

ASEAN-Japan MIDORI Cooperation Plan

Main Text : Revised in October 2025

Annex : Updated in August 2026

Ministry of Agriculture, Forestry and Fisheries of JAPAN

Cooperation Project 1

- Contributing to the reduction of fertilizers through automatic plotting technology and soil diagnosis of farmland using satellite data

(1) Summary of Activity

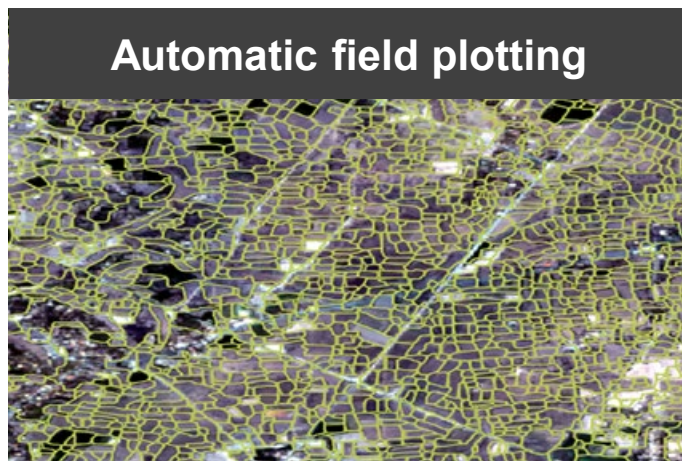
- Data-driven management using satellite field plotting and digital soil diagnosis
- Long-term value creation via a circular model recycling organic waste into cropland

(2) Expected Effect

- Higher yields & profitability with optimized costs and labor via balanced fertilization
- High-integrity carbon credits by quantifying GHG cuts and soil carbon storage

(3) Progress

- Project launched with a local sugar-milling company and dairy/agri-food group in Vietnam
- Promoting carbon credit business based on regenerative farming & fertilizer reduction



Source: Sagri Co., Ltd

Cooperation Project 2

- **Contributing to increase of productivity and reduction of labor hours through automatic steering technology**

(1) Summary of Activity

Anyone can easily introduce an Autosteering system and achieve the same or better workability as a skilled operator by installing a GNSS receiver, electric steering, console, etc. on existing tractors or harvesters.

(2) Expected effect

Improved productivity through improved yield and reduced labor hours by streamlining operations and achieving high accuracy work, from land preparation, planting, fertilizing, pest control and harvesting. It's expected to have the effect of reducing GHG emissions by The reduction in working time.

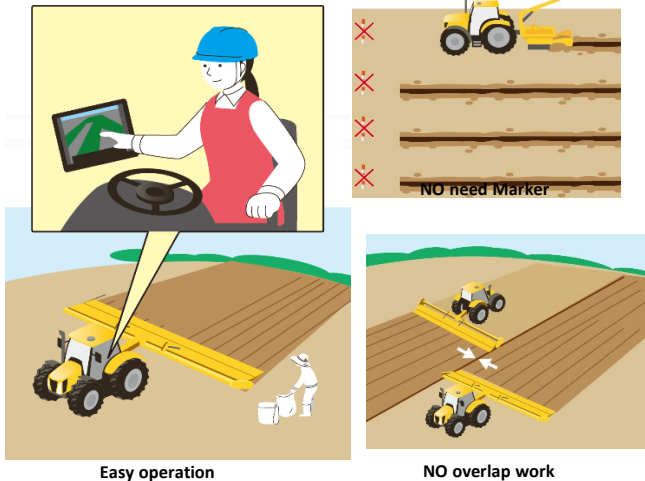
(3) Progress

Thailand: After pilot project in rice cultivation, we conducted own pilot project in sugarcane cultivation.

We are working towards the diffusion of Autosteering in the ASEAN.

Participated in an ASEAN business pitching event held in Tokyo in November 2025, held a meeting with Vietnam's DCRD (Department of Cooperatives and Rural Development), and collaboration is under consideration.

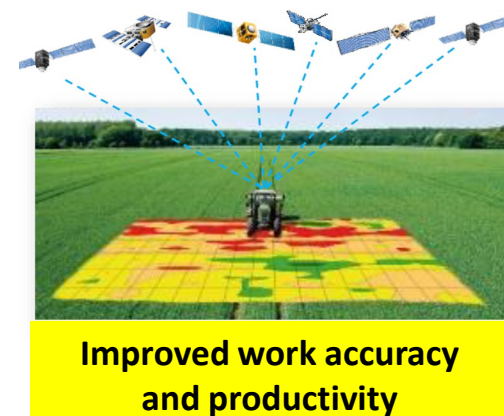
Anyone can operate same as skilled worker



Easy installation on existing tractors



Autosteering system



Source : TOPCON CORPORATION

Cooperation Project 3-1

- **Joint Crediting Mechanism (JCM) to promote climate change mitigation in agriculture (JAPAN-MAFF funded ADB project along with JAIF)**

(1) Summary of Activity

- To develop concrete methodologies to be applied to the JCM projects in combination with Alternate Wetting and Drying (AWD), the project focuses on operating the Expert Committee (EC) with the Partner Countries, International Organizations and Research Institutes

(2) Expected Effect

- To contribute to GHG reductions in ASEAN region.
- To increase income of local farmers.
- To issue reliable carbon credits.



Expert Committee

(3) Progress

- In the Philippines, JCM methodology for AWD has been approved, and on-farm projects are in progress.
- Launching JCM in other countries, including in Cambodia, is in consideration.
- Approved by the JAIF fund (June 2024, Revised approval in March 2026)

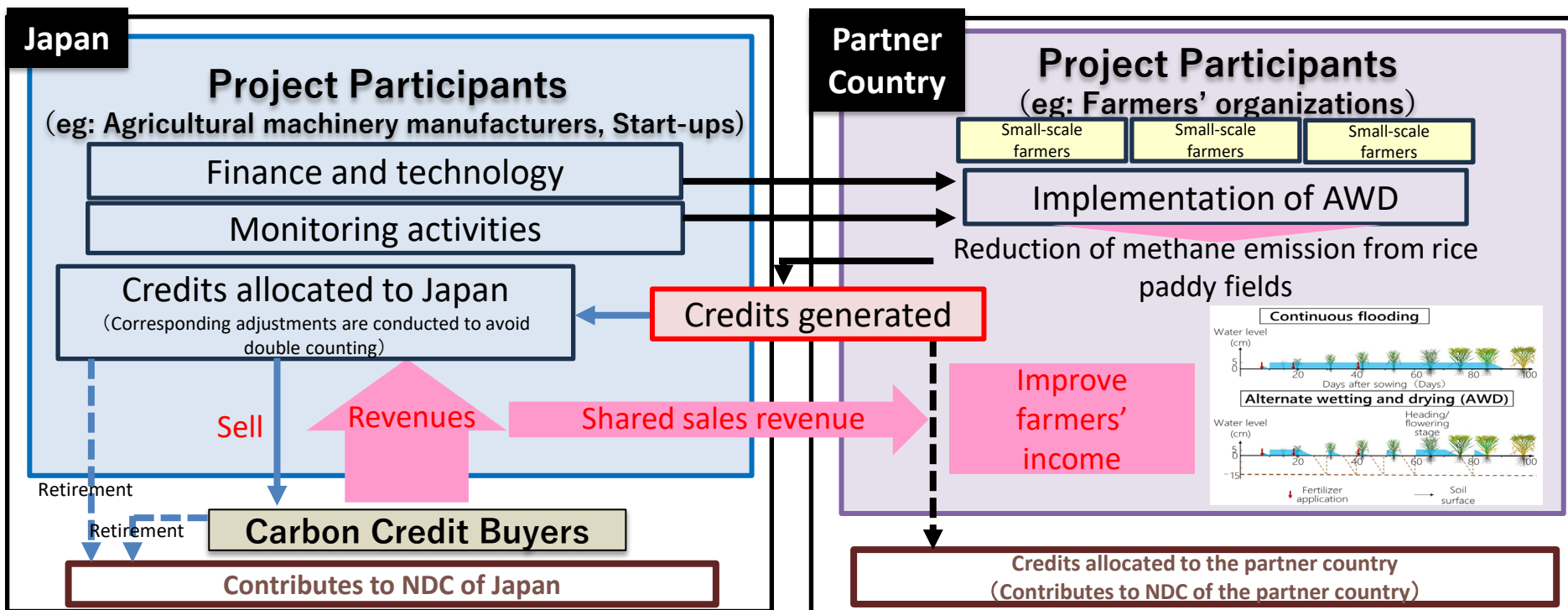


Cooperation Project 3-2

- **Joint Crediting Mechanism (JCM) to promote climate change mitigation in agriculture** (JAPAN-MAFF funded ADB project along with JAIF)

Joint Crediting Mechanism (JCM) in the Agricultural Sector

- Japanese private companies support the implementation of Alternate Wetting and Drying (AWD) in partner countries in accordance with their registered projects.
- As a result, reducing greenhouse gas (GHG) emissions and improving farmers' incomes in the partner countries will be achieved. This contributes to the achievement of reduction targets (NDCs) under the Paris Agreement in both countries.



Credit retirement: The process of permanently removing a carbon credit from circulation after it has been used to offset/neutralize emissions. This action finalizes the offsetting process, ensuring that the credit cannot be reused or claimed by another entity.

Cooperation Project 4

● Promotion of climate change adaptation and mitigation measures through agricultural and rural development in the Asian Monsoon region

(1) Summary of Activity

- Introducing advanced agricultural water management such as AWD using ICT-based water management.
- Improving rainwater storage in paddy fields by installing runoff adjustment outlets as "Paddy Field Dam".

(2) Expected Effect

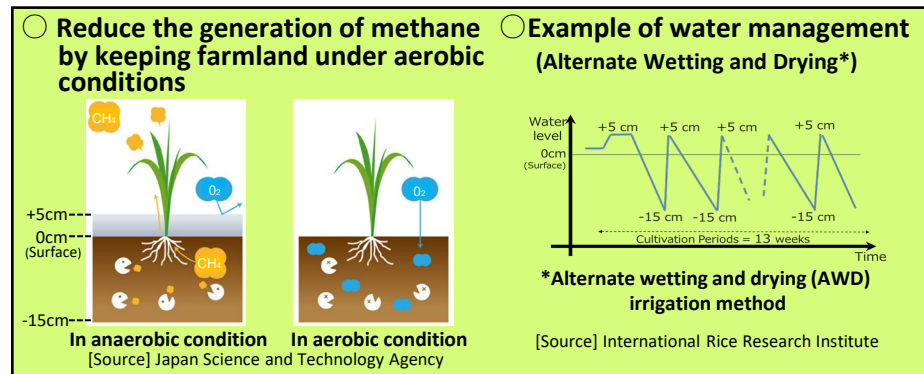
- AWD reduces GHG emissions from paddy fields.
- ICT-based water management reduces labor required for water management and water usage.
- "Paddy Field Dam" reduces flood damage in downstream areas.

(3) Progress

- The following demonstrations have been ongoing since 2024:
 - **Cambodia** (Kampong Chhnang Province)
 - (i) AWD using ICT-based water management
 - (ii) "Paddy Field Dam" by installing runoff adjustment outlets
 - **Lao PDR** (Vientiane City)
 - (i) AWD using irrigation faucet with a float valve
 - (ii) "Paddy Field Dam" by installing runoff adjustment outlets
 - **Vietnam** (Hai Phong City)
 - (i) AWD using ICT-based water management
 - (ii) Underground drainage improvement using "Cut Drain"



ICT-based Water Management



Cooperation Project 5

● Promotion on smart irrigation system technology for fruits

(1) Summary of Activity

The Department of Agricultural Extension (DOAE) is considering a site for a pilot project to promote smart irrigation system technology for fruits in Thailand

(2) Progress:

Training of Thai government officials in Japan was conducted in October 2024.

The pilot project on smart irrigation system technology for fruits in Thailand



- Intended location : Rayong Province
- Size: 0.4-0.7 hectares
- Demonstration Technology: Precise Irrigation Sensors and Controllers

Cooperation Project 6

● ASEAN-JICA capacity building project on IUU fishing countermeasures in Southeast Asia

1. Project purpose

Enhancing the capacity of ASEAN Member States (AMSs) to prevent and combat IUU fishing through a series of training and/or workshop activities.

2. Activities

- ✓ Training at Training Department of SEAFDEC in Bangkok
- ✓ On-site training at member states (Thailand, Laos, Vietnam, etc.)

3. Expected outputs

- ① **Responsible fishing technologies and practices** to combat IUU fishing are promoted.
- ② Capacity is enhanced through **effective management tools of traceability for fish and fishery products**
- ③ **Policy measures** to combat IUU Fishing are enhanced in AMSs.

➤ Results of activities in 2025 (4 group trainings, 2 individual on-site trainings in Laos & Indonesia)

subject	Activities	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Responsible Fishing	1.1) Training course on responsible fishing technologies/practices to combat IUU fishing in Southeast Asia.												
Traceability	2.1) Training course on human resource development on traceability for fish and fishery products for eliminating IUU fishing.												
	2.2) On-site training on traceability for fish and fishery products for relevant stakeholders in AMSs.			Lao								Indone sia	
Policy measure	3.1) Regional capacity building workshop on enhancing policies and countermeasures against IUU fishing in Southeast Asia.												
	3.2) Training course for fisheries inspectors in the implementation of Port State Measures.												

Cooperation Project 7

- **Expanding innovative technology to scale up GHG reduction, as well as stakeholder coordination to scale up actions on the ground**

(1) Summary of Activity

- In collaboration with FAO, training sessions and seminars on GHG reduction technologies have been conducted in AMS to strengthen the implementation of the Paris Agreement. Through the “Initiative for Net-zero compatible with Food security through International expansion of Japan’s Innovative Technology (MIDORI∞INFINITY)” and its implementation platform, the “MIDORI Decarbonization Overseas Deployment Consortium”, more training sessions and seminars will be held to promote overseas deployment of Japan’s GHG reduction technologies, aiming to facilitate matching between Japanese companies with such technologies and the governments and companies of AMS.

(2) Expected Effect

- The foundation for implementing the Paris Agreement in the agriculture sector will be established, and the potential for utilizing carbon credits, including the Joint Crediting Mechanism (JCM), will expand, leading to greater reductions in GHG emissions. In addition, overseas deployment of GHG emission reduction technologies and the formation of concrete projects are expected to be promoted through collaboration among stakeholders.

(3) Progress

- Co-hosted side events with FAO at the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (Nov. 2024, Nov. 2025)
- University of Tsukuba Malaysia, a consortium member, signed an MOU with Universiti Putra Malaysia, an agricultural university in Malaysia, on joint research and human resource development for agricultural GHG emission reduction technologies (Apr. 2026)
- Provided matchmaking opportunities among Japanese private companies with agricultural GHG emission reduction technologies, international funds and investment institutions, and regional stakeholders at a workshop held in Indonesia to promote concrete project formation (Jun. 2026)



Side event at COP30



MOU signing ceremony



Networking at the workshop held in Indonesia

Cooperation Project 8

- **Introducing agroforestry practices in coffee production that contribute to increasing profitability of local farmers while preventing deforestation**

(1) Summary of Activity

- Source specialty coffee produced through environmentally friendly cultivation methods, such as agroforestry, from Asia, Africa, and Latin America, and sell it — along with the stories of the origins and producers — mainly to roasters in Japan.
- Conduct Life Cycle Assessment (LCA)-based greenhouse gas (GHG) emissions assessments to identify emission hotspots and promote Green Transformation (GX) throughout the coffee value chain.

(2) Expected Effort

- Prevention of deforestation, preservation of vegetation through intercropping, risk mitigation during poor coffee harvests, increased income through alternative cash crops (fruits, root crops, spices), improved water retention in mountainous areas, and reduced risk of natural disasters such as landslides.
- Decarbonizing the coffee value chain will promote the production, processing, and distribution of coffee with a lower environmental footprint.

(3) Progress

- From April 2023 to October 2025, activities were carried out in collaboration with the United Nations World Food Programme (WFP) to promote environmentally friendly farming practices, with a focus on agroforestry, among smallholder coffee farmers in Luang Prabang Province, Laos.
- Currently, projects/business are being implemented in Thailand, Myanmar, Indonesia, the Philippines, Vietnam, and Timor-Leste, and expansion of this model to other provinces within Laos is planned.



Agroforestry



Training for smallholder coffee farmers in Laos

Cooperation Project 9

- **Japan-MAFF (Forestry Agency) funded ITTO Project on Sustainable Wood Use Promotion in Timber producing countries**

(1) Summary of Activity

- Japan has been supporting projects to promote sustainable wood use (SWU) in ASEAN member states - namely Vietnam, Thailand, Indonesia, and Malaysia - through funding to ITTO.
- The projects include various activities: improving the policy framework to promote domestic wood consumption, developing wood products that meet consumer needs, conducting market research on demand and supply, and analyzing the feasibility of mandatory timber certification.

(2) Expected Effects

- Enhancing the capacity to produce high value-added wood products.
- Strengthening the resilience of the wood industry by reducing dependence on exports through the development of domestic markets.

(3) Ongoing Project

- Malaysia: The project was started in October 2024 and the completion is scheduled in July 2026.

Developing of modern designed wood furniture



Support for small wood processing companies



Scenes from activities of the Vietnam's SWU project
(Image credit: Forestry Agency of Japan)

Cooperation Project 10

- **Activities to establish circular agriculture through public-private partnerships to train trainers to teach cultivation techniques and to utilize food residues as fertilizer(JAPAN-MAFF funded MIDORI Project)**

(1) Summary of Activity

- Conducting demonstrations of cassava cultivation technology developed by private company.
- Based on the results of the demonstrations, compiling cultivation techniques and creating a manual for farming extension service.
- Disseminating the results from the demonstrations in Thailand to ASEAN member states.

(2) Expected effect

- Improvement of productivity and farmer's income
- Establishment of sustainable agriculture based on correct cultivation knowledge

(3) Progress

- Field demonstration activities and dissemination are underway in Thailand. An international symposium is planned to share the project's results with other ASEAN member states (MIDORI Project Trust Fund).

Demonstration of cultivation



Extension service for farmers



Cooperation Project 11

● Capacity building activities of durian farmers in collaboration with local organizations

(1) Summary of Activity

- Data-driven durian farming initiative in Malaysia. Contributing to farmers' capacity building through the development of a cultivation and advisory system based on field data.

(2) Expected Effect

- Contribute to environmentally friendly and efficient durian production systems in response to growing market demand across countries.
- Develop cultivation indicators using soil, weather, and growth data, and stabilize yield through linkage with soil improvement and fertilization. Improve guidance for durian farmers by analyzing production and management data according to farm scale.

(3) Progress

- The pilot started in 2024 at a durian farm in Pahang, Malaysia. Currently collecting weather and cultivation data (e.g., sensing, tree-level management). from 2026, testing the impact of introducing irrigation tech on flowering, and other factors (starting in 2026).



Source : MYFARM Inc.

Cooperation Project 12

● ASEAN-JICA Food Value Chain Development Project

(1) Overview of the Project (Cooperation Period: 3 years from 15 January 2024 to 14 January 2027)

- Project Objective: The enabling environment for promotion of FVC in ASEAN is enhanced through achieving the 4 major Outputs in collaboration with the concerned ASEAN Sectoral Working Groups (ASWGC, ASCP, ASWGFi, and ASWGAC).
 - Output 1: Measures are developed for the marketing and promotion of national and ASEAN GAPs.
 - Output 2: Capacities of pesticide residue analysis necessary to strengthen SPS measures in AMSs are improved.
 - Output 3: Food safety on fishery sector is improved by promotion of GAqP and development of ASEAN guidelines and relevant principles on fisheries inspection mechanism.
 - Output 4: Strategies for promoting PPP based FVC are developed.

(2) Progress

- With 5 months left to the end, the Project is steadily underway and expected to produce the designated outcomes. Major events/activities completed, in progress, and planned are as follows:

(Output 1)

- ✓ “The Action Program for Marketing and Promotion of ASEAN GAP (2026–2030)” was approved in the EWG-GAP and the ASWGC Meetings 2026 and tabled at the SOM-AMAF Meeting in August.
- ✓ GAP promotion events inviting FBOs were held in Thailand and Cambodia for putting action plans into practice. The ASEAN GAP logo created by the Project was fully utilized.
- ✓ A second seminar summarizing the achievements to date is scheduled for October 2026.

(Output 2)

- ✓ Focusing on CLMV countries, country-specific training courses aiming at national research institutions' capacity-building regarding pesticide residue analysis were conducted by August 2025.
- ✓ Starting from July 2026, Proficiency Testing for AMS's laboratories is progressing.
- ✓ Capacity assessment surveys for biopesticide residue analysis started in the relevant four countries in August 2026.
- ✓ The final workshop, scheduled for August 2026, will review the entire achievements under Output 2 and discuss policy recommendations for strengthening and harmonizing capacity in pesticide residue analysis in the ASEAN region.

(Output 3)

- ✓ A workshop on hygiene management of seafood was held in October 2025.
- ✓ Training courses on GAqP for extension workers and auditors were conducted in February and March 2026. Country-specific on-site training for CLMV countries is scheduled to be conducted starting in August 2026.
- ✓ Activities aimed at development of regional inspection guidelines for imported fish and fisheries products started in April 2026.

(Output 4)

- ✓ The inception meeting was held in March 2026, which was followed by a questionnaire survey of PPP (Public-Private Partnership) cases in AMS.
- ✓ Case studies in Indonesia, Vietnam and Thailand are currently underway since July 2026. Best practices and lessons learned will be extracted and compiled as policy recommendations at the final workshop in November 2026.

Pesticide Residue Analysis Training in Vietnam



GAqP Training for Extension Workers



GAP promotion event in Cambodia



Site visit for PPP case study in Malaysia



Cooperation Project 13

● Development of Greenhouse Gas mitigation technologies economically beneficial for the small-scale farmers in Southeast Asia

(1) Summary of Activity

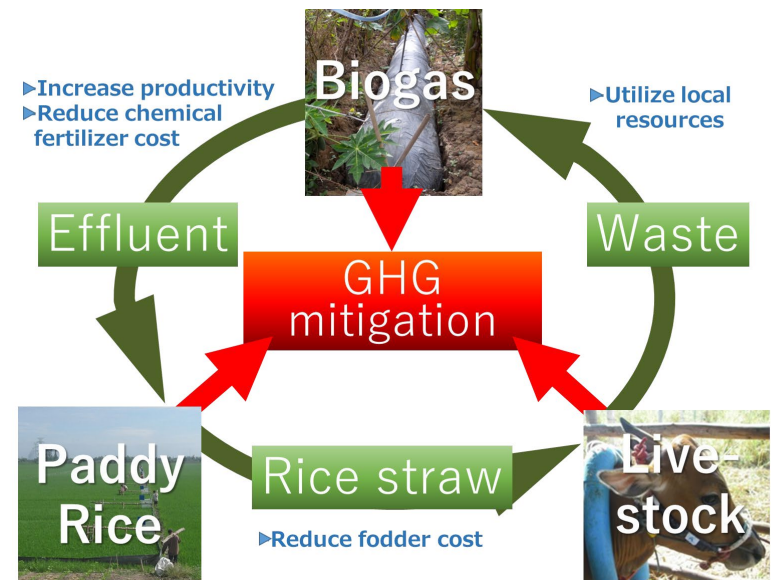
- Development of paddy rice cultivation management technology and livestock waste management system that reduce Greenhouse Gas emissions and provide practical and direct benefits to farmers in Southeast Asia.

(2) Expected Effect

- Paddy rice cultivation management technology with both low GHG emission and high productivity.
- Livestock waste management system to reduce GHG emission and utilize waste as value-added resources

(3) Progress

- Period : 2023.April – 2028.March
- Participating countries : Vietnam, The Philippines
- Collaborative research activities to develop :
 - ① Demonstration of a rice cultivation system combining deep-rooting rice with high intensity AWD.
 - ② Development a methodology to reduce organic matter in the effluent from small-scale livestock waste biogas digester.



GHG mitigation through effective utilization of regional resources

Cooperation Project 14

● Demonstration of data integration for ASEAN deployment of smart agricultural technologies (PRISM/BRIDGE)

(1) Summary of Activity

- Demonstrate smart agricultural technologies in ASEAN Member States (AMS).
- International standardization of data exchange standards for agricultural equipment for paddy field.

(2) Expected Effect

- Promotion of smart agricultural technologies to AMS.
- Enhance productivity and contribute to environmental sustainability in local agriculture.

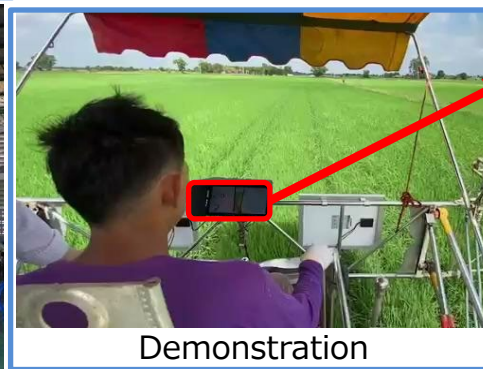
(3) Progress

- Demonstration of data-driven paddy field agriculture by integrating the Quasi-Zenith Satellite System 'Michibiki' with smart agricultural machines (2024-2026, Thailand).
- Data exchange standard for paddy field agriculture proposed to the international agricultural data interoperability organization 'AgGateway' was approved. The data exchange standard is published (2024-2025, United States).

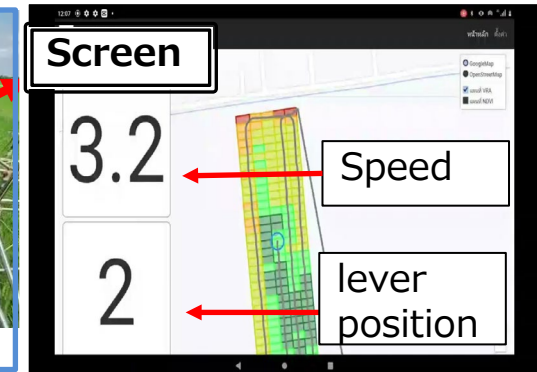
Study group on data integration in Thailand



Application Development utilizing 'Michibiki'



Demonstration



Cooperation Project 15

● International Joint Research Project

(1) Summary of Activity

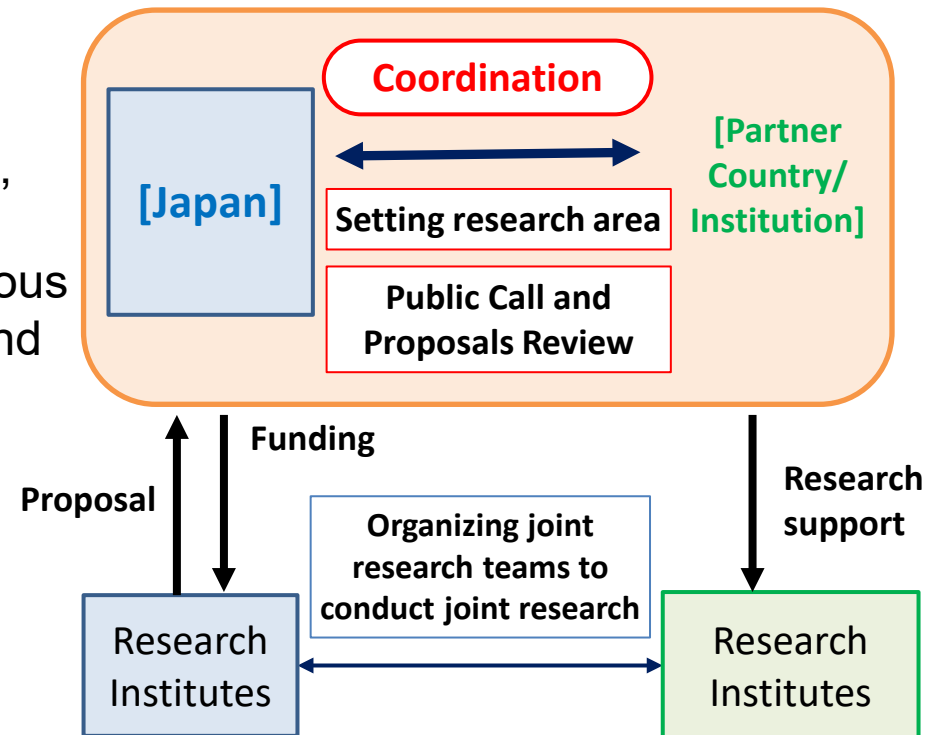
- The project supports International Joint Research with countries worldwide , including ASEAN countries.

(2) Expected Effect

- Contribute to the development of Agriculture, Forestry and Fisheries by utilizing the scientific findings, advanced technology, and resources of both research institutes.

(3) Progress

- Conducted following joint research
 - Control of the transboundary plant pest, 'Fall armyworm'
 - Control of transboundary animal infectious diseases, African Swine Fever (ASF) and Foot-and-Mouth Disease (FMD)
- Participating countries and Period
 - Philippines : FY 2024 - 2028
 - Thailand : FY 2023 - 2027
 - Vietnam : FY 2022 - 2026



Cooperation Project 16-1

● JICA Technical Cooperation Project on Sustainable Forest Management

Project Title	(i) Project for Community Movement Program on Forest and Land Fire Prevention (Indonesia)	(ii) Climate Change Mitigation Project in LULUCF Sector (Indonesia)
Project objective	Hotspots and burnt areas are decreased in areas served by the target Local Fire Stations in three provinces.	Strengthening the sustainable land management capacity for contributing to climate change mitigation to achieve Indonesia's NDC in LULUCF sector.
Output	Output1: Capacity of the target Local Fire Stations for fire management is strengthened. Output2: Community-based forest and land fire prevention model is adopted at the target villages. Output3: Community-based sustainable peatland management model is developed at fire prone villages. Output4: Policies and experiences on Community-based forest and land fire prevention are shared at the national level.	Output 1: Policy and capacity development are facilitated to support GFG inventory and MRV of LULUCF sector at national and jurisdictional level to contribute to the achievement of the NDC goals. Output 2: Tier 3 GHG emission monitoring system from peatlands is developed. Output 3: Green Economy is promoted through advanced AeroHydro techniques.
Progress	• Project period : 2023/6~2027/6 • Dispatching 2 long-term experts who are in charge of all outputs.	• Project period : 2024/10~2027/10 • Dispatching short-term experts to handle each outcome. Development of GHG emissions monitoring system and demonstration of AeroHydro techniques are underway.



Forest fire damaged site in peatland (Indonesia • JICA)



Demonstration of AeroHydro techniques (Indonesia • JICA)

LULUCF: Land Use, Land-Use Change, and Forestry
 REDD+: Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
 MRV: Measurement, Reporting, Verification

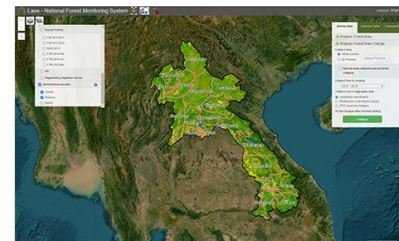
Cooperation Project 16-2

● JICA Technical Cooperation Project on Sustainable Forest Management

Project Title	(iii) The Project for Enhancing Sustainable Forest Management in collaboration with REDD+ Programs and REDD+ funds (Laos)
Project Objective	Capacity for sustainable forest management in collaboration with REDD+ programs and REDD+ funds is enhanced.
Output	Output 1. Policy and Institutional framework to implement Forestry Strategy (FS) 2035 is enhanced. Output 2. Implementation of National REDD+ and National Forest Monitoring System (NFMS) Roadmap is promoted. Output 3. REDD+ readiness in Savannakhet Province is enhanced.
Progress	• project period : 2022/2 ~ 2027/2 • With the support of the Project, Laos government received REDD+ Results based Payments from Forest Carbon Partnership Facility – Carbon Fund and Green Climate Fund. • The Provincial Deforestation Monitoring System (PDMS) developed and utilized by the Project was approved as an official forest monitoring tool of Laos.



Examination for making national forest classification map (Laos • JICA)



Web portal of National Forest Monitoring System (Laos • JICA)

Cooperation Project 17

● East Asia Plant Variety Protection Forum

(1) Summary of Activity

- The East Asia Plant Variety Protection (EAPVP) Forum consisting of the ASEAN Plus Three Countries (China, Japan, Korea) was established in 2007 under Japan's initiative.
- The EAPVP Forum aims to build momentum toward all members' accession to the UPOV Convention through its annual meetings. The Forum has also implemented cooperation activities to support member countries in developing and strengthening their PVP systems in accordance with the UPOV Convention, as well as harmonizing application and examination procedures in the region.

(2) Expected Effect

- To contribute to the development of sustainable agriculture and the achievement of food security, by encouraging all forum members to accede to the UPOV Convention and by facilitating the harmonization of PVP systems in the region.

(3) Progress

- In 2017, "10-Year Strategic Plan" was established to strategically develop the activities of the Forum.
- The conformity of the relevant national legislations of Brunei, Myanmar, Laos and Malaysia with the UPOV Convention has been approved by the UPOV Council.



Cooperation Project 18

● Building stable food systems and developing climate change adaptation and mitigation measures on irrigation and drainage facilities

(1) Summary of Activity

- Utilizing the developed guidelines, technical support will be provided for the demonstration and dissemination of Alternate Wetting and Drying (AWD), sustainable groundwater management, and the installation of fishways at weirs through Mekong River Commission for building stable food systems.
- Demonstrating methods for appropriate farmland improvement including arrangement of canals and farm roads.
- Implementing technical exchanges in the field of agricultural and rural development for solving issues such as climate change and efficient water use that Southeast Asian countries are facing.

(2) Expected Effect

- Addressing the global food insecurity and promoting the sustainable use of water resources.
- Promoting climate change countermeasures by improving irrigation and drainage facilities and introducing appropriate water management methods.

(3) Progress

- Improving irrigation facilities in the Lower Mekong River Basin
-Period: 2026-2031 -Target: Cambodia, Lao PDR, Thailand, Vietnam
- Model demonstration to promote farmland improvement
-Period: 2026-2030 -Target: Thailand
- Technical exchanges in the field of agricultural and rural development
-Period: 2026-2029 -Target: Indonesia, Thailand, Vietnam



Installation of underground drainage on farmland



Technical exchanges with ASEAN countries



Verification and revision of established guidelines

Cooperation Project 19

● Implementation and Assessment of the ASEAN Regional Plan of Action for the Management of Fishing Capacity

(1) Summary of Activity

Assess the implementation of the ASEAN Regional Plan of Action to Manage Fishing Capacity (RPOA-Capacity) and strengthen regional cooperation in fisheries management through the assessment of fishing capacity, fisheries information systems and mechanisms, and management strategies for selected pelagic species.

(2) Expected Effect

- The implementation of the RPOA-Capacity, fishing capacity profiles, fishing effort, and stock status in ASEAN Member States are assessed to support future fisheries management.
- Relevant fisheries information systems and mechanisms are enhanced to facilitate the sharing, exchange, and compilation of fisheries statistics and information.
- Management strategies for selected pelagic species are compiled and assessed to support sustainable fisheries management in ASEAN.

(3) Progress

- Period: 2024.April – 2026.October
- Participants countries: 9 ASEAN Member States, except Lao PDR
- Proponent: Department of Fisheries, Malaysia



Cooperation Project 20

● Project for AFSIS Geospatial Informatization Support (AFSIS-GIS)

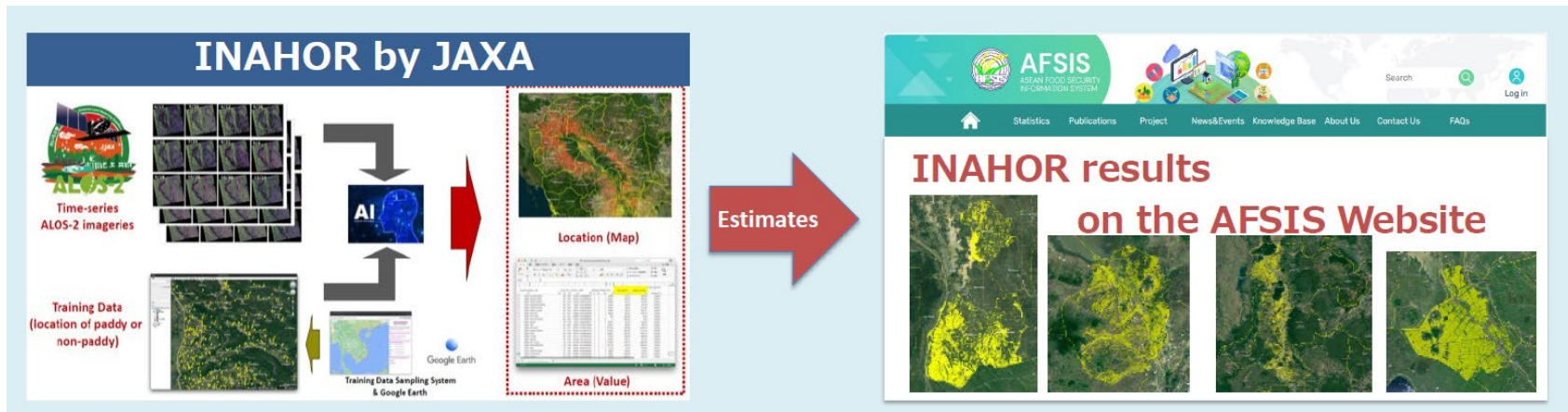
(1) Summary of Activity

- To address the increasing demand for detailed and timely agricultural statistics in ASEAN countries experiencing rapid economic growth, this project aims to enhance food security data by leveraging geospatial information under the framework of the ASEAN Food Security Information System (AFSIS).

(2) Expected Effect

- Improve agricultural statistics in AMS by using satellite data
- Enhance the usability of food security information through geospatial visualization
- Capacity building for satellite data analysis and related skills

(3) Progress : 3 years from Dec 2025 to Nov 2028



INAHOR: International Asian Harvest mOnitoring system for Rice. A software developed by JAXA that estimates rice-planted area using multi-temporal ALOS-2 satellite observation data.

Cooperation Project 21

● Project for Promotion of Sustainable Fisheries in Southeast Asian Region

(1) Summary of Activity

Government of Japan

Japanese Trust Fund

Southeast Asian Fisheries Development Center (SEAFDEC)
(Member Countries:
ASEAN Member States (excluding Timor-Leste) and Japan)
Implementing activities to promote the sustainability of fisheries in the ASEAN region.



(2) Expected Effect

①Promotion of resource management

②Promotion of sustainable aquaculture

③Promotion of common measures against IUU fishing and other issues

Realization of sustainable fisheries in the Southeast Asia

(3) Progress of major projects

(Project period: 2025-2029, Target countries: All ASEAN Member States(excluding Timor-Leste))

- Developing resource assessment methods for pelagic fish such as horse mackerel, sharks and rays, and tropical eels.
- Developing aquaculture techniques for coastal tuna, horse mackerel, tropical eels, oysters, sea cucumbers, etc.
- As part of efforts to combat IUU fishing, i) conducting surveys on implementation status of member countries and training regarding fisheries Monitoring, Control and Surveillance (MCS) measures; and ii) improving the catch certification app for ensuring traceability of catches.



Regional Training on Strengthening Capacity of Implementation for MCS in Southeast Asia



M.V. SEAFDEC 2 used for fisheries resource surveys of pelagic fish
(Research vessel provided to SEAFDEC by the Government of Japan in 2003)

Cooperation Project 22

● Demonstration project on the application of biological control agents (BCA) as a countermeasure against antimicrobial resistance (AMR) in aquaculture and livestock in ASEAN

(1) Summary of Activity

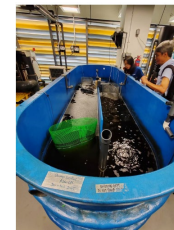
Exploring alternative solutions to combat antimicrobial resistance (AMR) in the ASEAN region, and involving a combination of in vitro and in vivo studies, as well as field trials, to assess the efficacy of BCA (Biological Control Agents)-based strategies in controlling various diseases in aquaculture and animal husbandry.

(2) Expected Effect

- Conduct demonstration trials on BCA in aquaculture and livestock in collaboration with the National University of Singapore (NUS), Mahidol University, and other research institutions.
- Generate preliminary data on the efficacy of BCA in aquaculture and livestock and conduct laboratory analyses to support scientific evaluation.
- Advance preparations for training at model farms and the development of technical reports and policy briefs.

(3) Progress

- Period: 2024.March – 2026.October
- Participants countries: ASEAN Member States
- Proponent: Food, Agriculture and Forestry Division, ASEAN Secretariat



Cooperation Project 23

● Global Application of Next-Generation Biomass Upcycling Technologies

(1) Summary of Activity

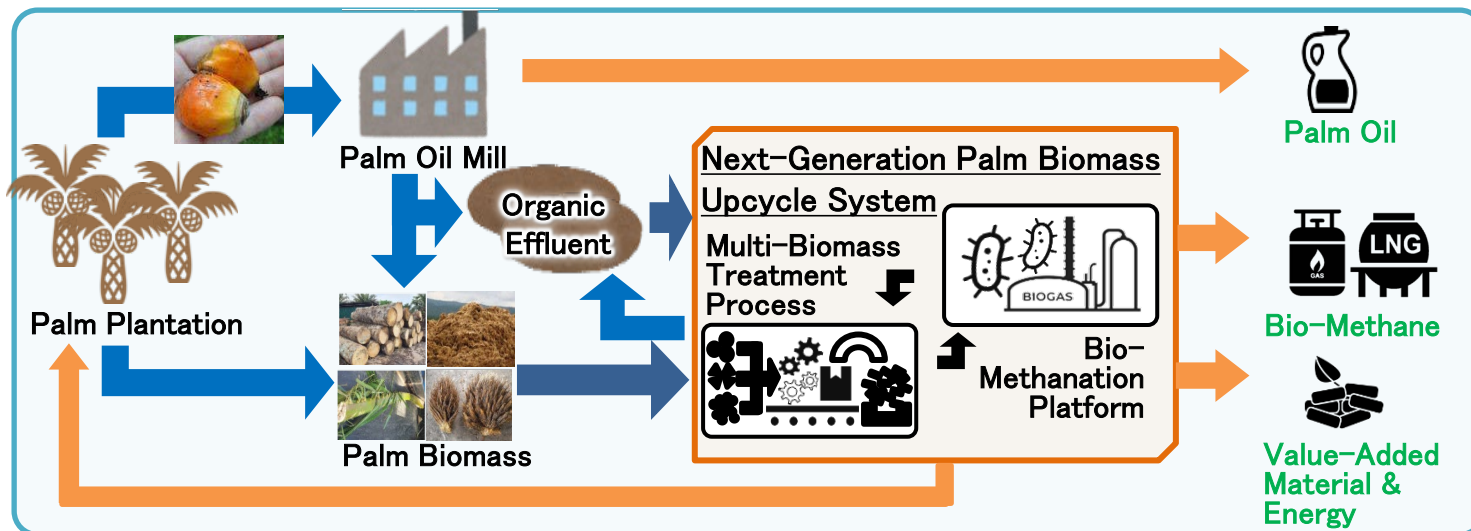
- Reducing environmental impact by utilizing unused palm biomass as a high-value-added resource.
- Development and demonstration of Next-Generation Biomass Upcycling Technologies to transform palm production into a sustainable industry.

(2) Expected Effect

- Realization of highly economical palm biomass utilization
- Creation of sustainable food, materials, and energy industries

(3) Progress

- Participating country: Malaysia
- Period: 2025. April – 2028. March



Cooperation Project 24

● Development of rice cropping systems toward carbon neutrality and food security in ASEAN countries

(1) Summary of Activity

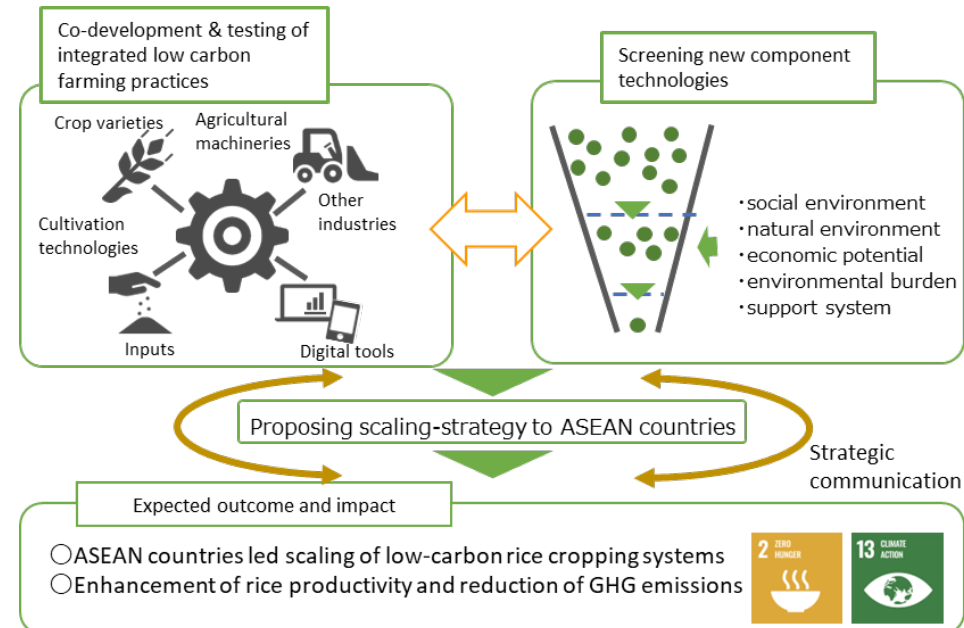
Co-development & testing of integrated low carbon farming techniques combined with local agricultural practices, Screening new component technologies, Proposing scaling-strategy to ASEAN countries

(2) Expected Effect

- ASEAN countries led scaling of low-carbon rice cropping systems
- Enhancement of rice productivity and reduction of GHG emissions

(3) Progress

- Period: 2024. June – 2028. May
- Participating countries
(The Philippines, Vietnam)
- It was clarified that these management of water, rice straw, and fertilizer contribute greatly to reducing GHG emissions.



Cooperation Project 25

●Paddy field water level monitoring and alternate wetting and drying (AWD) pilot project

(1) Summary of Activity

- Developed a model in Thailand for analyzing paddy field water levels.
- Evaluated and validated the developed model using data from the Philippines, Vietnam, and Cambodia.

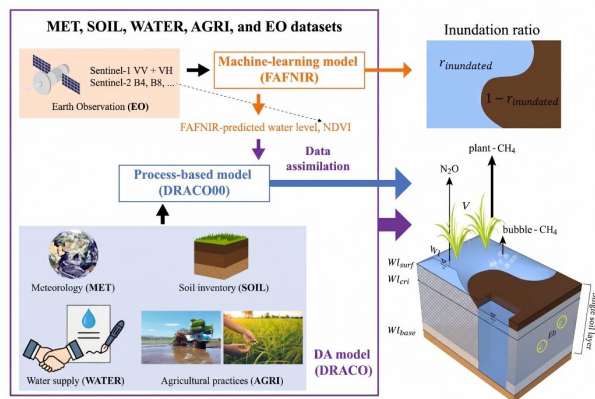
(2) Expected Effect

- Water Resource Management: Reduce water usage and improve the efficiency of agricultural water management.
- Greenhouse Gas (GHG) Reduction: Enable reductions in methane emissions from rice cultivation.

(3) Progress

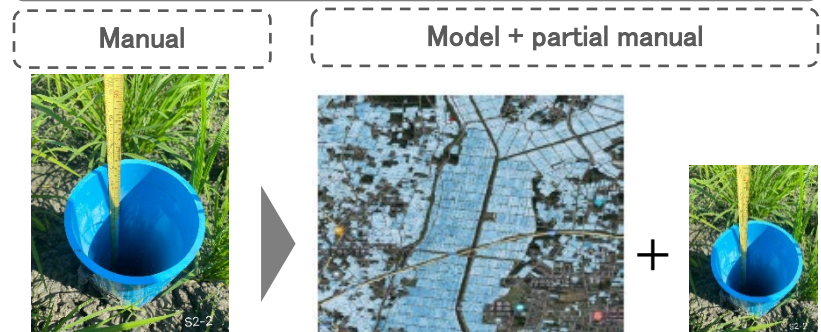
- Application to JCM: Working with research institutes in Japan and the Philippines to incorporate the model into JCM methodology. Aiming to quantify GHG emission reduction using the model.
- R&D Collaboration: Published a research paper on the developed model. Promoting local adaptation in collaboration with institutes and universities in the Philippines and Cambodia.

Dynamic and Regulatory AWD Conditions Optimiser



This diagram illustrates the overall model architecture (DRACO) which estimates inundation and water levels from satellite data and connects to GHG estimation.

Consideration of adoption into JCM credit methodology



Source: Sagri Co., Ltd

Cooperation Project 26

● Reducing GHG emissions from livestock by feeding cashew nutshell liquid

(1) Summary of Activity

- Providing cattle methane suppressing feed containing cashew nutshell liquid (CNSL).
- CNSL regulates rumen function and suppresses enteric methane emission from ruminants.
- Considering projects to support GHG reduction activity by livestock producer and food chain company.

(2) Expected Effect

- Suppressing methane production per unit of dry matter intake without reducing feed digestibility.
- There is potential to generate additional revenue by utilizing the carbon credit system.
- Improving production efficiency of beef and dairy cattle and contributing sustainable livestock farming.

(3) Progress

- Feeding experience and knowledge accumulation in Japan over 10 years.
- Research and implementation activities have been proceeded in Japan, the US, and other countries.
- The demonstration in Vietnam reports methane reduction from local cattle by 20.2–23.4%.
- Exploring cooperative players in ASEAN member states for demonstration and implementation.

What is the Cashew Nut Shell Liquid (CNSL)?

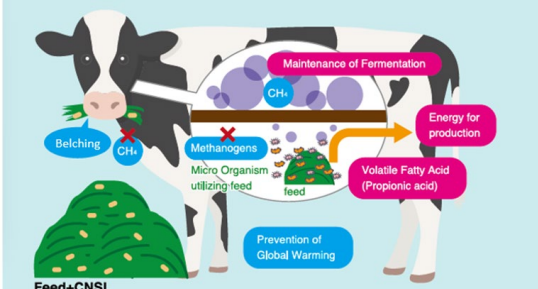


Cashew nut shell that are normally discarded can be utilized very effectively!

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Mechanism of the CNSL feed for cow



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Source: SDS Biotech K.K.

Cooperation Project 27

● Soil Restoration and carbon removal with High-Performance Biochar

(1) Summary of Activity

- Producing high-performance biochar enriched with selected beneficial soil microbes.
- Applying it to upstream farmland in the supply chain in collaboration with major food companies.

(2) Expected Effect

- Enhances soil chemically, physically, and biologically, shortening the usual multi-year soil improvement period.
- Boosts crop yields using compost and other organics due to better soil conditions.
- Sequesters carbon in soil, contributing to atmospheric CO₂ reduction.

(3) Progress

- Thailand (2023-): Partnering with a Thai conglomerate and a global beverage company to build a supply chain that raises soil fertility while sequestering carbon. Local subsidiary (Siam TOWING Co., Ltd.) established in April 2026.
- Indonesia (2024-): Structuring oil palm projects with palm oil and related companies, and preparing cultivation trials with a local university.



Crop under cultivation in Thai



High performance biochar

Source: TOWING Co., Ltd

Cooperation Project 28

● Promoting forest projects (REDD+ and afforestation/reforestation) on Joint Crediting Mechanism (JCM)

(1) Summary of Activity

- JCM contributes to climate change mitigation and supports the achievement of the NDCs of both Japan and partner countries by dissemination of advanced decarbonizing technologies and implementation of mitigation activities.
- Develop JCM rules and guidelines unique to the forest sector, in collaboration with partner countries, to enable the Japanese private sector to implement REDD+ and afforestation/reforestation (A/R) projects.

(2) Expected Effects

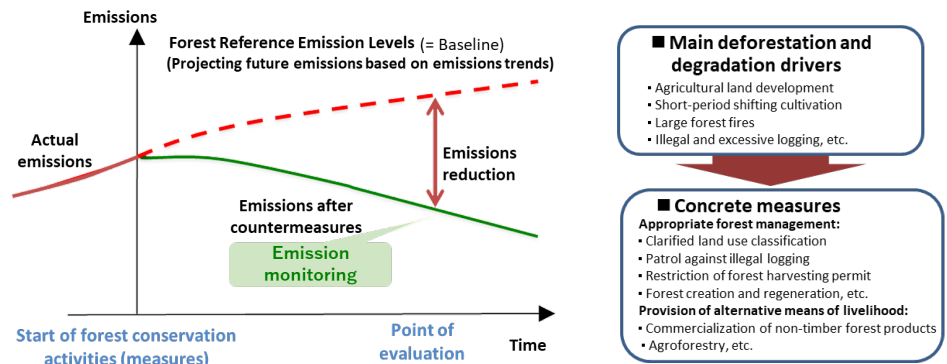
- Contribute to the reduction of deforestation and forest degradation, as well as to forest restoration in partner countries.
- Contribute to climate change mitigation and the achievement of Japan's NDC

(3) Progress

- The JCM forest rules and guidelines aligned with Article 6 of the Paris Agreement have been adopted in the Philippines and Cambodia in FY2025. Discussions are ongoing with Laos on revising the existing guidelines.
- In the Philippines, a private company is in the process of registering a new A/R project.



【Workshop on JCM guidelines for REDD+ and A/R in the Philippines】



REDD+: Reducing Emissions from Deforestation and Forest Degradation in Developing countries, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

Cooperation Project 29

● Project for Human Resource Development in Agriculture and Food-Related Areas through Partnership with Universities in ASEAN Region - Phase 4

(1) Summary of Activities

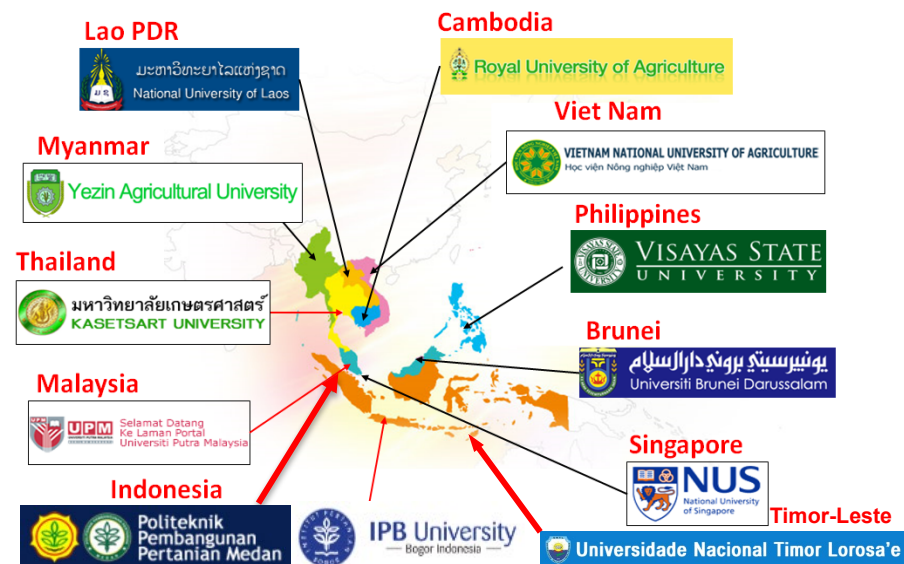
- Develop human resources in agriculture and food-related areas at universities and related local entities and organisations including food-related government agencies in the ASEAN region.
- In collaboration with 11 partner universities and one organisation in AMSs, conduct the programmes to enhance Food Value Chain (FVC), Food Safety Management (FSM) and Food Analysis (FA), and study tours and internships in Japan.

(2) Expected Effects

- Contributing to the development of the local food industry and strengthening future food security through the young generation in the ASEAN region learn cutting-edge technologies that contribute to improving the sustainability and adding value to the agriculture and food industries, in collaboration with industries, academia and governments.
- Disseminate the standards and knowledge of FSM and FA, which will form the foundation in the food industry.

(3) Progress

- Phase 1 started in 2014.
- Phase 4 began in 2024 and is scheduled to conclude at the end of 2026.



Cooperation Project 30

● Development of GHG emission reduction technologies through a large paddy area water management system

(1) Summary of Activity

This project is being implemented as “Project for Development and Social Implementation of Greenhouse Gas Emission Reduction Technologies in Paddy Fields of West Tonle Sap Lake by Establishing a Large Paddy Area Water Management System” (SATREPS) supported by JICA and JST. Project Objective : "Water Management System for Methane Emission Reduction" with monitoring and evaluation methods site will be developed and applied.

(2) Expected Effect

- Output1: “Water Management System for Methane Emission Reduction” is established in the model site.
- Output2: An estimation method for methane emission reduction in a large paddy area under the “Water Management System for Methane Emission Reduction” is developed.
- Output3: A framework for the sustainable implementation of the “Water Management System for Methane Emission Reduction” is proposed.



(3) Progress

- Data observation and measurement equipment were installed, and data collection on conventional water management methods has been continued to establish a baseline. In addition, a data monitoring system was established to support data analysis for the introduction of AWD irrigation and for the development of new GHG monitoring methods.
- The installation of a water management system that reduces methane emissions and related equipment has been completed, and trial operations have begun. A Farmer Water User Sub-Community (FWUSC) was formed to ensure the appropriate and sustainable operation of the system.



Cooperation Project 31-1

● Support for DX, GX and value chain linkages in agricultural cooperatives

(1) Summary of Activity

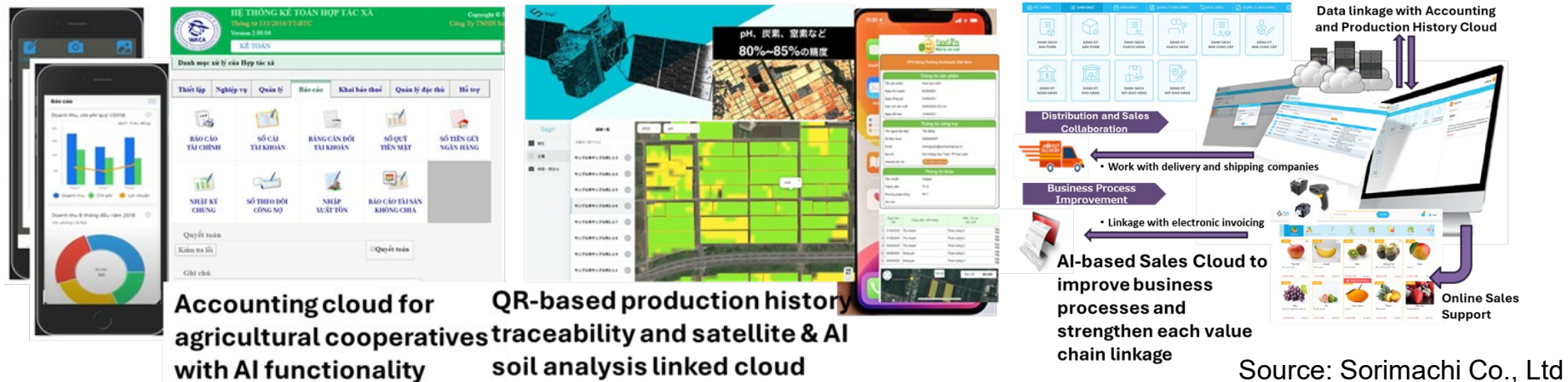
- DX services for agricultural cooperatives enable the digitalisation of the management and production history of agricultural cooperatives and the linkage of food value chains.

(2) Expected Effect

- Contributing to the efficiency of agricultural cooperative management and optimisation of production, as well as to the high added value of the crops sold.

(3) Progress

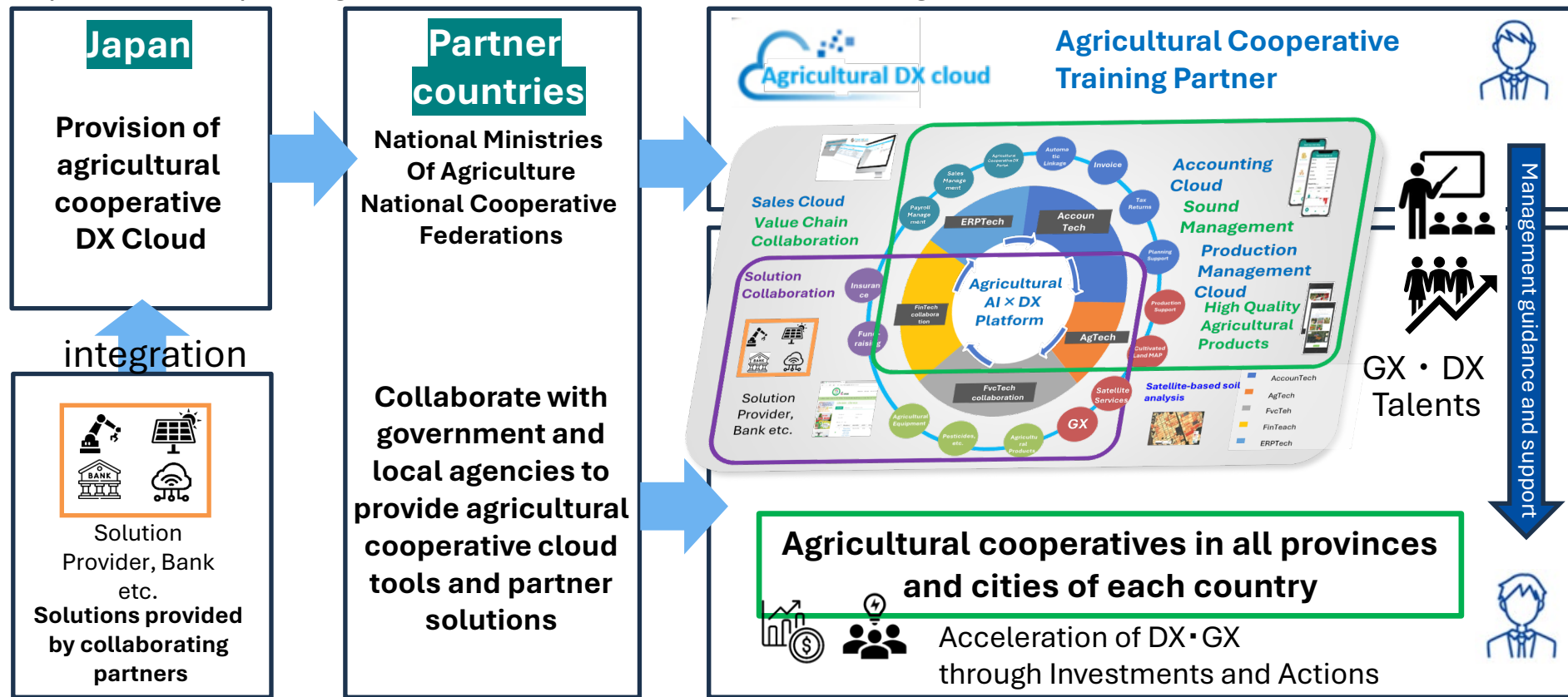
- Vietnam: in collaboration with the Ministry of Agriculture and Environment and others, the introduction of Accounting and Production History Cloud is being supported for agricultural cooperatives nationwide. Plans are in place to develop a Sales Cloud from 2025 onwards. Plans to expand other content in the future.
- Next countries to be selected and surveyed for deployment (additional surveys will be considered if requested by government agencies in other countries).



Cooperation Project 31-2

● Support for DX, GX and value chain linkages in agricultural cooperatives

(Reference) Image of the development of DX in agricultural cooperatives.



Improving management capabilities of Agricultural Cooperatives and Farmers, promoting DX, reducing and using AI for book-keeping tasks

Source: Sorimachi Co., Ltd

Cooperation Project 32

● Solving problems of livestock farmers (cattle) by using IoT technology

(1) Summary of Activity

- Utilizing IoT technology, monitoring cattle's behavior 24 hours a day, 365 days a year, makes the situation 'visualization'. Through those data, we support farmers in solving their various problems.

(2) Expected Effect

- Achieving greater efficiency and DX in livestock management promote more sustainable livestock industry.
- Increasing number of cattle by improving reproductive performance, improving productivity make milking production increase.
- Reduction of loss costs through early detection and treatment of diseases.

(3) Progress

- Pilot tests were conducted at some Indonesian farms from 2024 to 1Q 2025.
- Based on the results of the pilot tests, we are currently promoting commercialization for dairy farming in Indonesia and Thailand.



Source : desamis Co.,Ltd.

Cooperation Project 33

● Introducing GHG Reduction and Absorption Technologies in Agriculture to ASEAN Countries (PRISM/BRIDGE)

(1) Summary of Activity

- Deployment of Japanese GHG reduction and absorption technologies, and carbon credit methodologies, to ASEAN Member States (AMS) for promoting sustainable agriculture.

(2) Expected Effect

- Promoting GHG reduction and removal technologies to AMS.
- Creating carbon credit projects in AMS.

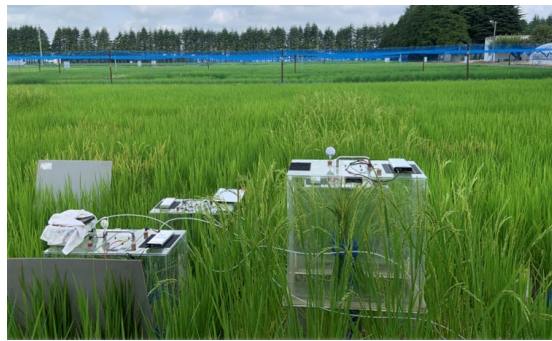
(3) Progress

- Workshops with government agencies in AMS (2025-2026, Thailand and Indonesia).
- Demonstration in AMS (biochar (2024-2026, Thailand and Indonesia), methane reduction in rice paddies (2024-2026, Thailand and Philippines), GHG reduction from livestock-derived sources (2025-2026, Vietnam and Thailand)).
- Japanese GHG reduction and absorption technologies proposed to Thailand Taxonomy were adopted (2025, Thailand).

Biochar workshop session



Demonstration of methane reduction technology in rice paddies



Demonstration of livestock-derived GHG reduction technology



Cooperation Project 34

● Green Asia+: Optimized Practices and Technologies for Inclusive Monsoon-region Agriculture in the Global South (OPTIMA-GS)

(1) Summary of Activity

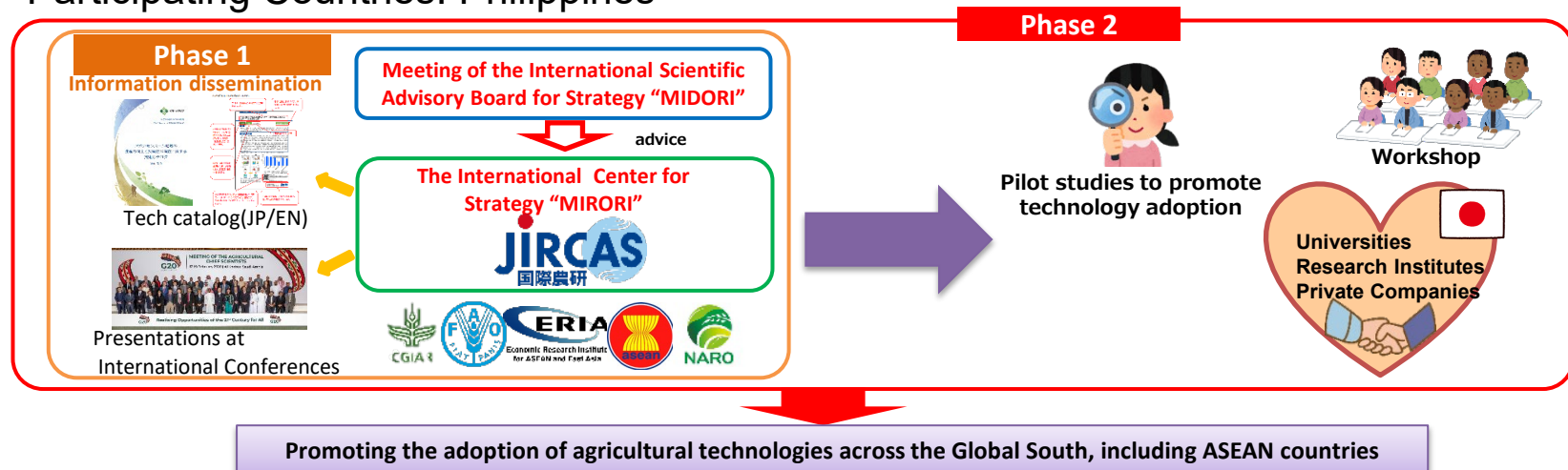
- Collecting, analyzing, and sharing information on scalable technologies applicable to the Global South including ASEAN.
- Promoting adoption of agricultural technologies through collaborative research among research networks of a national research institute.

(2) Expected Effect

- Promoting the adoption of technologies that contribute to climate change mitigation and sustainable agriculture.

(3) Progress

- Period: April 2026 through March 2031
- Participating Countries: Philippines



Cooperation Project 35

● Advancing heat-tolerant rice breeding and low-cost, low-emission cultivation practices to strengthen food security across Asia (ST 1,2,3)

(1) Summary of Activity

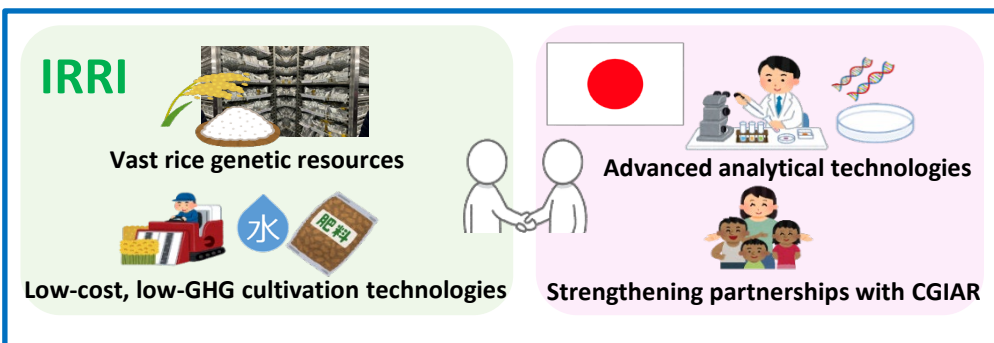
Through collaboration between the International Rice Research Institute (IRRI) and Japanese researchers, this project will develop heat-tolerant rice varieties and low-cost, low-GHG cultivation technologies.

(2) Expected Effect

- Contribute to food security through the development of heat-tolerant rice varieties.
- Contribute to the transition to net-zero GHG emissions through the development of low-cost, low-GHG rice cultivation technologies.

(3) Progress

- Period: March 2026 through March 2032
- Participating Countries: Research activities are underway in the Philippines.



**Developing
heat-tolerant rice varieties and
low-cost, low-GHG cultivation
technologies.**



Cooperation Project 36

● Capacity Development on Agricultural Statistics and Food Security Information for ASEAN Member States

(1) Summary of Activity

Strengthen agricultural statistics and food security information in ASEAN through Customized Technical Distribution, Regional Workshops, In-country Technical Training, and a Web-based Training System under the AFSIS framework.

(2) Expected Effect

- Strengthen the capacity of government officers in ASEAN Member States to produce reliable agricultural statistics and food security information.
- Establish a Web-based Training System to support continuous capacity development and knowledge sharing beyond the project period.
- Enhance regional food security information and policy development through the AFSIS framework.

(3) Progress

- Period: 2026.June – 2028.May
- Participants countries: ASEAN Member States
- Proponent: Office of Agricultural Economics (OAE),
Ministry of Agriculture and Cooperatives, Thailand



Cooperation Project 37

● Capacity Building for Irrigation Asset Management in the CLMV Countries

(1) Summary of Activity

Introduce and disseminate irrigation Asset Management (AM) technology in the CLMV countries through model sites in Lao PDR and Cambodia, including function diagnosis, preparation of function conservation plans, establishment of AM databases, and training of trainers.



(2) Expected Effect

- Disseminate irrigation AM technology to the CLMV countries through verification at model sites.
- Improve the efficiency of operation and maintenance (O&M) through function diagnosis, planned repair, and appropriate budget allocation based on the condition of irrigation facilities.
- Contribute to sustainable food production and stable irrigation water supply in the CLMV region.



(3) Progress

- Period: 2025.November – 2027.May
- Participants countries: CLMV countries (Lao PDR, Cambodia, Myanmar, and Viet Nam), with model sites in Lao PDR and Cambodia
- Proponent: Department of Irrigation (DOI), Ministry of Agriculture and Forestry, Lao PDR; and Ministry of Water Resources and Meteorology (MOWRAM), Cambodia



Cooperation Project 38

● Dissemination of Agricultural Materials Based on Climate Stress Management Technology(CSMT) in ASEAN

(“Decarbonization and Climate Resilience in Agriculture” and “Fostering Public-Private Partnerships and Digital Innovation”)

(1) Summary of Activity

- Agricultural materials based on the climate stress management technology (CSMT) enhance climate resilience and improve fertilizer uptake efficiency in the production of grains, vegetables, fruits, flowers, and other crops, thereby contributing to sustainable agriculture under climate change in ASEAN.

(2) Expected Effect

- Improving local agricultural productivity and reducing environmental impacts through dissemination of the agricultural materials based on CSMT in each country

(3) Progress

- Project Period: From 2024 (on-going)
- Target Countries: Vietnam, Thailand, Cambodia, Malaysia, Indonesia
- Main Activities

- ① Conducting field demonstrations using agricultural materials based on CSMT
- ② Establishing public-private partnerships with local companies and government



① Cabbage demonstration in Cambodia
*The area on the right is the CSMT treatment plot



② the Public-Private Forum on Vietnam-Japan Agricultural Cooperation Dialogue

Cooperation Project 39

● Project Farm management service using remote sensing technology for Philippine banana production (ST 5)

(1) Summary of Activity

- TR4 (Tropical Race 4), a soil-borne disease, is spreading damage across banana plantations in the Philippines. This project aims to digitize plantation management by using drones to detect TR4 infection at an early stage from the air and to map aerial imagery of the plantations, thereby improving overall productivity.

(2) Expected Effect

- Early detection of infected areas to prevent further spread of the disease
- Improved productivity of export-oriented banana production and accurate monitoring of crop growth conditions

(3) Progress

- Joint project with the Philippine Department of Agriculture (April 2026 – March 2027)
- Survey on the Needs of Banana production company in Philippine (April 2024 to the present)



Signing the MOU with DA



Survey with DA and Cooperative



Drone shooting

Cooperation Project 40

● Building a Sustainable Palm Oil Sourcing Model through a Landscape Approach (ST1. Promoting Sustainable and Regenerative Measures)

(1) Summary of Activity

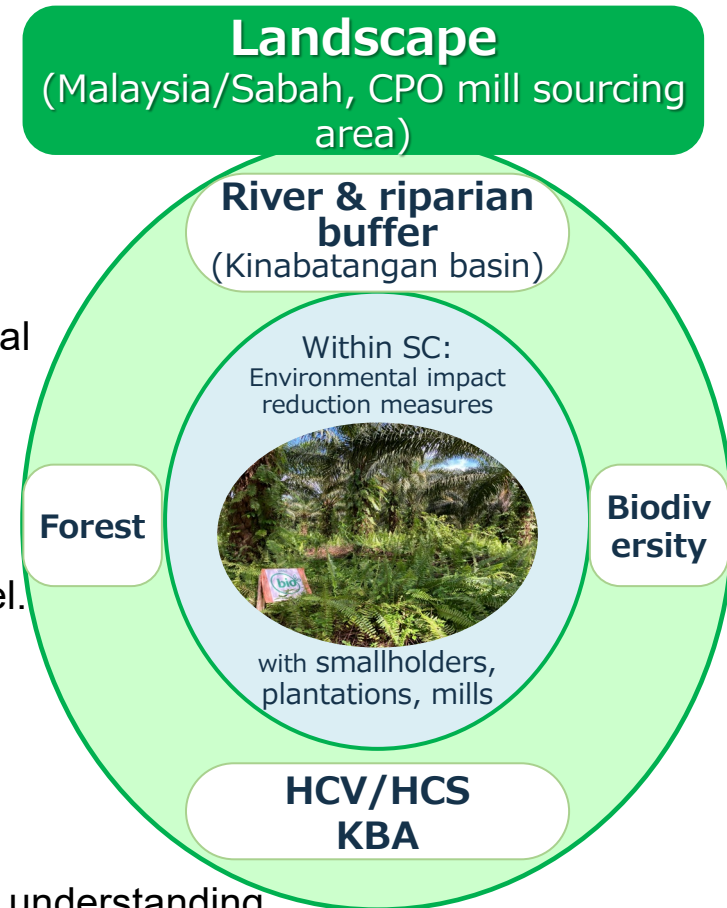
- A landscape approach centered on the sourcing area of an Crude Palm Oil (CPO) mill located in Sabah, Malaysia.
- An inclusive initiative that builds a mass-balance supply chain (SC) engaging not only large plantations but also smallholders.
- Multi-stakeholder collaboration with smallholders, plantations, CPO mills, refineries, RSPO, local government-linked companies, government agencies and NGOs, based on partnership with a local social enterprise.

(2) Expected Effect

- Strengthen sustainability in mass-balance sourcing by promoting low carbon and decarbonization, nature-positive actions and respect for human rights both within the SC and at landscape level.
- Build a sustainable palm oil production and stable supply model while realizing coexistence and shared prosperity with local communities and the natural environment.

(3) Progress

- The project selected for the subsidy project by the MAFF, Japan.
- In FY2025, a basic survey was conducted and memorandums of understanding were concluded with stakeholders, with commercialization targeted during FY2026.
- Although this initiative combines “Malaysia × palm oil,” the model could be expanded to other ASEAN regions and other commodities.



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