong Province
14	Mr. Nguyen Van Phu	Deputy Director	DARD, Hung Yen Province
15	Mr. Tran Nguyen Thap	Head of Sub-Department	Sub-Department of NAFIQAD, DARD, Hung Yen Province
16	Ms. Nguyen Thi Vang	Deputy Director	DARD, Ha Nam Province
17	Ms. Tran Thi Nga	Deputy Head of Sub-Department	Sub-Department of Crop Production and Plant Protection, DARD, Ha Nam Province
18	Mr. Le Van Dung	Deputy Director	DARD, Vinh Phuc Province
19	Ms. Thieu Thi Thu Hang	Deputy Head of Sub-Department	Sub-Department of Crop Production and Plant Protection, DARD, Vinh Phuc Province
20	Mr. Tran Tu Anh	Deputy Director	DARD, Phu Tho Province
21	Ms. Nhu Thi Ngoc Anh	Head of Sub-Department	Sub-Department of NAFIQAD, DARD, Phu Tho Province
22	Ms. Nguyen Thi Hien	Deputy Head of Sub-Department	Sub-Department of Crop Production and Plant Protection, DARD, Thai Binh Province

No.	Name	Title	Organization
<b>JICA</b>			
23	Mr. Naoki Kakioka	Senior Representative	JICA Vietnam Office
24	Mr. Satoshi Yamamoto	Lead Advisor for Agri-Business	JICA Vietnam Office
25	Ms. Nguyen Thi Thu Hang	Staff	JICA Vietnam Office
26	Mr. Yasuo Watanabe	Adviser	JICA Expert
27	Mr. Teruyoshi Kumashiro	Chief Adviser	JICA Project Office
28	Ms. Wakana Nishiyama	Project Coordinator	JICA Project Office
29	Ms. Nguyen Thi Hang	Project Advisor	JICA Project Office
30	Ms. Hoang Thi Phuong Linh	Staff	JICA Project Office
31	Mr. Mitsuru Nanakubo	Team Leader	JICA Project Consultant Team
32	Ms. Chiyo Mamiya	Co-Team Leader	JICA Project Consultant Team
33	Mr. Takuto Hashimoto	Project Coordinator	JICA Project Consultant Team
34	Ms. Vuong Thuc Tran	Staff	JICA Project Consultant Team
35	Mr. Nguyen Van Doang	Senior Cultivation Expert	JICA Project Consultant Team
36	Mr. Nguyen Viet Cuong	Marketing expert	JICA Project Consultant Team
37	Mrs. Tran Thi Mui	Staff	JICA Project Consultant Team
38	Ms. Le Thi Tuyet Lan		Simultaneous Interpreter



### Annex III: Project Design Matrix (PDM)(Version 1)

Title of the Project: Project for Improvement of Reliability of Safe Crop Production in the Northern Region (“IRSaC” Project)  
 Term of Cooperation: 5 years from dispatch of first long term expert

Project Site: The Northern Region of Vietnam: “2 Cities and 11 Provinces” (Hanoi City, Hai Phong City, Hung Yen Province, Hai Duong Province, Ha Nam Province, Thai Binh Province, Phu Tho Province, Vinh Phuc Province, Quang Ninh Province, Hoa Binh Province, Bac Ninh Province, Bac Giang Province, Nam Dinh Province and Ninh Binh Province).

Implementing Organization: DCP/IMARD, DARDs (in the Project site)

April 17, 2017/PDM-ver.1

Overall Goal	Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>Agricultural products in the Northern Region of Viet Nam are improved in term of safety and reliability.”</p> <p>*Improvement of products in term of safety and reliability, thereby, it enables to promote cultivation of safe crops paid much more attention and achieve the promotion of related industries.</p>	<p>1) Areas and productions of reliable safe crop production in the Northern Region of Viet Nam is increased.</p> <p>2) Numbers of farmer groups, agriculture cooperatives and enterprises who acquired Basic GAP/ VietGAP/ GlobalGAP in the Northern Region of Viet Nam is increased.</p> <p>3) Numbers of buyers/shops of safe crops in the Northern Region of Viet Nam is increased.</p>	<p>* MARD/DARD reports (focus on Basic GAP/ VietGAP/ GlobalGAP)</p>	<p>1. The current agricultural legal policy on safe crop production and food safety does not change.</p>	
<p><b>Project Purpose</b></p> <p>Safe crop productions (safety vegetable) in target sites in the Northern Region of Viet Nam are promoted.”</p> <p>*Promotion of safe crop production, then, channel of the value chain is promoted.</p>	<p>1) At least three kinds of supply chain models for safe crops are developed in the target sites.</p> <p>2) Percentage of farmers who join joint sales of safe crop is increased to 50% in the target sites.</p> <p>3) The area for reliable safe crop production in the target sites is increased to 180ha.</p>	<p>1) Safe crop supply chain development manual</p> <p>2) Baseline/Endline survey</p> <p>3) Baseline/Endline survey</p>	<p>1. Necessary budget for safe crop production activities is ensured at central/ provincial level.</p>	
<p><b>Outputs</b></p> <p>1) “The capacity of monitoring and management on safe crop production for relevant organization (DCP/IMARD, DARD in respective province/city, district, and commune) is improved.”</p>	<p><u>For Producers</u></p> <p>1-1) The number of target groups applying and utilizing Basic GAP/ VietGAP is increased to at least 16.</p> <p>1-2) 320 number of producers in target sites attend Basic GAP trainings.</p> <p>1-3) 80% of producers in target sites record on field diary properly according to Basic GAP.</p> <p>1-4) 100% of target groups in target sites conduct internal audit to evaluate group members’ activity.</p>	<p>1-1) PPMU monitoring report</p> <p>1-2) PPMU monitoring reports</p> <p>1-3) Baseline/Endline survey</p> <p>1-4) PPMU monitoring reports</p>	<p>1. No severe natural disasters or economic crisis occur that have serious impact on food production and prices.</p> <p>2. The price and condition of agricultural product are not drastically fluctuated.</p> <p>3. The violation of contract and bankruptcy of buyers is</p>	

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Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>2) "The good patterns as model on safe crop production (safety vegetable) following GAP (Basic GAP/VietGAP/Global GAP) with supply chain is proposed."</p> <p>3) "Awareness of relevant organization/people, mainly producer and buyers (consumer and traders; such as wholesalers and retailers) on safe crop production and food safety is raised."</p>	<p>For Government staff            1-5) 48 number of field officers are trained as trainer of Basic GAP.            1-6) 35 samples of soil and water analysis are conducted.            1-7) 60 samples of pesticide residue inspection are conducted.            1-8) 70 times of internal audits are attended by field officers.            1-9) Monitoring report is prepared by PPMU every 3 months.            1-10) Evaluation report is prepared by CPMU before every JCC meeting.            1-11) Action plan is prepared by PPMU and CPMU.</p> <p>2-1) 20 number of matching events are conducted            2-2) 40 number of linkages between producers and buyers are made in target sites.            2-3) The stakeholder coordination meetings for each target group which include producers, buyers and members of DARD are held at least twice a year.            2-4) Monitoring report is prepared by PPMU every 3 months.            2-5) Evaluation report is prepared by CPMU before every JCC meeting.            2-6) Action plans is prepared by PPMU and CPMU.</p> <p>3-1) The awareness program for consumers, producers and buyers are conducted 15 times by CPMU and PPMU.            3-2) 5 promotional materials for awareness activities are developed.            3-3) The number of participants in the awareness activities exceeds 500.</p>	<p>1-5) PPMU monitoring reports            1-6) PPMU monitoring reports            1-7) PPMU monitoring reports            1-8) PPMU monitoring reports            1-9) PPMU monitoring reports            1-10) CPMU evaluation reports            1-11) Action plans</p> <p>2-1) PPMU monitoring reports            2-2) PPMU monitoring reports            2-3) PPMU monitoring reports</p> <p>2-4) PPMU monitoring reports            2-5) CPMU evaluation reports            2-6) Action plans</p> <p>3-1) CPMU and PPMU monitoring report            3-2) CPMU and PPMU monitoring report            3-3) CPMU and PPMU monitoring report</p>	<p>not frequently.</p>

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Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p><b>Activities</b></p> <p>1.1 To create unit of CPMU (Central Project Management Unit) within DCP/MARD in order to manage and implement of the Project effectively in central level</p> <p>1.2 To create PPMU (Provincial Project Management Unit) within the respective province selected as "Pilot province(s)/city" and "Semi Pilot province(s)" in order to manage and implement of the Project effectively in local level</p> <p>* The PPMU is consisted with relevant sub-department(s) in DARD as well as collaboration with other departments/centers which is necessary to implement the Project effectively.</p> <p>1.3 To review/analyze and identify bottlenecks in the existing situation and problems for safe crop production in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.4 To select the target groups (=Agriculture production entities; Agriculture Cooperative, Agriculture Production company/enterprises, and Farmer Groups) in the Pilot province(s) and Semi Pilot province(s)</p> <p>1.5 To collect relevant documents, materials and data on safe crop production including GAP, training materials, brochures</p> <p>1.6 To design crop production systems in order to ensure quality and safety</p> <p>* "Crop production system" includes the activities, such as format of record keeping, method of record confirmation, scientific pesticide residue testing, PGS (participatory Guarantee System, and introduction of ICT (Information and Communication Technology), etc.</p> <p>1.7 Based on the systems designed in the Activity 1.6 above, to introduce the system as pilot activities in the pilot province(s) by joint collaboration between CPMU and PPMU</p> <p>1.8 Based on the Activities 1.7 above, to modify and improve the systems in order to make the system workable</p> <p>1.9 Against PPMU in the respective "Semi Pilot province(s)", to conduct workshop/seminars regarding to the system constructed in the Activity 1.8 above by CPMU</p> <p>1.10 To introduce the system above even in the "Semi Pilot province(s)" under the guidance and instruction by CPMU</p> <p>1.11 In the Pilot province(s) and Semi Pilot province(s), to evaluate the results of pilot activities carried out, and then to formulate action plans (including activities and budget) which enable MARD/DARD to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 1, the "Knowledge-sharing province(s)/city" are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p> <p>2.1 To conduct survey on "Market (value chain) analysis" (such as "Market Trends &amp; Competitiveness", "Value Chain Mapping/Diagram", "Constraints &amp; Opportunities", "Stakeholders/ Actors' relationship" and "Governance Structures &amp; Public-private relations")</p> <p>2.2 In conjunction with the Activity 1.4, and also based on the results of Market analysis survey above, to identify the potential buyers of the agricultural products produced by target groups (product processing entities, distribution entities and sales entities) in the Pilot province(s) and Semi Pilot province(s) or large consumption areas (Hanoi, etc.)</p> <p>2.3 Together to provide the results of the Market analysis survey to the producers in the respective province, to conduct sales promotion activities on safe crops (in particular, vegetables follow GAP), making contract and planning collection and delivery activities based on the requests by processing and sales entity</p>	<p><b>Inputs</b></p> <p>&lt;Project Staff&gt;</p> <ul style="list-style-type: none"> <li>- Counterpart and administrative staffs</li> </ul> <p>&lt;Facilities/Buildings&gt;</p> <ul style="list-style-type: none"> <li>- Suitable office space with necessary equipment/ facilities for Japanese experts</li> </ul> <p>&lt;Expenses for operation and management&gt;</p> <ul style="list-style-type: none"> <li>- Counterpart Fund necessary for the implementation of the Project</li> </ul> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>&lt;Dispatch of Japanese Experts&gt;</li> <li>Long-term Experts:</li> <li>- Project Chief Advisor</li> <li>- Project Coordinator/ Training/ Public Relations</li> </ul> <p>Short-term experts: As required</p> <p>&lt;Equipment/Machinery/Vehicle&gt;</p> <ul style="list-style-type: none"> <li>- As necessary equipment</li> <li>- Other items are to be discussed</li> </ul> <p>&lt;Training in Japan/ Third countries&gt;</p> <ul style="list-style-type: none"> <li>- Training of Vietnamese staffs in Japan/third countries as required</li> </ul>	<p>1. The majority of the Project counterparts in charge of safe crop production in central and pilot province(s) do not change.</p> <p>2. The cooperation from government organization and people committee in relevant province(s) and city and the counterpart budget is secured.</p> <p><b>Pre-conditions</b></p> <p>1. The cooperation from buyers (collector, trader, wholesaler, retailer, etc.) of safe crop production is secured.</p>	

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Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>* Promotion activities on safe crop production" is called as Matching activities like market/price information sharing and supports of business opportunities between producers and buyers</p> <p>2.4 To examine the pilot activities of collection, pre processing and delivery in Pilot provinces.</p> <p>2.5 To introduce the pilot activities of collection, pre processing and delivery above even in the "Semi Pilot province(s)" under the guidance and instruction by CPMU</p> <p>2.6 In the Pilot province(s) and Semi Pilot province(s), to evaluate the results of pilot activities carried out, and then to formulate action plans (including activities and budget) which enable MARD/DARD to continue the Project activities even after the termination of the Project</p> <p>* For the above-mentioned Activity 2, the "Knowledge-sharing province(s)/city" are also participating as appropriate, to share information about the progress and results of activities in the Pilot province(s) and Semi Pilot province(s), even to share the experience each other.</p>			
<p>3.1 To review and analyze past experiences of promotion activities on safe crop production and food safety, and draw good practices and lessons learned.</p> <p>3.2 To implement raising awareness activities on safe crop production and food safety, focusing on traceability and trust building toward customers (buyers/consumers) through various tools</p> <p>* Awareness activities = such as awareness raising campaign event, utilization of social media</p> <p>3.3 To implement specific raising awareness activities on safe crop production and food safety toward the target groups and organization related to the Activity 1 and Activity 2</p> <p>3.4 To grasp the consumers' voice/opinion and support communication activities of Vietnamese government</p>			

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**Ministry of Agriculture and Rural Development  
Socialist Republic of Viet Nam**

**Project for Improvement of  
Reliability of Safe Crop Production  
in the Northern Region**

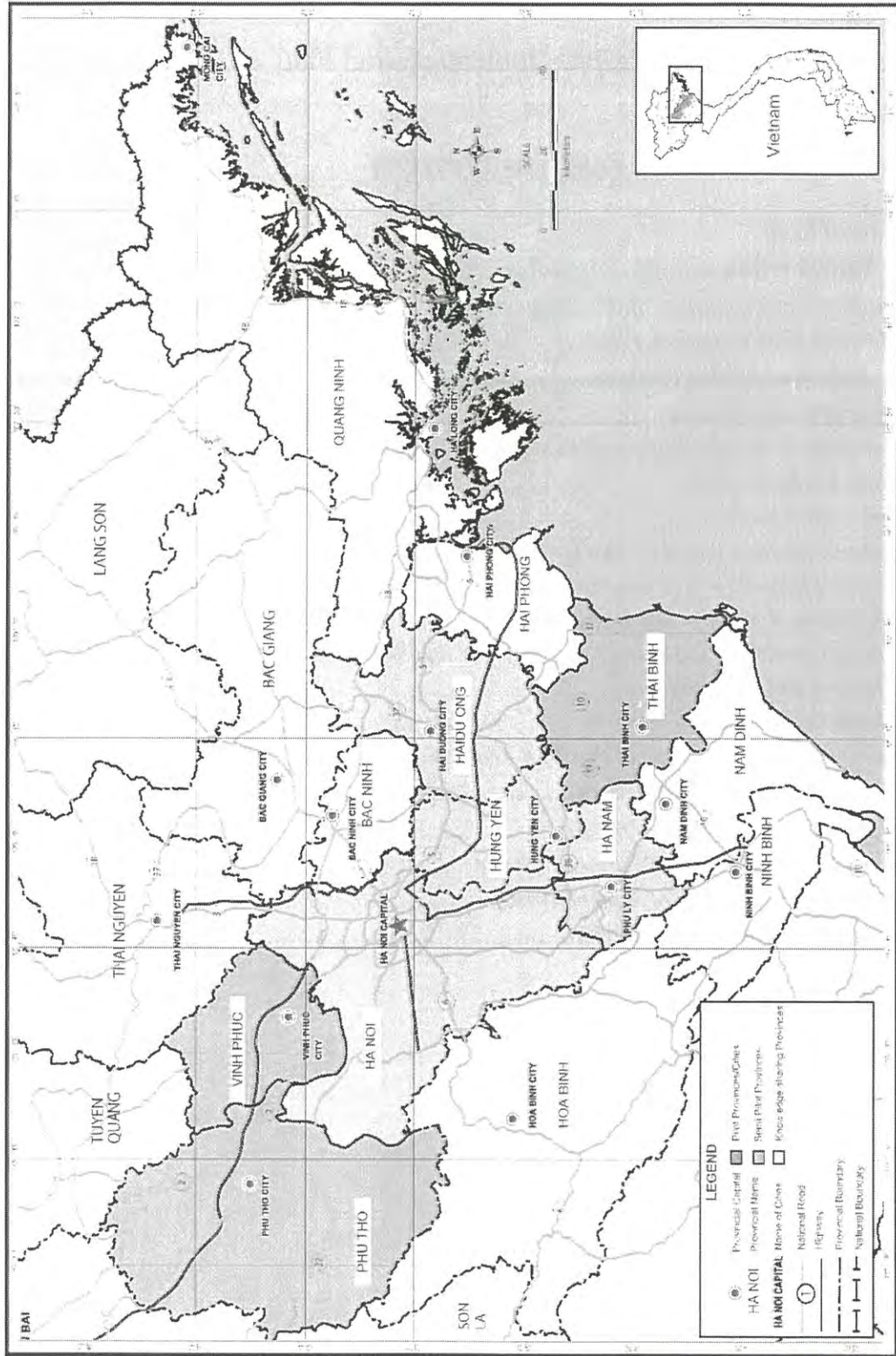
**Pilot Project Implementation Plan**

**April 2017**

**Japan International Cooperation Agency (JICA)**

**Nippon Koei Co., Ltd.  
Kaihatsu Management Consulting, Inc.**





**Location Map of the Target Area**  
**Project for improvement of reliability of safe crop production in the northern region in Vietnam**

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Socialist Republic of Viet Nam  
Project for Improvement of Reliability of Safe Crop Production  
in the Northern Region

Pilot Project Implementation Plan

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## CHAPTER 1 INTRODUCTION

### 1.1 Objective of implementation of pilot Projects

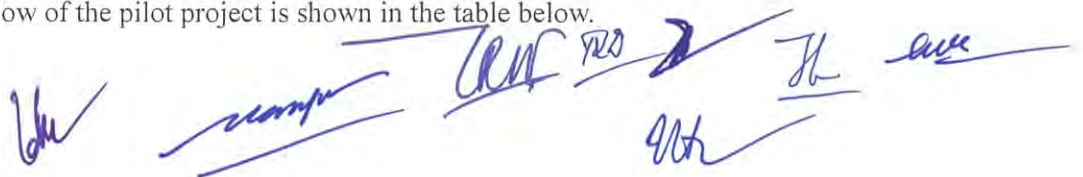
The objective of implementation of pilot projects is to ensure the good responsiveness and application of basic GAP, cultivation techniques and supply chain development in the context of Northern Vietnam. Application of the basic GAP with introduction of cultivation techniques is expected as an effective way to reduce the microbiological and chemical contamination of vegetables requiring government regulations and to supply consumers with safe and quality products according to market requirement. Each pilot project will cover not only production but also whole value chain from producers to consumers.

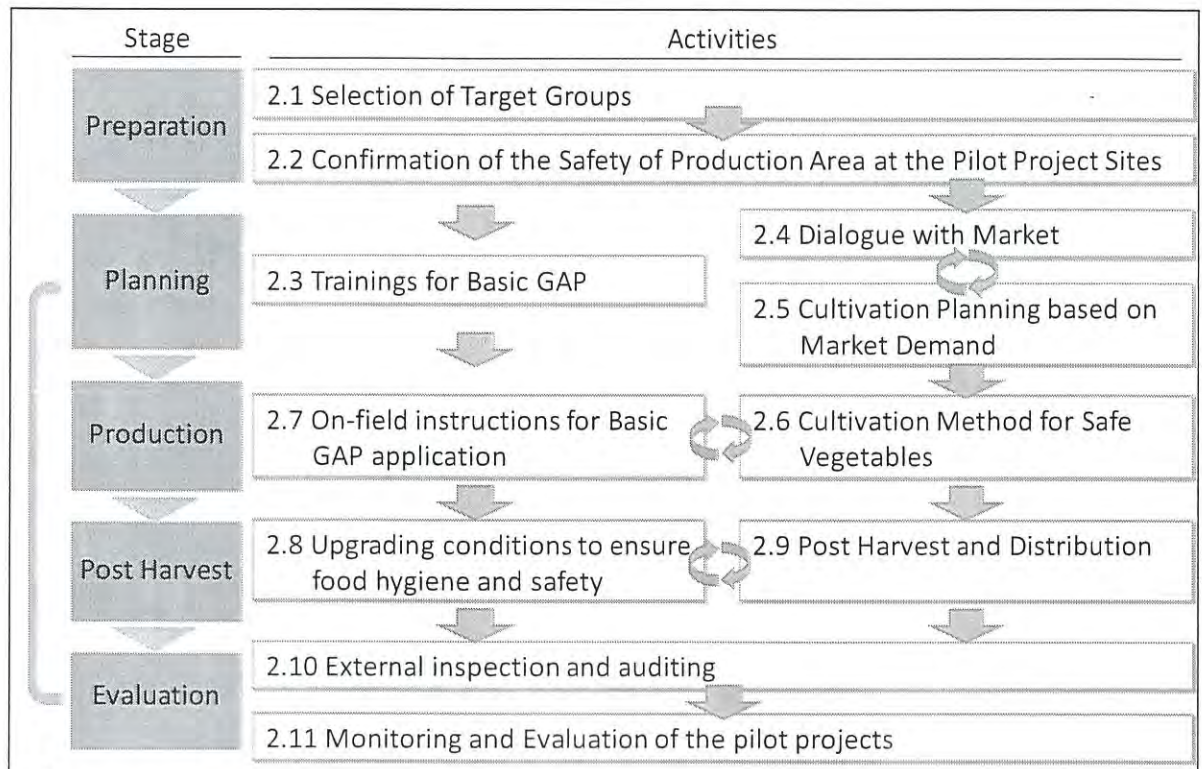
To exercise safe crop production and distribution in accordance with Good Agricultural Practices (basic GAP/ VietGAP), small-scale pilot projects in pilot provinces will be implemented with selected target producers' groups. The detailed objectives are as below:

- Introduce, monitor and evaluate application and efficiency of basic GAP and/or VietGAP for respect of procedures;
- Support improved agricultural practices and technology for safe fresh vegetable products;
- Enable supply chains for safe vegetables (basic GAP, certified VietGAP) by implementing and monitoring Good harvesting and post harvest handling practices;
- Evaluate and monitor the quality and safety of targeted products in different steps of production and distribution channels;
- Implement the quality control system by end products sampling based on National and international standards;
- Capacity building of individuals, group and relevant government organizations to acquire different skills in development, experimentation, follow-up and support of GAPs; and
- Assure economic return to producers.

### 1.2 Pilot Project Implementation Flow

The implementation flow of the pilot project is shown in the table below.





Source: JICA Project team

**Figure 1.1 Flow Chart of Pilot Project Implementation**

The pilot project will be implemented stage-wise approach according to the cultivation season, starting from preparation, planning, production, post harvesting and to evaluation. One activity closely links with others, then the evaluation of a season will be reflected to the planning of next season. Chapter 2 explains the detail of the pilot project activities.

## CHAPTER 2 ACTIVIES OF PILOT PROJECT

### 2.1 Selection of Target Groups

Target groups in this pilot project shall be identified according to the following steps;

#### (1) Confirmation of Selection Criteria for target groups

The selection criteria of target groups are described as the Record of Discussions agreed upon between MARD and JICA on 29th February, 2016.

Especially, JICA Project team emphasizes that the target groups should hold strong willingness and eagerness considering as a model with sustainability.

#### (2) Nomination of candidate target groups

PPMU nominates the target groups as candidates for pilot project. (3) Implementation of baseline survey to the candidate target groups

In order to assess the actual conditions of candidate target groups, baseline survey is implemented for the candidate target groups. Baseline survey consists of two types of interviews; group interview for candidate target groups and individual interview with the farmers of each group. For effective and efficient data collection, both interviews should be conducted with questionnaire formats. Sample sizes for group interview and individual interview are as below.

- 1) Group interview : 1 interview for each group (with 2–5 respective farmers)
- 2) Individual interview : 20 individuals for each group

#### (4) Confirmation of target groups

Based on the results of baseline survey, candidate target groups are assessed according to the selection criteria. PPMU and CPMU together with JICA Project team discuss and confirm the selection of target groups of each province.

Current safe vegetable production condition of selected target groups is summarized with the following items.

- Total safe vegetable production land area
- Number of farmers participating in pilot project/ in dividing into village, Hamlet
- Situation of linkage between farmers and cooperative for production and distribution.
- Group Organization structure

### 2.2 Confirmation of the safety of production area at the pilot project sites

In the below cases, JICA Project team shall consider to carry out the soil and water tests to confirm the safety of the pilot project sites:

- The certificate of safe production area has been already expired or to be expired during the project period.
- The production area is not certified yet as the safe production area.
- The production area is extended as the new pilot project site.

- The potential risks of unsafety of production area due to changing of irrigation water sources and pollution of soil are evaluated.
- An inspection report by DARD and/or any relevant institution shows a heavy metal residue from the sample products produced in the pilot project site.

Soil and water tests shall be exercised according to the following procedures.

- PPMU appoints a collector of soil and water samples. It is recommended the collector shall be nominated from the authorized unit.
- The inspector shall collect samples and sends them to a qualified laboratory for testing of heavy metals (As, Cu, Pb, Cd, Zn) on soil and heavy metals (Hg, As, Cd, Pb,) and E. coli on irrigation water.
- The inspector shall prepare a sampling equipment correctly and follow the procedure according to the guidance from MARD to ensure a sampling error is minimized.
- DARD shall issue the certificate when the safety of the sampling area is confirmed.
- CPMU is responsible for checking and monitoring of the above procedures.

## 2.3 Trainings for Basic GAP

### 2.3.1 TOT Training

TOT training on basic GAP shall be organized and conducted by JICA Project team with assistance of CPMU. The expected participants are the technical staff of PPMU members (eg. Provincial and District extension officers) and the technical inspectors of the target groups.

#### (1) Objective

- To provide PPMU technical staffs and pilot project managers necessary knowledge of Basic GAP, skills, tools and expertise in order for them to be capable of planning and delivering of TOF training.

#### (2) Target participants

The expected participants are the technical staff of PPMU members (e.g. Provincial and District extension officers) and the group leader and technical inspectors (internal auditor) of the target groups. Expected number of participants is 20 persons/class in each province.

#### (3) Training schedules

Trainings are expected to be conducted in April - May 2017 tentatively. One training course consists of 2days program, including lecture of Basic GAP knowledge as well as field visit.

In addition, a follow-up course will be held in June 2018.

#### (4) Trainers

- Vietnamese GAP, technical experts with assistance of JICA Project Team

### 2.3.2 TOF Training



TOF training on basic GAP shall be organized and conducted by PPMU members participated in TOT training as the trainers with assistance of JICA Project team. PPMU will apply basic GAP as the technical procedures for the project and will utilize the “basic GAP manual” developed by the previous JICA project.

(1) Objective

- To enable participants to be aware of necessity of corrective action to keep safety and reliability of vegetable production according to the basic GAP.
- To enable participants to understand and implement the procedures of production and post-harvesting according to the requirement of basic GAP in order to produce vegetables with satisfaction of hygienic and safe requirements.

(2) Target participants

The expected participants are the group leader, technical inspector(s) and farmers participating in production, harvest and handling of vegetables. Expected number of participants are 20 – 25 persons/class.

(3) Training schedules

Trainings are expected to be conducted in April - May 2017 tentatively. One training course consists of 2 half-day program.

In addition, a follow-up course will be held in June 2018.

(4) Trainers

- PPMU technical staffs participated in TOT training as the trainer with assistance of JICA Project Team

TOF training modules will be designed by JICA Project team and CPMU. The contents are including; maintenance of checklist indicated in basic GAP manual, internal audit procedures, quality assurance, nomination of quality control staff, etc. This course will include discussion among participants for better implementation of Basic GAP.

### 2.3.3 Post Harvest Training

Training on good post harvest handling practice/ hygiene condition on packaging and transportation for farmers, workers who work at vegetable packing place, selling points. The training contents focus on some crucial steps of post harvest such as water used for washing vegetables and hygiene assurance of working conditions in packing house.

(1) Objective

- To enable participants (the persons involved in post harvest handling activities) to understand and implement post harvest handling properly to ensure food safety.

(2) Target participants

The expected participants are the owner of handling house and the workers who are directly involved in vegetable handling. Expected number of participants are 20 – 25 persons/class

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## (3) Training schedules:

Training is expected to be conducted in September 2017 tentatively. One training course is a half-day in each province.

In addition, a follow-up course will be held in September 2018.

## (4) Trainers

- Technical experts with assistance of JICA Project Team

The contents of the training will be designed by JICA Project team with support of CPMU and other outsourced institutions.

## 2.4 Dialogue with Market

**2.4.1 Developing marketing tools**

In order to make the target producer groups prepare for marketing their products, JICA project team will assist in preparing the profiles of producer groups and those of potential buyers. By developing profiles for themselves and buyers, the producer groups will understand themselves better and will be able to develop a strategy to market their products. The producer profiles will be used to present the overview and strengths of their groups, key information for marketing to the potential buyers.

Table 2.4.1 Information contained in the producer profile

Category	Information contained
General information	Name of unit, address, leader of unit, contact information, website, established year, number of board members, number of member farmers, form of management
Production	Total vegetable cultivation land, safe vegetable cultivation land, estimated annual vegetable production, applied protocol, kinds of vegetable produced, production schedule of major vegetables, status of vegetable production and consumption
Collection and consumption of the products	The conditions of collection, preprocessing, packaging and delivery. Major market and buyers
Quality monitoring	The method of quality monitoring
Future vision of the unit	Future plan on marketing

The profile will be updated by the producer groups in the TOF training on marketing action plan development described in (3) and will be used to discuss with buyers in the producer-buyer dialogue described in (4). The profile is expected to be continuously updated by the producer groups afterwards.

In addition, the profiles of potential buyers are developed based on the outcomes of the market survey. PPMU with the help of JICA project team will contact potential buyers identified through the market survey to confirm their interest and collect more detailed information which will be incorporated in the profiles.

The profiles are presented to the target producer groups to narrow down the target buyers. The information contained in the profile is shown below.

Table 2.4.2 Information contained in the buyer's profile

Category	Information contained
----------	-----------------------



General information	Name of unit, type of business, company logo, address, contact information, website.
Organization	Established year, number of employees (of which number of employees who deal with vegetable business), number of selling point
Vegetable demand	Vegetable to purchase in each season, three vegetables buying most in each season, three vegetables difficult to find in each season, required standard such as VietGAP, volume of vegetable purchase, frequency of purchase, delivery point
Orientation of linkage in the collection and distribution	Policy of unit to deal with suppliers, requirements for collection and distribution such as packaging

**2.4.2 Training of trainer (TOT) on marketing**

TOT training on marketing will be conducted in order for the officials of DARD in the Pilot and Semi-Pilot Provinces and core farmers of the producer groups in the Pilot Provinces to acquire capacity of conducting trainings to satisfy the following objectives :

- The producer groups will understand the market needs, and formulate the plan to find the buyers in accordance with the strengths and capacity of the group and develop the capacity to negotiate with buyers.
- The producer groups will understand the system required for cultivation and delivery of the vegetables which satisfy the buyer's needs in a collective way.

The expected participants are listed below.

Table 2.4.3 Participants for TOT training

Province	Organization	Number of participants	Selection criteria
Pilot provinces	DARD	6 (2/province)	<ul style="list-style-type: none"> <li>- One participant is from the section in charge of marketing and he/she is in a position to conduct training of marketing to other officials in DARD, districts and communes.</li> <li>- One participant is from extension center and he/she has high possibility to support target producer groups in the pilot projects</li> </ul>
	Producer group	12 (2/group)	<ul style="list-style-type: none"> <li>- Two producer groups which have high possibility of being selected as target groups for the pilot project should be selected.</li> <li>- Two board members of the producer groups should be selected. One is in charge of overall management of the cooperative and the other is in charge of collection and delivery for collective sales.</li> </ul>
Others		12 (2/province)	<ul style="list-style-type: none"> <li>- Three participants from each DARD (Hanoi, Thai Binh, Vinh Phuc and Phu Tho) who are in a position to conduct training of marketing to other officials in DARD, districts and communes, and core farmers in the City/Provinces.</li> </ul>
Total		30	

Source: JICA Project Team

The contents of TOT program is shown below. The training requires one and half days. The first part focuses on market conditions of vegetable in general and safe vegetables in particular. The second part will focus on developing internal control system of the target group which is required for collective sales.

Table 2.4.4 Contents of TOT program

Day		Program
First	AM	Mobilization

Day		Program
day		Visit supermarkets in Hanoi
	PM	Opening remark Market potential of safe vegetable Present conditions of vegetable distribution system (Hanoi, Pilot provinces, export market) Relation between producers and buyers
Second day	AM	Cooperative management and production system development for collective sales Overview and key elements of contract farming
	PM	Establishment of internal control system required for collective sales Case study by guest speakers

Source: JICA Project Team

After completing TOT training, two types of training of farmers (TOF) are expected to be carried out by the participants of TOT. One is TOF for developing marketing strategy before producer and buyer dialogue and the other is TOF for developing internal control system for collective sales after producer and buyer dialogue. The details of these trainings are explained (3) and 2.10 separately.

### 2.4.3 Develop marketing action plan for each target group

In order to make target group farmers ready for marketing activities, TOF training on marketing strategy development will be held. PPMU will organize and implement the training with the help of JICA project team.

Table 2.4.5 Outlines of TOF on marketing action plan development

Date	One day in March 2017
Place	Each pilot province (Hai Duong, Ha Nam, Hung Yen). PPMU will organize the venue.
Trainer	DARD officials who participate in TOT marketing program and JICA experts
Participants	Key producers in target producer groups who have responsibility with marketing and collective sales including those who participate in TOT marketing training. Around 5 people from each group
Program	9:00-9:10 Opening remarks 9:10-10:00 Current market conditions for safe vegetables and result of market survey 10:00-10:10 Break 10:10-11:30 Group work 1: SWOT analysis and update of producer's profile 11:30-13:00 Lunch 13:00-13:30 Contract and negotiation skills 13:30-14:30 Group work 2: Identify target buyers and formulate action plans 14:30-14:50 Presentation of outcomes by each group 14:50-15:00 Summary of activities

Source: JICA Project Team

Producer profiles and buyer's profiles developed by the Project team will be utilized in the training. The former will be updated based on the SWOT analysis made by each target group. The latter will be distributed in the second group work and each group will identify target buyers utilized the profiles. Expected outputs are SWOT analysis sheet and action plan sheet.

### 2.4.4 Matching with buyers

There are two types of matching in the pilot. The one is a matching between a specific producer and buyers. The other one is a matching event where multiple producers and buyers meet. PPMU is

expected to arrange both occasions. The former one is arranged upon request from either the producer group or the buyer who is interested in the target group. The latter is organized at least one in season by inviting all producer groups and potential buyers

1) Matching for the specific producer group

When PPMU receives a request for matching, PPMU will arrange a meeting between the producer group and the buyer. PPMU facilitate discussion and support the producer group to fairly negotiate with the buyer. PPMU makes the matching record after completing the session.

PPMU cannot prevent the producer groups from contacting potential buyers directly. PPMU should encourage them to do so and provide necessary support. PPMU will collect information of buyers the producer group has contacted and status of negotiation. PPMU is expected to report these conditions the quarterly monitoring report.

2) Matching events

Each PPMU with the support from JICA project team will arrange matching events at least once in a season. For the buyers from Hanoi, PPMU in Hanoi will arrange a matching event in Hanoi for the target producer groups in pilot provinces. The outlines of event is shown below.

Table 2.4.6 Outlines of matching event

Date	One day in April 2017
Place	Hanoi
Organizer	Hanoi DARD and Hanoi Trade Promotion Center
Participants	DARD in pilot provinces, representatives of producer groups
Program	- Introduction of provinces - Matching sessions

Source: JICA Project Team

After completing the event, PPMU will develop a matching event report which shall be submitted with the quarterly monitoring report to CPMU. PPMU will follow-up the results of matching.

**2.4.5 Assisting in making contract**

PPMU with the help of JICA project team will assist in making contracts between producers and buyers. The Project will propose standard terms for contract. PPMU will be an observer for making contracts to ensure that the contract is not against the interest of producer group and the conditions are feasible. PPMU makes the agreement record after completing the session.

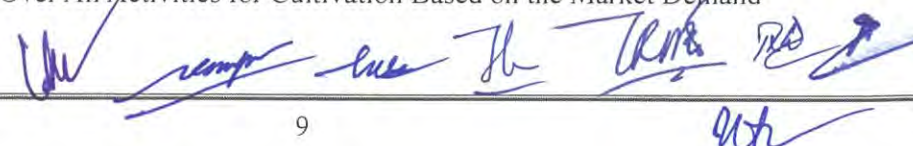
After making the contract, the producer group will develop cultivation plan explained in Section 2.5. Based on the developed cultivation plan, PPMU will assist the producer group in making agreement with members for volume, price and payment.

2.5 Cultivation Planning based on Market Demand

Overall activities on market demand based cultivation through planning, production and evaluation is described in the table below.

Table 2.5.1 Over All Activities for Cultivation Based on the Market Demand

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Step	Time line	Activities
Planning	2.5.1 Formation of safety crop group	- To formurate safety crop groups - To confirm existing production and crops - To confirm objective of the group through market prospection
	2.5.2 Selection of Crops	- To analyze existing production (yield, quality, crop type, harvesting period)
	2.5.3 Selection of market	- To prepare candidate market lists - To analyze each candidate market and prioritize the market
	2.5.4 Preparation of production and shipping planning	- Production: Variety, cultivation period, quantity, quality - Procesing: Washing, selection, packing (size, material: box, bag, etc.), Pre-cooling - Shipping: Chilled, standard, Freezing, quake-proof, shading, shelf track, etc.
	2.5.5 Preparation of cultivation calendar	- To prepare best cultivation plan through soil check, composting, fertilizer, prevention of desease and insect, irrigation, seed sowing, seedling production, agri-facilities and materials - To prepare overall crop rotation - To control disease and insect through listing the damages and countermeasures by chemical, material and facility - To introduce agri-machines / tools for seed sowing, plowing, mulching, inter tilling, etc
	2.5.6 Purchase of materiales	- To caluculate demand from farmers for each materiales - To take price quotation - To purchase and distribute
Production	2.6.1 Instalation of pilot farm	- To select person in charge of cultivation - To instal pilot farm for each target group
	2.6.2 Production of safety crops	- To prepare farmland including composting, fertilizer - To produce safety crops with improving cultivation method (seed sowing, seedling production, transplanting, disease and insect control, irrigation and drainage, etc) - To utilize agri-materials (tunnel, mulching, etc.)
Evaluation	2.6.3 Evaluation	- To evaluate result of this season - To prepare cultivation plan in next season

Source: JICA Project Team

JICA project team together with CPMU and PPMU shall apply necessary activities according to the condition of each target group and target crops.

### 2.5.1 Formation of safe vegetable production group

The target group shall setup a safe vegetable production group with assistance of JICA project team and PPMU. Number of participant farmer for the safe vegetable production shall be maximum around 20 households, to realize effective group management. If more households want to participate, more than two safe vegetable production groups shall be prepared. Selected farmers shall sign on the regulations of the group. Selection criteria is prepared by CUPM and JICA project tem as follows:

Table 2.5.2 Selection Criteria for Target Farmer

Item	Criteria
Vegetable production	- Involved in safe vegetable production
Knowledge and techniques	- Hold accumulated knowledge/ techniques on Basic GAP and/or any other safe crop production
Record keeping	- Capable of writing - Confident to maintain records regularly according to GAP



### 2.5.3 Selection of Market

As mentioned in 2.4, the safe vegetable production group shall select the target market by negotiation with buyers on the candidate market list.

### 2.5.4 Preparation of production and shipping planning

The safe vegetable production group shall prepare "Production Plan" with assistance of JICA project team. The purpose of production planning is to estimate production volume, processing and shipment time of individual farmer level and group level. According to this information, person in charge of the group for sale shall coordinate with buyer and transporter to realize joint sell with assistance of JICA project team.

### 2.5.5 Preparation of cultivation calendar

JICA Project team and PPMU will prepare cultivation calendar with assistance of external institutions, such as Fruit and Vegetable Research Institute. The purpose of the cultivation calendar is to cultivate vegetable based on the demand of market such as Volume, Quality, Shipment time and Variety. The cultivation calendar shall include selected appropriate cultivation methods for each vegetable.

The cultivation calendar shall include two types of techniques: 1) Technique directly affect to safety. This technique shall be explained to all groups. 2) Technique indirectly affect to safety. This technique shall be explained according to necessarily of target groups/vegetables.

Table 2.5.3 List of Cultivation Techniques

Affect to safety	Technique
Directly affect: shall be explained to all groups	- Agri-chemical use: Name, amount, concentration, frequency, last application before harvesting - Fertilizer use: Name, amount, frequency, moment
Indirectly affect: shall be explained according to necessarily	- Farm selection: Rotation, condition of location - Soil preparation: Compost, tillage, ridge - Cultivation density: Sowing, transplanting, thinning - Growing management: Irrigation, pile soil, attract of stem, thinning of fruit, use of cultivation materials - Harvesting: Moment, condition, selection

Source: JICA Project Team

### 2.5.6 Purchase of materials

The safe vegetable production group shall select one farmer as a person in charge to purchase materials. The person shall calculate amount of production materials by using format "Amount of Materials to Purchase" with assistance of JICA project team. According to this information, the person shall take quotation about material cost and transportation cost.

In the first season, only one target group shall conduct joint purchase for one material as trial activity. From 2nd season, several target groups shall conduct joint purchase for several materials which target farmers apply high volume.

2.6 Cultivation Method for Safe Vegetables

2.6.1 Installation of pilot farm

Each target group shall select one person in charge of cultivation, and the person shall install one pilot farm to demonstrate cultivation method for target farmers. The basic size of the pilot farm shall be 360m<sup>2</sup> (1 sao) and the size will be confirmed through the discussion with target group and PPMU. The owner of the field shall cultivate target vegetable by following technical assistance from JICA project team.

On training in the pilot farm, all target farmers shall visit the farm to practice cultivation method, and shall replicate the same cultivation method on their own farm.

Target group shall coordinate with target farmers to concentrate production farms near by the pilot farm, to simplify production management such as control of agrichemical drift, evaluation of growth condition and shipping.

All target farmer shall not receive any payment from project for farm and labour, however, shall receive one part of cultivation material to minimize risk to change cultivation method.

2.6.2 Production of safety crops

The contents of on farm training will be followed cultivation method described in cultivation calendar. List of cultivation techniques are described in 2.5, JICA project team shall select key techniques for each target group for on farm training. Expected key techniques to improve actual problems are described in the table below.

Table 2.6.1 Actual Problems and Expected Key Techniques

Actual Problem	Key techniques	Expected Key Techniques
Yield of vegetable is low due to condition of farmland is not appropriate for vegetable production	- Improvement of farmland condition	- Application of composting to improve physical condition of soil - Application of appropriate amount of fertilizer to adjust containing of nutrients - Improvement of plowing and ridging to improve drainage - Economic evaluation (cost and benefit analysis)
Quality of vegetable is low due to damage of insect and disease	- Improvement of insect and disease control	- Application of appropriate agrichemical to control insect - Improvement of seed sowing, seedling production, transplanting to reduce disease - Economic evaluation (cost and benefit analysis) - Application of mitigation measures of insect and disease damage, such as keeping water in field for 7-10 days after harvest.
Quality of vegetable is low due to lack of usage of materials	- Installation of agri-materials	- Usage of mulching, tunnel and/or greenhouse to equalize growth, to enhance growth, to control insect, to reduce disease - Economic evaluation (cost and benefit analysis) - Control of usage of fertilizer and pesticide approved by the Government - Encouraging farmers to use bio-insecticide

Source: JICA Project Team

If unexpected disease, insect or other problems appear, JICA project team shall find solution with

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coordination with another institutions such as Fruit and Vegetable Research Institute and target group.

The person in charge of cultivation shall supervise cultivation of other target farmers with assistance of JICA project team.

### 2.6.3 Evaluation

At the end of the season, target group shall organize meeting with target farms to evaluate results of production and to discuss solution. JICA project team shall assist the group to prepare production plan for next season according to the results of the meeting.

At the end of the season, JICA project team shall share results of activities, lessons and learns to DARD and relevant organizations.

## 2.7 On-field instructions applying Basic GAP

### 2.7.1 Establishment of Internal Quality Management System

JICA Project team and PPMU assist in establishment of Internal Quality Management System applying Basic GAP.

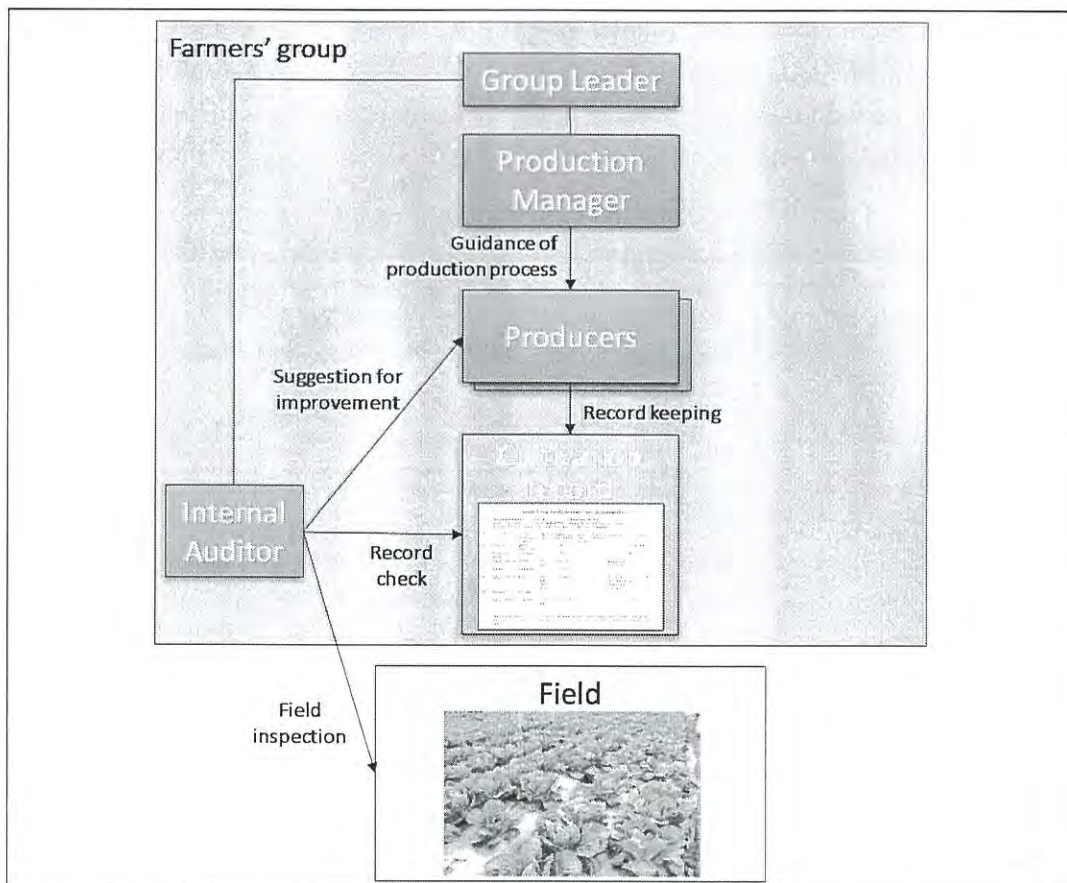


Figure 2.7.1 Internal Quality Management System

Internal Quality Management System is the internal structure to secure the safety of agriculture products in accordance with Basic GAP.



(1) Members of Internal Quality Management System

Internal Quality Management System will be maintained by the following three members, who will be appointed with guidance of PPMU and JICA Project team.

- 1) Group leader/ Head of Internal quality management
- 2) Production Manager(s)
- 3) Internal Auditor(s)

(2) Roles and Responsibility of each member

- 1) Group leader/ Head of Internal quality management
  - To be responsible generally for production and trading of products and internal auditing
  - To organize, operate and maintain and develop the quality management system following Basic GAP
  - To assign staff to record information based on the logbook forms which are applied for cooperative management
  - To represent the cooperative to sign contracts with buyers and basic agreement with the cooperative members
  - To represent the cooperative receiving supports on materials, finance, technologies from outside organizations and individuals
  - To lead and supervise production manager, internal auditor to implement tasks assigned.
  - To issue the decision of penalty to member who violates and/or does not comply with quality control in accordance with Basic GAP.
  - To solve complaint, denouncement that may occur during production, collection and delivery of products.
- 2) Production Manager(s)
  - To be supervised and directed directly by Group leader
  - To organize and provide technical assistances to farmers.
  - To organize group meeting with members when required.
  - To directly supervise, remind members to comply with Basic GAP requirements.
  - To recommend technical improvements in cultivation and quality system suitable with Basic GAP requirements.
  - To monitor and instruct farmers/ members to correct non-conformity points as required in production activities.
  - To participate in internal audit.
- 3) Internal Auditor(s)
  - To be supervised and directed by Group leader.
  - To develop audit plan and report to Group leader.
  - To supervise all activities in the group throughout purchase of agricultural inputs, cultivation, harvesting, collection and delivery in accordance with Basic GAP.
  - To supervise the corrective actions taken by farmers/ members.
  - To audit the appropriateness of Basic GAP throughout the above process with check list.

- To prepare an audit report and report the result to the Group leader and production manager.
- To make recommendations for improvement.

### **2.7.2 On field instruction for farmers applying basic GAP**

The internal auditor(s) together with production manager(s) shall instruct farmers how to maintain records and how to practice farming with application of basic GAP focusing on some crucial steps on cultivation, harvest and post harvest based on the checklist (26 items). Cultivation method for safe vegetables described in Section 2.6 will be utilized in order to meet the requirement of basic GAP.

The production manager(s) will assist farmers for self-check and evaluation of their own practices and guide on the implementation of correction actions.

PPMU's technical inspector(s) visit each target group once a week to check the record keeping and field practice in accordance with Basic GAP, and provide technical advice to internal auditor and production manager in case of any detection or error on practice.

### **2.7.3 Internal monitoring of farmers' activities**

Internal monitoring meeting should be regularly executed once a month in cultivation season with participation of production manager, internal auditor, PPMU technical inspector and farmers to share experiences and give guidance to farmers application of basic GAP.

### **2.7.4 Internal audit**

Internal audit shall be conducted 2 times/ year using basic GAP checklist (26 items). The internal audit checklist with methods for audit and evaluation will be prepared by JICA project team.

## **2.8 Upgrading Conditions to Ensure Food Hygiene and Safety**

With consideration of market requirement, JICA Project team and PPMU conduct a technical assessment to upgrade the conditions to ensure food hygiene and safety in production area, pre-processing place and outlets. JICA Project team and PPMU will develop an upgrading plan and draft a list of necessary equipment and materials with budget estimate. JICA Project team provides financial support to the target groups for installation of equipment and facilities.

JICA Project team and PPMU supervise the installation and operation in line with the upgrading plan. PPMU shall evaluate the usage of the installed facilities and the improvement of the condition compared with the previous conditions in terms of food hygiene and safety.

## **2.9 Post Harvest and Distribution**

### **2.9.1 Planning of collection and delivery system**

Each target group will formulate a plan for collection and delivery system which satisfy the requirements of buyers. In order to enable the target groups formulate a plan, the second TOF training will be conducted. PPMU will organize and implement the training with the help of JICA project team. The outlines of TOF is shown below.

Table 2.9.1 Outlines of TOF on collection and delivery activity planning

Date	One day in June 2017
Place	Each pilot province (Hai Duong, Ha Nam, Hung Yen). PPMU will organize the venue.
Trainer	DARD officials who participate in TOT marketing program and JICA experts
Participants	Key producers in target producer groups who have responsibility with marketing and collective sales including those who participate in TOT marketing training. Around 5 people from each group. Buyers are invited for discussion.
Program	9:00-9:10 Opening remarks 9:10-10:00 Establish internal control system for joint sales 10:00-10:10 Break 10:10-11:30 Group work: Analyzing current conditions and planning collection and delivery system 11:30-13:00 Lunch 13:00-14:00 Presentation and discussion for improvement 14:00-14:30 Revising action plans 14:30-15:00 Summary of activities

Source: JICA Project Team

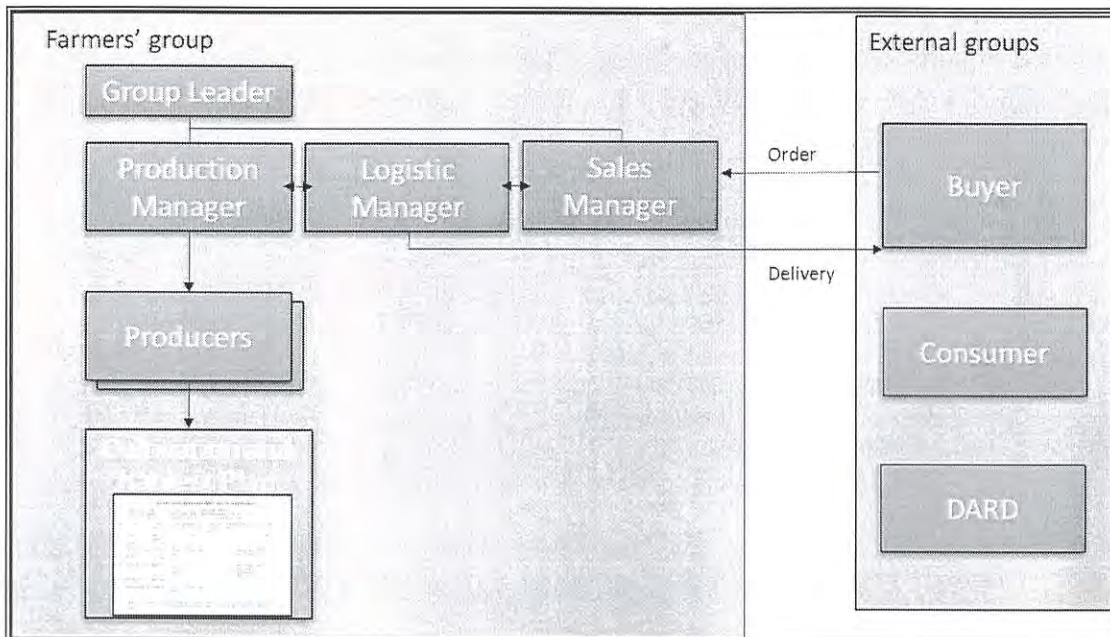
In the training, each target group will develop an action plan.

After the training, PPMU with the help of JICA project team will discuss with each producer group at their site more details about collection and delivery activities and finalized the collection and delivery activity plan. In this process, necessary packaging arrangements including label and logo will be discussed and included in the plan.

**2.9.2 Implementation of pilot activity**

PPMU with the help of JICA project team assist in implementation of collection and delivery pilot activities of the producer group. PPMU will visit each target group every week to monitor the progress, provide advice and discuss any issues to be resolved.

Each target group assign a logistic manager and a sales manager. The sales manager is responsible for marketing, all the communication with buyers including claims and settling payment with buyers. The logistic manager is responsible all the internal preparation for collection and delivery including adjustment of harvest, checking products if they satisfy the buyer’s criteria, preprocessing, arranging logistic and ensuring no mixing happening in the consignment.



Source: JICA Project Team

Figure 2.9.1 Implementation structure for collection and delivery activities

PPMU will organize stakeholder meeting at least once a season. The aim of holding stakeholder meetings is to share information, solve issues, increase mutual understanding and build trust among stakeholders. The outlines of meetings are shown below.

Table 2.9.2 Outlines of stakeholder meetings

Members	a member responsible for collection and delivery, a member responsible for production, a representative of buyer, an official from district DARD.
Frequency	At the beginning of season, before harvesting
Agendas	Requirements for sales, conditions of production, any other issues related to the contract

Source: JICA Project Team

The target group is expected to record collecting products and payment using the format such as below. PPMU will check the book if the crops are collected and delivered by following the pre-agreed standard and provide advice to producers on production, collection and delivery if necessary. PPMU will record the collected amount of each products of target group and report it in the quarterly monitoring report.

Table 2.9.3 Recording book for collecting products and payment

Name of product		Seed rice (variety: Jasmine)										
Collecting date		10 December 2014					Date of payment					19 December 2014
#	Name of member who deliver product	Member code	Collecting amount (kg)				In cash (1,000 VND)			Total amount for marketing (1,000 VND)	Advanced payment (1,000 VND)	Total amount for payment (1,000 VND)
			A		B		A		B			
			1	2	3	Total	1	2	3			
			Price unit									
1	Linh	08	08	50			50	450			450	200
2	Dung	04	04	50	20	20	90	450	140	100	690	290
3	V. Thành	01	01	20	10		30	180	70		250	200
4	Xuân	03	03	30	20		50	270	140		410	200
5	Son	02	02	40			40	360			360	160
6	X. Thành	05	05	10		50	60	90		250	340	200
7												
100												
<b>Total</b>			<b>200</b>	<b>50</b>	<b>70</b>	<b>320</b>						

Source: Training manual "Introducing method of joint marketing business in agricultural cooperatives (JICA)"

## 2.10 External Inspection and Auditing

### 2.10.1 Inspection and assessment of Basic GAP implementation.

PPMU with assistance of JICA Project team shall assess the implementation of the pilot projects in line with Basic GAP by using the checklist at the end of cultivation season. A respective staff who are trained on monitoring and inspection will be appointed by PPMU to conduct the assessment. An audit report shall be prepared and submitted to PPMU and JICA Project team after the audit.

### 2.10.2 Pesticide residue check

Pesticide residue check is essential to monitor safety of the products at the time of harvesting and/or delivery to the buyers. JICA Project team propose dual approaches of pesticide residue check; 1) quick sampling test and 2) laboratory test, in consideration of accuracy of the test as well as cost efficiency.

#### (1) Quick Sampling Test

Quick sampling test will be conducted by PPMU inspector (representatively a staff from sub NAFIQAD) by using a quick tool kit in order to measure the pesticide residue of sample products on farm. The results of the quick tests will be shared among target groups, PPMU and JICA Project team for auditing purpose only and will not be disclosed to the public.

#### (2) Laboratory Test

Laboratory test will be arranged by PPMU inspector together with JICA Project team. PPMU inspector collects samples and send them to a qualified laboratory for testing heavy metals, pesticides residues and microbiological respectively if necessary. The results of laboratory test will be disclosed to the public and utilized for marketing purpose as the evidence of safety of products.

JICA Project team and CPMU will design a sampling and testing plan for pilot project.

## 2.11 Monitoring and Evaluation of the Pilot Projects

PPMU with support of JICA Project team will monitor the pilot activities of target groups and government officers in charge every 3 months.

CPMU will evaluate overall pilot activities before every JCC meetings and review and improve the crop production system as well as collection and delivery method. CPMU shall have a presentation of the evaluation results in JCC meeting.

JICA Project team together with CPMU will prepare the draft manual for establishment of crop production system.

### 2.11.1 Monitoring and Evaluation of Production Activities in accordance with Basic GAP

#### (1) Monitoring

The objectives of monitoring are to improve crop production system and to develop capacity of C/P for monitoring and evaluation. The monitoring item and methodology are as following table.

Table 2.11.1 Monitoring method of pilot activity

Target	Person in charge	Monitoring Item	Method
For producers	PPMU of each province	<ul style="list-style-type: none"> <li>• Procedure of selection of production area of safe crop</li> <li>• Cultivation according to check list (26 items)</li> <li>• Record keeping of field diary by each members</li> <li>• Record keeping of management book by group</li> <li>• Execution of internal audit</li> </ul>	Record book of target group Field note of extension staff (commune and/or district level)
For government officers	PPMU of each province	<ul style="list-style-type: none"> <li>• Confirmation of safety of production area (execution of soil and water analysis)</li> <li>• Frequency of field visit to target group</li> <li>• Witness of internal auditing by target group</li> <li>• Execution of inspection of products upon delivery</li> </ul>	Field note of extension staff (commune and/or district level)

Source: JICA Project team

Technical staff of PPMU prepares a field report of the field activities of target groups and submit to PPMU once a month according to the monitoring item. A respective officer from PPMU visits target groups to supervise the operation of crop production system and prepares a monitoring report, which compile all data and records of pilot activities. The monitoring report will be prepared by PPMU every 3 months. All the data and records of pilot activities will be compiled as a monitoring report and used for evaluation.

#### (2) Evaluation

After completing the pilot activities, advantages and disadvantages, bottlenecks and counter measures of the crop production system in the pilot activities will be evaluated through monitoring reports and interviews of stakeholders. The evaluation will be conducted by CPMU with support of JICA Project Team before each JCC meeting. The results of evaluation will be reflected to the plans of the following pilot activities.

Table 2.11.2 Evaluation of Pilot activities

	Target	Evaluation indicators	Method of obtaining data
Crop production system	Crop production system is executed properly in pilot activity.	<ul style="list-style-type: none"> <li>• Number of producers following instructions according to the system</li> <li>• Number of government officers following instructions according to the system</li> </ul>	Monitoring report
	Contents of the system	<ul style="list-style-type: none"> <li>• Timing and frequency of safety</li> </ul>	Monitoring report

	satisfy requirements of safety standard	confirmation of target area, field visits and inspection of products	
Monitoring for producers	Producers follow the procedures according to BasicGAP	<ul style="list-style-type: none"> <li>• Procedure and evidence of selection of target area</li> <li>• Confirmation of check list (26items)</li> <li>• Execution of internal audit</li> </ul>	Monitoring report Interview with producers
	Producers record field diary properly.	<ul style="list-style-type: none"> <li>• Recording of field diary of each member</li> <li>• Recording of field diary of target group</li> </ul>	Monitoring report
Monitoring for government officers related to pilot activities	Government officer executes the safety confirmation of products	<ul style="list-style-type: none"> <li>• Execution of safety confirmation (soil and water analysis)</li> <li>• Execution of products inspection on delivery</li> </ul>	Monitoring report
	Government officer supervises the target groups to follow the procedures according to Basic GAP	<ul style="list-style-type: none"> <li>• Regular visit to target group</li> <li>• Witness of internal audit of target group</li> </ul>	Monitoring report Interview with government officers

Source: JICA project team

The results of evaluation will be explained to all the stakeholders after completing the pilot activities. The measures to improve the activities will be reflected to the plan of the following pilot activities. The results of evaluation will also be used for the pilot activities in the semi-pilot provinces and for spreading the similar activities within the pilot provinces. The contents of evaluation should be comprehensive enough to apply them to not only the project-related provinces but also any other provinces in Vietnam.

### 2.11.2 Monitoring and Evaluation of Marketing Activities

#### (1) Monitoring

The organization responsible for monitoring, monitoring items and methods of obtaining data are shown below. Not only producers and buyers, but also PPMU officials who supervise the pilot activities are subject for monitoring.

Table 2.11.3 Monitoring method of pilot activities

	Monitoring by	Monitoring items	Method of obtaining data
Matching	PPMU	<ul style="list-style-type: none"> <li>• Number of buyers who can participate in matching</li> <li>• Number of matching events implemented</li> <li>• Number of participants in matching events</li> <li>• Number of business contracts as a result of matching</li> </ul>	Record of matching events by PPMU Data collected at the matching events
Collection and delivery	PPMU	<ul style="list-style-type: none"> <li>• Accumulated delivered volume</li> <li>• Weekly delivered volume and received orders</li> </ul>	Records by producer group Records by PPMU
		<ul style="list-style-type: none"> <li>• The condition of observing the rules for washing, grading and packaging</li> <li>• The condition of recording delivery information</li> <li>• The condition of managing the labels</li> <li>• The condition of delivering safe crop including the occurrence of mixed delivery</li> <li>• The condition of storing and selling safe crop by retailers</li> <li>• Number of claims received</li> </ul>	Records by producer group Records by PPMU
		<ul style="list-style-type: none"> <li>• Difference between the average sales price in the pilot activities and the market price</li> </ul>	Sales records by producer group Market statistics at PPMU
		<ul style="list-style-type: none"> <li>• The status of technical transfer of DARD official</li> </ul>	Working record of PPMU officials

Source: Project team

Data for monitoring matching will be collected at the time of matching events by officials of respective

PPMUs. PPMU of each pilot and semi-pilot provinces will receive weekly reports from officials of district DARD where the pilot activities are taken place and confirm it with the records of concerned producer groups.

(2) Evaluation

After completing the pilot activities, advantages and disadvantages, bottlenecks and counter measures in the collection and delivery system in the pilot activities will be evaluated through interviews of stakeholders. The results of evaluation will be reflected to the plans of the following pilot activities. All the data and records of pilot activities will be compiled as a monitoring report and used for evaluation.

Table 2.11.4 Evaluation of pilot activities

	Target	Evaluation indicators	Method of obtaining data
Matching	The producers and buyers reach to the business agreement	<ul style="list-style-type: none"> <li>• Number of matching opportunities</li> <li>• Number of business agreements reached</li> </ul>	Monitoring report
Collection and delivery	The safe crop which satisfy the quality and quantity required by the buyer is delivered	<ul style="list-style-type: none"> <li>• Accumulated delivered volume</li> <li>• Weekly delivered volume and received orders</li> </ul>	Monitoring report
	The system to ensure safety of crop functions	<ul style="list-style-type: none"> <li>• The condition of observing the rules for washing, grading and packaging</li> <li>• The condition of recording delivery information</li> <li>• The condition of managing the labels</li> <li>• The condition of delivering safe crop including the occurrence of mixed delivery</li> <li>• The condition of storing and selling safe crop by retailers</li> </ul>	Monitoring report
	The safe crop is traded at the higher price than market price	<ul style="list-style-type: none"> <li>• Difference between the average sales price in the pilot activities and the market price</li> </ul>	Monitoring report
Sales	Sales volume increases	<ul style="list-style-type: none"> <li>• Weekly sales volume</li> </ul>	Monitoring report
	The produced crops gain the trust of buyers and consumers	<ul style="list-style-type: none"> <li>• Number of claims received</li> <li>• Evaluation by retailers</li> <li>• Evaluation by consumers</li> </ul>	Monitoring Stakeholder interview

Source: Project team

The results of evaluation will be explained to all the stakeholders after completing the pilot activities. The measures to improve the activities will be reflected to the plan of the following pilot activities. The results of evaluation will also be used for the pilot activities in the semi-pilot provinces and for spreading the similar activities within the pilot provinces. The contents of evaluation should be comprehensive enough to apply them to not only the project-related provinces but also any other provinces in Vietnam.



CHAPTER 3 IMPLEMENTATION STRUCTURE

3.1 Pilot Project Implementation Structure

The basic pilot project implementation structure is shown in the table below.

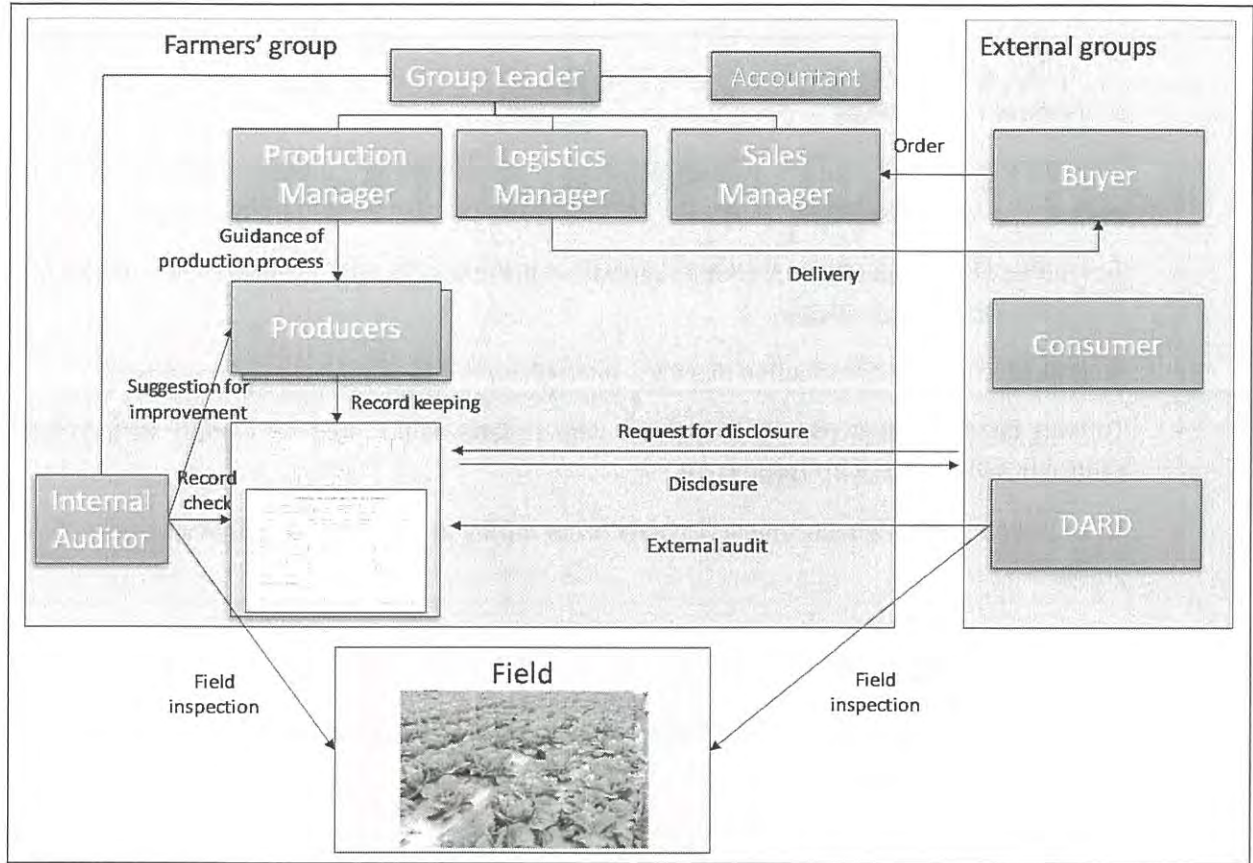


Figure 3.1.1 Pilot Project Implementation Structure

3.2 Roles and Responsibilities of Farmers' Group

Farmers' group (Agriculture Cooperative/ Company) is the main body of pilot project execution for safe vegetable production and sales. Each farmers' group shall carry out monitoring and self-auditing activities in compliance with requirements and steps prescribed in the basic GAP. The group also shall prepare production and delivery plan based on marketing activities, and provide supports to PPMU's technical officers and external experts during the consultation, monitoring and evaluation of pilot activities.

Each farmers' group shall establish a management body, which consist of the following members;

- 1) Group Leader/ Head of Cooperative
- 2) Production Manager
- 3) Internal Auditor
- 4) Sales Manager
- 5) Logistics Manager
- 6) Accountant

Roles and responsibilities of management members are as below.

*[Handwritten signatures in blue ink]*

### **3.2.1 Group leader/ Head of Cooperative**

- To be responsible generally for production and trading of products and internal auditing
- To organize, operate and maintain and develop the quality management system following Basic GAP
- To assign staff to record information based on the logbook forms which are applied for cooperative management
- To represent the cooperative to sign contracts with buyers and basic agreement with the cooperative members
- To represent the cooperative receiving supports on materials, finance, technologies from outside organizations and individuals
- To lead and supervise production manager, internal auditor to implement tasks assigned.
- To issue the decision of penalty to member who violates and/or does not comply with quality control in accordance with Basic GAP.
- To solve complaint, denouncement that may occur during production, collection and delivery of products.

### **3.2.2 Production Manager(s)**

Production manager will be nominated one person per sub production group, which will be formed by maximum 20 farmers per target crop.

- To be supervised and directed directly by Group leader
- To organize and provide technical assistances to farmers.
- To organize group meeting with members when required.
- To directly supervise, remind members to comply with Basic GAP requirements.
- To recommend technical improvements in cultivation and quality system suitable with Basic GAP requirements.
- To monitor and instruct farmers/ members to correct non-conformity points as required in production activities.
- To participate in internal audit.

### **3.2.3 Internal Auditor(s)**

- To be supervised and directed by Group leader.
- To develop audit plan and report to Group leader.
- To supervise all activities in the group throughout purchase of agricultural inputs, cultivation, harvesting, collection and delivery in accordance with Basic GAP.
- To supervise the corrective actions taken by farmers/ members.

- To audit the appropriateness of Basic GAP throughout the above process with check list.
- To prepare an audit report and report the result to the Group leader and production manager.
- To make recommendations for improvement.

### 3.2.4 Sales Manager

- To be supervised and directed by Group leader.
- To develop and implement a marketing plan
- To approach buyers pro-actively to promote the sales
- To draft the sales contracts and negotiate with buyers
- To participate in a stakeholder meeting, which consists of representatives from the farmers' group, buyer(s) and DARD.
- To receive and solve claims on products from buyers and/or consumers
- To maintain a reliable and sustainable relation with buyers
- To manage sales of products

### 3.2.5 Logistics Manager

- To be supervised and directed by Group leader.
- To assist designing of a cultivation plan developed by production manager,
- To design a delivery plan for joint sales through discussion with production manager and sales manager based on the orders from buyers
- To collect the products from farmers to meet the requirement of buyers in terms of quantity and quality
- To manage in-coming and out-going of products at pre-processing house/ vegetable storage
- To keep the pre-processing house/ vegetable storage safe and clean to meet the requirement on good post harvest handling and hygiene condition
- To hire and supervise the workers at pre-processing house/ vegetable storage

### 3.2.6 Accountant

- To be supervised and directed by Group leader.
- To maintain daily money transaction (cash and bank)
- To maintain the account book, bank account
- To prepare annual account report

### 3.2.7 Individual Farmers



- To participate in the pilot project activities actively
- To practice GAP in compliance with requirements of Basic GAP applied in the pilot projects.
- To follow the instructions of leader and management members of the group
- To maintain records of field practices in the notebook according to Basic GAP guidance.
- To collaborate with relevant stakeholders to carry out the pilot projects' activities.

### 3.3 Roles and Responsibilities of Stakeholders

#### 3.3.1 MARD-CPMU

DCP/MARD establishes a CPMU to supervise the pilot projects for safe vegetables at central level. The roles and responsibilities of CPMU are as below.

- To supervise the pilot project activities in provincial level,
- To conduct trainings of trainers, such as basic GAP and marketing trainings with JICA project team,
- To disseminate information and knowledge to semi pilot provinces and knowledge sharing provinces,
- To prepare the evaluation report before every JCC meetings.

#### 3.3.2 DARD-PPMU

DARD establishes a PPMU to conduct pilot projects for safe vegetables at provincial level, including providing technical officers of suitable professions for training of farmers, production, inspection and monitoring of food safety. Each pilot project should have one technical staff, who will be responsible for implementing field activities in pilot project such as giving instruction, monitoring activities at project sites. They can be from district agriculture extension center, Plant protection station at district level; or from DARD's Sub-Department/ Division). The role and responsibilities of PPMU are below.

- To nominate the technical inspectors and marketing persons in charge,
- To organize, monitor the pilot project activities,
- To organize trainings of farmers, such as basic GAP and marketing trainings,
- To coordinate with local program to support improvement of infrastructures,
- To disseminate information and knowledge to other farmers groups in province,
- To prepare the monitoring reports every 3 months.

#### 3.3.3 JICA Project Team

- To provide technical supports to implement pilot activities from production to marketing including trainings, on-field instruction and coordination among stakeholders,
- To conduct TOT courses on Basic GAP and marketing with CPMU,

- To prepare manuals for establishment of crop production system, cultivation method and supply chain development,
- To support PPMU to organize trainings for farmers (TOF) on Basic GAP, post-harvest handling and marketing,
- To support installation of facilities and equipment to ensure food hygiene and safety
- To support designing and implementation of sampling and analysis of soil and water and pesticide residue check.

### 3.3.4 Buyers (wholesalers and supermarket) participating in the pilot projects

- Participate actively in the pilot project activities
- Ensure to have a separate section (effective segregation and traceability) to sell safe vegetables from the pilot projects.
- Collaborate with relevant stakeholders to carry out the pilot projects' activities.
- Provide all relevant information on safe vegetables.

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## CHAPTER 4 IMPLEMENTATION SCHEDULE

Pilot Project Implementation Schedule is shown in Attachment 4.1



