

JICA Global Agenda for No. 5 **Agricultural and Rural Development** (Sustainable Food Systems)



SUSTAINABLE
DEVELOPMENT
GOALS



Japan International Cooperation Agency (JICA) works toward the achievement of the Sustainable Development Goals (SDGs).

1. Objective

(1) Objective of Global Agenda

By promoting sustainable and inclusive agricultural and rural development and stimulating agriculture (including fisheries and the livestock industry) and related industries (such as processing and distribution), JICA aims to eradicate poverty in rural areas through increasing farmers' income and revitalizing rural economies, as well as to ensure food security through the stable production and supply of food¹.

(2) Objective of Development Scenarios (“Clusters”)

In order to achieve the above objective, JICA strives to deliver the following results in the Global Agenda. ((I) to (V) below are the clusters that JICA places a particular focus on for that purpose.)

- Building an inclusive food value chain (FVC) that smallholders can participate in and benefit from and promoting agriculture and related industries.
 - (I) Smallholder Horticulture Empowerment & Promotion (SHEP) Approach,
 - (II) Building a Food Value Chain (FVC) in Southeast Asia)
- Promoting rice cultivation to create stable production and supply of rice.
 - (III) Coalition for African Rice Development (CARD)
- Managing and utilizing fishery resources appropriately and promoting fisheries.
 - (IV) Promotion of the Fisheries-centered Blue Economy in island countries
- Improving livestock hygiene and promoting the livestock industry.
 - (V) Promotion of the “One Health” concept through strengthening of livestock hygiene

2. Current Status and Analysis of Issues and Reasons for Setting the Objective

(1) Current Status and Analysis of Issues

Eradication of poverty in among farmers and in rural areas and economic growth

About 80% of the world's population in poverty and hunger live in rural areas², with the

¹ In the Global Agenda, 'agriculture' includes the livestock and fishery industries, 'farmer' includes fishers, 'rural areas' includes fishing villages, and 'agricultural products' includes fisheries products.

² Up to 2010, 78% of the poorest poor lived in rural areas. (World Bank, 2015)

poorest especially concentrated in rural areas. Sixty-three percent of the people who subsist on 1.90 dollars or less a day are engaged in agriculture, and the number reaches 500 million around the globe. Agriculture remains the main source of livelihood for the people in most low- to middle-income countries. Especially in Sub-Saharan Africa, poor families in rural areas tend to be more dependent on agriculture than non-poor families³, yet labor productivity is far lower in the agriculture sector than other sectors, creating an urban-rural economic gap. To achieve the Goal 1 of SDGs (No Poverty), it is essential to eradicate poverty in rural areas by promoting agriculture and related industries. In developing countries where agriculture accounts for a high ratio of the GDP and of jobs, agricultural and rural development is the key to eradicating poverty.

Most agriculture is small-scale family farms (smallholders)⁴. Many smallholders are unable to switch to commercial farming and labor productivity is low, so increased agricultural production does not always translate to greater agricultural income. Smallholders abandoning farming leads to devastation in rural communities, and it is important to promote agriculture as a business and ensure families can earn a livelihood in agriculture.

Meanwhile, with the expansion of the middle class accompanied by economic growth, food demands of consumers is increasing and diversifying, and FVCs are being built to cover all the steps from production of agricultural products to processing, distribution, and consumption. Thus, there is a higher potential for smallholders to increase agricultural income by producing and supplying market-oriented agricultural products,

Eradication of hunger and promotion of food security

Goal 2 of the SDGs (Zero Hunger) aims to eradicate hunger by 2030, yet the number of the world's population of chronic hunger has been increasing since 2014. Achievement of this goal has been further hindered by the COVID-19 pandemic. The world's food demand is estimated to increase 1.7 times from 2010 to 2050. With changes in food demands through population growth and economic development⁵, this increase is predicted to be about 2.7 times in low-income countries and 1.6 times in middle-income countries. Nearly 800 million people still lack sufficient food, but about a third of food produced is wasted. More efforts should be made to reduce food waste and improve food security⁶.

Food security for one country is usually achieved through a combination of domestic production, imports, and reserves. When there is a gap between domestic supply and demand, policies are needed to promote production and foreign trade. Especially developing countries with limited foreign currency reserves must be well-prepared to handle soaring

³ Agriculture accounts for only about 10% of the GDP in low- to middle-income countries but as much as about 45% of the labor force. The proportion of the agricultural labor force is 54.4% in East Asia and Oceania, 50.5% in South Asia, and 56.5% in Sub-Saharan Africa, and tends to be higher in low income countries. (FAO, 2015)

⁴ Over 90% of farms around the world (over 500 million farms) are run by families or individuals. Over 375 million farmers make a living on less than 1 hectare of land. (FAO, 2014)

⁵ The meat consumption per person increases with increasing per capita income. The amount of grain needed to produce 1 kg of beef, pork, and chicken is 11 kg, 7 kg, and 4 kg, respectively (https://www.maff.go.jp/chushi/jikyuu/pdf/shoku_part1.pdf), thus an increase in meat consumption leads to an increased demand for grain.

⁶ Food waste is a major problem in the consumption phase in developed countries while the production and distribution phases in developing countries.

prices in international markets and reinforce systems to secure domestic food production and supply to a certain extent.

As food production in many developing countries is supported by smallholders⁷, promoting agriculture and related industries and enabling smallholders to make a living is critical for stable production and supply of food to ensure food security.

(2) Rationale for Setting the Global Agenda Objective

Based on the current situation and issues in developing countries outlined in (1), this Global Agenda promotes sustainable and inclusive agricultural and rural development and stimulates agriculture and related industries with the aim of eradicating poverty in rural areas by increasing farmers' income and revitalizing rural economies and by creating food security through the stable production and supply of food.

To achieve the Global Agenda objective, JICA primarily addresses building of an inclusive FVC, promotion of rice cultivation, management and utilization of fishery resources, and promotion of livestock farming and improved livestock hygiene. Among JICA's initiatives, (I) to (V) below are the Clusters that JICA places a particular focus on.

Building of an inclusive FVC

Increasing agricultural income requires production and supply of market-oriented agricultural products, including by smallholders, and boosting of earnings from agriculture. However, linking diversified and increasing consumer needs to market needs for agricultural products requires building an FVC with added value at each step from production of agricultural products to processing, distribution, and consumption. In addition, as the agro-processing industry and other related industries developed in the FVC building process are generally labor intensive, creates more job opportunities, and provide opportunities for rural residents to secure a non-agricultural income, thus the increase in income can be expected through income source diversification.

Accordingly, increasing farmers' income and revitalizing rural economies requires programs to promote agriculture and related industries by stimulating market-oriented production and supply by smallholders and building an inclusive FVC in which the farmers also profit.

(I) Smallholder Horticulture Empowerment & Promotion (SHEP) Approach

Although agriculture is the primary source of livelihood for rural residents, greater agricultural production does not necessarily translate to greater income. Many smallholders cannot sell or profit from their products, and it is necessary to promote market-oriented agriculture in which production and sale of agricultural products is based

⁷ Family farms account for about 70 to 80% of the world's agricultural land and over 80% of the world's food supply. (FAO, 2014)

on market needs.

To address this challenge, JICA has collaborated with the Government of Kenya to develop the SHEP approach, which promotes market-oriented agriculture by smallholders. The SHEP approach increases farmer's motivation to run farms as a business and change their mindset from 'grow and sell' to 'grow to sell.' It also boosts their farm management skills including marketing skills by correcting the asymmetry of information between the farmers and market-related individuals. Since declaration at TICAD V in 2013 to provide support using this approach, JICA has extended support over 30 countries, mostly in Africa. JICA has also conducted academic research to verify the effectiveness of the approach. Based on the research results, at TICAD 7 in 2019, JICA made the 'SHEP One Million Declaration' to support one million smallholders with the SHEP approach together with partners such as African governments, the International Fund for Agricultural Development (IFAD), and private enterprises.

Based on the above, the Global Agenda continues to prioritize promotion of market-oriented agriculture by smallholders using the SHEP approach.

(II) Building a Food Value Chain (FVC) in Southeast Asia

Profound development effect can be expected by building an inclusive FVC particularly in Southeast Asia where consumer needs for foods are increased and diversified with economic growth and the proximity to huge markets such as China. The region also has strong geopolitical and socioeconomic links with Japan, thus there is great potential for utilizing food and agriculture technologies of Japanese companies in the food and agriculture industry and Japan's experiences in agricultural and rural development.

Based on the above, the Global Agenda prioritizes building the FVC in the respective regions.

Promotion of rice cultivation

Rice is a staple food in many parts of Asia and demand is increasing in Africa as well with population growth and urbanization. As such, stable production and supply is needed from the perspective of food security. In addition, the global market for rice is much smaller than for wheat and corn and there is an elevated risk of prices soaring when extreme weather or other factors cause drops in production and supply by rice exporting countries. Japan has a wealth of expertise and technologies related to rice cultivation as well as experience in international cooperation.

From the perspective of food security, programs to promote rice cultivation among crops are especially important.

(III) Coalition for African Rice Development

In Africa, rice demand is increasing due to greater rice consumption with population growth and urbanization, but many countries are rice importers as their domestic

production cannot keep pace with domestic demand.

Given the above situation, JICA partnered with the Alliance for a Green Revolution in Africa (AGRA) to launch the Coalition for African Rice Development (CARD) at TICAD IV in 2008 and worked with other donors to promote rice cultivation in African regions, achieving its target of doubling rice production in Sub-Saharan Africa (from 14 million tons to 28 million tons). However, demand for rice rose above the production level during that period, and JICA set a new target from 2019 of further doubling rice production (from 28 million tons to 56 million tons) and is carrying out cooperation projects.

Based on the above, the Global Agenda continues to prioritize promotion of rice cultivation in regions of Africa with CARD.

Management and utilization of fishery resources

The estimated number of people working in fisheries (fishing and aquaculture industry) globally is over 58.3 million⁸. Fishery products are an important source of foreign currency revenue for developing countries and effective use of fishery resources offers great potential benefits. Fish is also a relatively inexpensive source of animal protein in fishing village regions, and promotion of fisheries contributes to the stable supply of highly nutritious food.

On the other hand, climate change in recent years has altered the marine environment and coastal ecosystems and overfishing has caused a decline in fishery resources. As a result, about 30% of use is considered unsustainable, creating the need for resource management programs including IUU fishing measures⁹. In addition, promotion of aquaculture has potential as a measure for meeting growing demand for fisheries products.

Consequently, to eradicate poverty in fishing villages and create a stable supply of marine food products, programs are needed to promote fisheries through the appropriate management and utilization of fishery resources.

(IV) Promotion of the Fisheries-centered Blue Economy in island countries

Among developing countries, Small Island Developing States (SIDS) have particularly large geographical constraints such as size, isolation, and remoteness, and limited resources to use as a foundation for industry. Effective use of marine resources in these countries has potential as one of few development options. Fishery resources in particular, are not only valuable exports for SIDS, but also form the foundation for securing a means of livelihood in remote islands for procuring food domestically. SIDS are also vulnerable to natural disasters like cyclones, earthquakes, and tsunamis and fishery resources that are relatively less affected by disasters are often considered as emergency supplies to people affected by disasters. On the other hand, coastal communities in island countries play multi-faceted roles including IUU fishing monitoring in frontier waters, sea rescues, conservation of marine culture and traditions, and protection of important

⁸ FAO, 2015

⁹ Illegal, Unreported and Unregulated

ecosystems like mangroves and coral reefs.

Given this situation, “By 2030, increase the economic benefits to SIDS and least developed countries through the sustainable use of marine resources, including sustainable management of fisheries, aquaculture and tourism” was proposed as an SDG target.

Based on the above, the Global Agenda prioritizes promotion of the Blue Economy in island countries.

Promotion of livestock farming and better livestock hygiene

The livestock industry is a valuable source of revenue for smallholders and an asset that can mitigate livelihood risks. Promoting livestock farming is expected to increase the income of smallholders. In addition, recent economic growth and population growth have brought a trend towards increasing demand for livestock products and processed foods. Especially in Southeast Asia and South Asia, demand roughly tripled from the 1990s to the 2010s, and business opportunities for livestock farmers are increasing.

On the other hand, an increase in production with greater demand for livestock products creates risks of increase in livestock diseases. Livestock diseases are a major factor hindering productivity, and livestock hygiene needs improvement. In addition, the risk of creating and spreading newly emerging and re-emerging infectious diseases¹⁰ originating from animals has been increasing as international trade grows and diversifies and as the movement of people, animals, and livestock products accelerates. Developing countries lack sufficient systems for prevention, diagnosis, and treatment services, and the concern is that these types of diseases could increase and spread domestically and internationally.

Accordingly, there is a need for programs to promote livestock farming and better livestock hygiene as a way to increase farmers' income and create a stable supply of livestock.

(V) Promotion of the “One Health” concept through strengthening of livestock hygiene

Attempts to improve the productivity of livestock products, increased livestock density, overuse of antimicrobial agents, and increased movement of people and livestock, have resulted in the global spread of newly emerging and re-emerging infectious diseases since the 1990s. Strengthening of livestock hygiene including measures against cross-border animal diseases is an urgent challenge for developing countries as well.

Given this situation, international agencies such as the World Organization for Animal Health (OIE) are recommending programs based on a “One Health” concept and carrying out programs to strengthen the Performance of Veterinary Services (PVS) in developing countries. Strengthening of PVS in developing countries is expected to contribute to the

¹⁰ Including zoonotic diseases such as avian influenza that infect both humans and animals.

stable supply of safe livestock products, increase the income of smallholders, and act as a measure against zoonotic diseases including novel coronaviruses.

Based on the above, the Global Agenda prioritizes promotion of the “One Health” concept through strengthening of livestock hygiene.

(3) Trends among International Organizations

Agricultural and rural development is one of the priority policies in many developing countries, and organizations such as the FAO and other United Nations agencies, multilateral development banks, bilateral donors, and international NGOs carry out programs to improve the livelihood of smallholders and improve food security.

The following are recent trends in the international community’s discussions related to agricultural and rural development.

UN Decade of Family Farming

At the 2017 United Nations General Assembly, the UN designated the period from 2019 to 2028 as the ‘Decade of Family Farming’ and is asking member countries and relevant agencies to promote policies and share findings on family farming that plays a key role in ensuring food security and eradicating poverty and hunger.

G20 Summit and Agriculture Ministers’ Meetings

At the G20 hosted by Japan in 2019, the importance of IUU fishing policies was shared in the Osaka Leaders’ Declaration and the importance of innovation, FVC, and SDGs was shared in the Niigata Agriculture Ministers’ Meeting Declaration. At the G20 Agriculture and Water Ministers’ Meeting held in September 2020, global food security during the COVID-19 pandemic was discussed and a declaration was made to: (I) strengthen the food supply chain to prepare for emergencies, (II) increase responsible investment in agriculture and food systems, (III) promote rural development that acknowledges the challenges for many family farms, (IV) eliminate food loss and waste through sharing of good practices and management of animal and plant health, and (V) promote of innovation in agriculture and digital transformation of rural communities.

UN Food Systems Summit

The UN Food Systems Summit held in 2021 aimed to achieve the following five specific targets to support the broad vision of advancing all 17 SDGs.

- Ensure access to safe and nutritious food for all (enable all people to be nourished and healthy and enable gradual achievement of the right to food)
- Shift to sustainable consumption patterns (promote and create demand for healthy and sustainably produced food and eliminate waste)
- Boost nature-positive production (combat climate change without loss of healthy and

nutritious food, reduce emissions, increase carbon capture, regenerate, and protect important bio-systems, and reduce food loss and energy use)

- Advance equitable livelihoods and distribution of value (boost income, diversify risk, increase participation, promote full and productive employment for all, and create jobs)
- Build resilience to vulnerabilities, shocks, and stresses (ensure the continued functionality of healthy and sustainable food systems)

(4) Policy Priorities of the Japanese Government

Japan's Development Cooperation Charter proposes "Quality growth" and poverty eradication through such growth as a priority issue and discusses necessary support for growth of agricultural, forestry, and fishery industries including building of food value chains (FVC) and necessary support for promoting human-centered development to support the basic lifestyle of people including food and nutrition. In addition, to build a sustainable and resilient international community through efforts to address global challenges, the Japanese government is carrying out programs for the sustainable use of agricultural and marine resources, food security, and nutrition.

The following are priorities in the Global Agenda concerning main policies in recent years.

Free and Open Indo-Pacific (FOIP)

Measures against overfishing and IUU fishing and policies to develop remote islands are priorities for contributing to FOIP. In the Global Agenda, JICA promote the Blue Economy, mostly in island countries, and contributes to resource management including IUU fishing measures and to securing economic feasibility.

Strategy for Infrastructure System Exports

The food and agriculture sector is being proposed as concrete measures for developing new infrastructure sectors. In the Global Food Value Chain (GFVC) Strategy (2016), industry, academia, and government are collaborating to support the international expansion of Japanese companies using the strengths of Japanese food industry and the building of a global FVC. The Global Agenda contributes to the international expansion of Japanese companies through programs to build FVCs in regions such as Southeast Asia that are of particular interest to Japanese companies.

Strategy for Sustainable Food Systems (MeaDRI¹¹)

To build sustainable food systems, MeaDRI promotes programs in each stage (procurement, production, processing and distribution, and consumption) from a medium- to

¹¹ Measures for Achievement of Decarbonization and Resilience with Innovation

long-term perspective and innovations to reduce the environmental load, for example by achieving carbon neutrality. As a model for creating new sustainable food systems in the Asia-Monsoon region that has different climate conditions and production structure from Western countries, Japan plans to propose MeaDRI at the UN Food Systems Summit to be held in September 2021 and other venues. As part of the Global Agenda, JICA will build smart food chains (SMC) and reduce the environmental load when building the food value chain (FVC) in Southeast Asia.

Tokyo International Conference on African Development (TICAD)

At TICAD, Japan and JICA declared the following types of cooperation.

- **Coalition for African Rice Development (CARD):** In TICAD IV, JICA proposed and achieved the goal of doubling rice production in Sub-Saharan Africa from 14 million tons to 28 million tons. In the General Meeting for CARD and TICAD 7, JICA proposed the target of further doubling rice production (from 28 million tons to 56 million tons) based on the increase in demand for rice with the growing population in Africa and the increasing popularity of rice.
- **Smallholder Horticulture Empowerment & Promotion (SHEP):** At TICAD V, JICA declared its intent to aid smallholders in 10 countries using the SHEP approach and train 1,000 agricultural technical officers and 50,000 farmers, with the aim of promoting profitable agriculture. JICA surpassed that target and, at TICAD 7, declared a new target of delivering agricultural extension services to one million farmers around the world in collaboration with partners¹² who agree with the approach (SHEP One Million Declaration).
- **Blue Economy:** At TICAD 7, thematic meetings were held on the Blue Economy, in JICA presented programs concerning the use of fishery resources including freshwater aquaculture resources were presented and declared further support through human resource development.

3. Significance of Japan's and JICA's Engagement

(1) Building of an Inclusive FVC

In Japan, the urban-rural income gap increased during the rapid growth period. In response, Japan attempted to revitalize rural economies with programs such as the One Village One Product movement and programs to selectively increase production of

¹² African government officers, IFAD, Sasakawa Africa Association, Mitsui & Co. / ETG, and Itochu Corporation joined the declaration.

agricultural products (e.g. horticultural crops, livestock products) that are increasing in demand. Japan has also worked to eradicate poverty in rural areas through livelihood improvement campaigns, including empowerment of women in rural areas. In recent years, Japan has been carrying out regional revitalization programs throughout the country through “sixth industrialization” that is a new industry formed by linking production of agricultural, livestock and fisheries products (primary industries) with food processing (secondary industries) and distribution/sale (tertiary industries).

JICA has carried out cooperation projects based on this domestic experience and expertise, and is currently promoting agriculture using the SHEP approach and carrying out cooperation projects based on the FVC concept in various countries.

In addition, FVC development support also boosts development of overseas business by Japanese companies in the food and agriculture sector, aids in promoting export of agricultural, forestry, and fishery products and food products from Japan¹³, leads to diversification of importers of safe food and contributes to food security in Japan.

(2) Promotion of Rice Cultivation

With its wealth of expertise and technologies related to rice cultivation and international cooperation personnel, Japan has carried out cooperation projects for stable rice production for many years, mostly in Asia, contributing to food security in the region. In Africa that has seen a rapid rise in demand for rice since 2008, Japan has been providing assistance to increase rice production through CARD and succeeded in doubling rice production in Africa during the ten-year period from 2008 to 2018.

Japan therefore has a wealth of domestic resources related to rice cultivation and experience in international cooperation, enabling effective cooperation using those tools.

(3) Management and Utilization of Fishery Resources

In Japan, many fisheries are small-scale coastal fishers, catching a variety of fish with a variety of methods, and fishery harbors that are the landing place are dispersed. These characteristics are similar to those of many developing countries. Japan also has a wealth of useful expertise that can be applied in island countries, like fisheries co-management controlled by Fisheries Cooperatives and the “Satoumi” concept. From its experience using that expertise in Oceania and the Caribbean countries and with JICA’s accumulated practical knowledge on promoting fisheries co-management management and creating alternative livelihood activities, JICA can contribute to both the sustainability of fishery resources and economic development at the same time.

¹³ Development of FVCs in developing countries in collaboration with Japanese companies will also contribute to the increase in the value of Japan’s agricultural, forestry, and fishery product and food product exports as proposed by the government of Japan (two trillion yen by 2025 and five trillion yen by 2030) (https://www.maff.go.jp/shokusan/hq/attach/pdf/export_yosan-3.pdf).

In addition, appropriate management and utilization of fishery resources contributes to Japan's food security as a fishing country as well as a fishery importer.

(4) Promotion of Livestock Farming and Better Livestock Hygiene

Japan has varied farming and management styles suited to the environment or land infrastructure such as large dairy farms in Hokkaido, suburban and semi-mountainous area pastures, and crop-livestock combination farms in Honshu areas, and public organizations related to the livestock industry, universities, and private enterprises have accumulated unique livestock farming technologies based on those farming and management styles. Moreover, Japan has experiences in livestock infection prevention and hygiene management based on Hazard Analysis Critical Control Point (HACCP). These experiences are also useful for livestock industry development and livestock disease control in developing countries.

Also, as livestock diseases like foot-and-mouth disease and avian flu cross borders, improving livestock hygiene in developing countries, especially in Asia, is important for the livestock industry in Japan as well.

4. Scenarios Contributing to Objectives of the Global Agenda, and Clusters

(1) General Stance on and Approach to the Global Agenda

Based primarily on the achievement of Goal 1 (No Poverty), Goal 2 (Zero Hunger), and Goal 14 (Life Below Water) of the SDGs and with the aim of helping eradicate poverty in rural areas by increasing farmers' income and revitalizing rural economies and creating food security through the stable production and supply of food, this Global Agenda promotes agriculture and related industries through the building of an inclusive FVC, promotion of rice cultivation, management and utilization of fishery resources, and promotion of livestock farming and better livestock hygiene in rural areas where the world's poor and hungry are concentrated.

Priority will be given to the following five Clusters while strengthening domestic and international industry-academic-government partnerships: (I) Smallholder Horticulture Empowerment & Promotion (SHEP) Approach, (II) Food value chain (FVC) development in Southeast Asia, (III) Coalition for African Rice Development (CARD), (IV) Promotion of the Blue Economy in island countries, and (V) Promotion of the "One Health" concept through strengthening of livestock hygiene.

Target regions for clusters

	South east Asia	Oceania	East Asia	Central Asia	South Asia	Central and South America	Africa	Middle East	Europe
SHEP	○	○	○	○	○	○	○	○	○
CARD							○		
FVC	○								
Blue Economy	○	○			○	○	○		
Livestock	○		○		○		○		

Note: The island country fisheries cluster targets Oceania, the Caribbean, and the Indian Ocean region.

(2) Clusters

(I) Smallholder Horticulture Empowerment & Promotion (SHEP)

- Summary: Provide services to promote market-oriented agriculture based on the SHEP approach to transform the management mindset of smallholders from 'grow and sell' to 'grow to sell.'
- Indicator: One million smallholders implementing market-oriented agriculture through the SHEP approach by 2030. (Note: The indicator for the 2022–26 medium-term plan is to 'train 100,000 smallholders through the SHEP approach by 2026')
- Main program activities
 - Training personnel (e.g. government officials, promoters) who can use the SHEP approach
 - Promoting knowledge management concerning the SHEP approach and building personnel networks (e.g. international SHEP workshops, improving and sharing tools for applying the SHEP approach, SHEP research)
 - Scaling up smallholder support programs through collaboration with governments of developing countries and partners (e.g. planning and implementing loan projects using the SHEP approach, workshops for personnel at partner organizations)
- Main collaborating partners: The International Fund for Agricultural Development (IFAD), the Sasakawa Africa Association, private enterprises

(II) Building a Food Value Chain (FVC) in Southeast Asia

- Summary: Build a value-added chain (FVC) while increasing the added value at each step from production of agricultural products to processing, distribution, and consumption in Southeast Asia.

- Indicator: Increase the GDP in the food and agriculture sector in Southeast Asia by 2030. (Note: The indicator for the 2022–26 medium-term plan is to ‘accumulate good practices contributing to FVC development and improvement in Southeast Asia by 2026’)
- Main program activities
 - Analyzing FVC potential and bottlenecks, creating action plans to reinforce FVCs (e.g. promoting market-oriented agriculture by smallholders, financial inclusion, training entrepreneurs to promote agribusiness, improving agricultural product distribution systems, strengthening Good Agricultural Practices (GAP), and strengthening Sanitary and Phytosanitary (SPS) Measures)
 - Providing practical support for action plans (e.g. provide technologies, access to funds)
 - Promoting knowledge management and public-private partnerships (PPP) (e.g. sharing good practices, promoting public-private dialogue, promoting matching of human resource and technology seeds in Japan with human resource and technology needs in Southeast Asia)
- Main collaborating partners: ASEAN offices, private enterprises

(III) Coalition for African Rice Development (CARD)

- Summary: To create a stable production and supply of rice in Africa, under the Coalition for African Rice Development (CARD), Japan is carrying out activities for 32 countries in Africa to build agricultural management systems in order to create a stable production amidst climate change and population growth, create local industries that coordinate well with the private sector, increase the quality of domestically produced rice to compete with imported rice, and improve the livelihood and daily life of farmers.
- Indicator: Double rice production in Sub-Saharan Africa (from 28 million tons to 56 million tons) by 2030. (Note: The indicator for the 2022–26 medium-term plan is to ‘train 250,000 rice production workers in Africa by 2026’)
- Main program activities
 - Training related to rice cultivation (e.g. researchers, engineers and promoters, farmers)
 - Developing and promoting rice cultivation technologies (e.g. growing excellent varieties, producing excellent seeds, cultivation technologies, soil management, pest control, post-harvest treatment)
 - Promoting development of the foundation for production, e.g. irrigation, and farm mechanization
- Main cooperation partners: Alliance for a Green Revolution in Africa (AGRA), AU/NEPAD and other organizations running CARD, private enterprises

(IV) Fisheries-centered Blue Economy in island countries

- Summary: For island countries in Oceania, the Caribbean, and the Indian Ocean region, Japan will contribute to promote fisheries co-management, harmonious co-existence of nature and people based on the “Sato-Umi” concept, and fishery FVC development.
- Indicator: Sustainable management of fishery resources in island countries and economic revitalization in coastal communities by 2030. (Note: The indicator for the 2022–26 medium-term plan is to ‘collect excellent case examples contributing to increase in economic benefits to island countries through the sustainable use of fishery resources by 2026’)
- Main program activities
 - Capacity development of core personnel who are well-versed in Japanese development to create and implement the Blue Economy policies and create and strengthen coastal community’s organizations/fishers’ groups
 - Toolbox development (resource management tools, tools to diversify the use of resources, ecosystem protection tools, tools to diversify economic activities)
 - IUU fishing measures (improve monitoring capacity, strengthen traceability)
- Main collaborating partners: Melanesian Spearhead Group (MSG), Japanese universities, private enterprises

(V) Promotion of the “One Health” concept through strengthening of livestock hygiene

- Summary: Strengthen livestock hygiene based on the “One Health” concept in Asia and Africa.
- Indicator: Improve veterinary service capacity among livestock farmers in Asia and Africa by 2030. (Note: The indicator for the 2022–26 medium-term plan is to ‘accumulate good practices contributing to improvement in veterinary services in Asia and Africa by 2026’)
- Main program activities
 - Improving veterinary medicine education and training veterinarians
 - Improving veterinary inspection and diagnosis services (e.g. building systems, developing facilities, training laboratory technicians)
 - Building a network of veterinary service workers
- Main collaborating partners: World Organization for Animal Health (OIE), Japanese universities

5. Strategic Approaches for the Global Agenda and Clusters

(1) Collaboration and Co-creation with Industries, Government, and academia in Japan

Through JICA Platform for Food and Agriculture (JiPFA; established in 2019), JICA is promoting information sharing and collaboration to see the resolution of issues in developing countries and Japan by parties such as government agencies in the agriculture and fisheries sector and the food and nutrition sector, universities and research institutions, private enterprises and industry groups, civil society, Japanese offices of international organizations, and relevant individuals from JICA (currently dispatched experts, overseas offices, departments related to headquarters). In addition, JICA organizes information sharing, dialogue, and cooperation activities with relevant industry, government, and academic organizations through the Japanese Ministry of Agriculture, Forestry and Fisheries Public-Private Council for Promoting Global Food Value Chain (established in 2014 to build FVC through the global expansion of Japan's food industries) and the Japan Intellectual Support Network in Agricultural Sciences (JISNAS; established in 2009 as a network of universities intending to participate in international cooperative activities related to education, research, and social contribution in agricultural science) at agricultural universities.

JICA also promotes matching of human resource and technology seeds in Japan with human resource and technology needs in developing countries through programs like thematic seminars and international student networks (Agri-Network).

JICA also carries out international cooperation projects using the expertise and technologies of industry, government, and academic organizations through public-private partnership schemes (e.g. SME/SDGs Business Support Project, ODAs) and grassroots technical cooperation projects.

In addition, JICA is strengthening its partnerships with industry, government, and academic institutions in Japan, including collaborations with the following;

- (Cooperation with private enterprises) Mitsui & Co. / Export Trading Group (ETG), Itochu Corporation / Afri Ventures, Toyota Tsusho Corporation, Kirin Holdings Company, Asahi Holdings
- (Cooperation with relevant groups and organizations) The Japan Aerospace Exploration Agency (JAXA), Central Union of Agricultural Cooperatives (JA-Zenchu), Farmers' Co-op, Sasakawa Africa Association (SAA)

(2) Human Resource Development and Network Development for Developing Countries and Japan

Under the JICA Development Studies Program, JICA provides scholarship opportunities for 100 students a year in agriculture and fisheries sector in developing countries to become well-versed in Japanese development and will train 1,000 people in the 10-year period starting in 2021. The following is the target number of people to be educated in each Cluster under the Agriculture Studies Networks for Food Security (Agri-Net) program¹⁴. To educate international students about Japanese development, JICA provides lectures on Japan's experiences in agricultural and rural development as a supplement to their university education¹⁵.

- Smallholder Horticulture Empowerment & Promotion (SHEP): 5 people
- Building a Food Value Chain (FVC) in Southeast Asia: 50 people
- Coalition for African Rice Development (CARD): 120 people
- Fisheries-centered Blue Economy in island country: 100 people
- Promotion of the “One Health” concept through strengthening of livestock hygiene: 100 people

In collaboration with universities, JICA is also training Japanese personnel who are adapted to the global environment in the agricultural and rural development sector through the following activities¹⁶.

- Development and operation of university collaboration volunteer programs (Currently carrying out a livestock industry program in Paraguay with the Obihiro University of Agriculture and Veterinary Medicine. Developing similar programs in cooperation with JISNAS.)
- Support for higher education with the aim of training personnel who are adapted to the global environment (Providing lectures on development cooperation, development cooperation project site visits, and opportunities for dialogue with relevant individuals.)

JICA also used LinkedIn and other tools to build a human and organization network (Agri-Network) of personnel from Japan and developing countries (primarily study abroad returnees) who are adapted to the global environment¹⁷.

¹⁴ International students in the agriculture, forestry, and fisheries sector are accepted into programs other than Agri-Net as well, such as JDS (Japanese Grant Aid for Human Resource Development Scholarship), ABE Initiative (African Business Education Initiative for Youth), and PEACE (Project for the Promotion and Enhancement of Afghan Capacity for Effective Development).

¹⁵ Lecture modules and materials related to Japan's experiences in agricultural and rural development have already been created. Lectures have been held since February 2021 via online seminars.

¹⁶ Fill rate of Japan Overseas Cooperation Volunteers in the agriculture, forestry, and fisheries sector is about 30% (final number passing / number of positions).

¹⁷ JICA created and has been running a network of international students using LinkedIn since January 2021. About 100 international students have joined the network as of the end of March 2021.

(3) Strengthening of International Collaboration

In addition to the current operation and use of the following programs, JICA is strengthening collaboration with stakeholders outside of Japan.

- SHEP: JICA enters cooperation agreements with IFAD and other international organizations, international NGOs, and private enterprises and promotes knowledge management among stakeholders (including industry-academic-government organizations in developing countries) through international workshops.
- CARD: JICA has established steering committees and offices through 18 organizations including international organizations and donors, creates annual plans and reports, and operates an international platform through activities such as general meetings and seminars.
- Cooperation agreements: Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), World Food Program (WFP), Alliance for a Green Revolution in Africa (AGRA), World Organization for Animal Health (OIE), Melanesian Spearhead Group (MSG), Swiss Re, A.R. Malik Seeds Pvt. Ltd

(4) Promoting Science, Technology and Innovation, and Digital Transformation (STI&DX)

JICA supports the promotion of science, technology and innovation, and digital transformation (STI&DX) aimed at building a smart food chain (SFC) through the following activities.

- Promoting matching of Japan's science and technology with projects in developing countries through the Science and Technology Research Partnership for Sustainable Development (SATREPS) and thematic seminars and holding demonstration projects
- Promoting development and real-world application of leapfrog technologies through technology exploration and talent scouting in developing countries and support for demonstration projects
- Promoting use of space technologies in collaboration with organizations like JAXA (e.g. development of apps to promote use of satellite data in agriculture in developing countries)
- Training international cooperation personnel with expertise about SFCs

(5) Promoting Investment in Infrastructure Development

JICA promotes investment in infrastructure development through the following programs.

- Financial assistance to support the development of a foundation for the agricultural production (e.g. irrigation, rural roads)

- Package-based financial assistance to support the development of a foundation for small-scale agricultural production and to improve smallholders' access to input goods (e.g. small-scale irrigation, cargo pickup points, storage facilities, seeds, fertilizer, agricultural machinery)
- Financial assistance (two-step loans) and foreign investment and lending to promote the development of FVC-related facilities through private enterprises

(6) Support for Hosting Foreign Workers

JICA carries out cooperation projects to aid in the responsible hosting of foreign workers, mostly from Southeast Asia, who want to train and work in Japan (e.g. technical interns, skilled workers) and in the promotion of agriculture through the return of skills to their own country. As the labor shortage in the agriculture sector in Japan is becoming increasingly serious with factors like the graying of the population and these activities are also supported by foreign workers including technical interns, these cooperation activities also help revitalize agriculture and rural areas in Japan. The following are specific programs being carried out.

- Providing seminars to technical interns before coming to Japan (e.g. Japanese language, agricultural technologies)
- Supporting matching of foreign labor seminar and employment needs with labor needs in the host region
- Supporting the promotion of agriculture by returning technical interns (establishment of production area)

6. Other Considerations

(1) During/after the COVID-19 Pandemic

City lockdowns, restrictions on economic activities, and trade policies in the COVID-19 pandemic have had various impacts on each step of the FVC (production, processing, distribution, and consumption). Smallholders who are especially vulnerable faced challenges due to the sudden drop in income outside of agriculture as the economy slowed, such as a shortage of farming funds and adapting to changes in demands. JICA is rebuilding FVCs from the Build Back Better perspective after assessing and analyzing those impacts.

(2) Measures against Climate Change

The agriculture sector needs help adjusting to the increase in frequency of heavy rain and

droughts brought with climate change that have been increasingly affecting agricultural production. To achieve stable agricultural production that is adapted to climate change, JICA must intensify its cooperation activities (e.g. agricultural insurance) that involve participatory irrigation development, strengthening of community resilience, and digital transformation / advanced technologies. There is also the problem of greenhouse gas emissions from agriculture, and JICA must work to reduce these environmental impacts.

(3) Improving Nutrition

As smallholders and others in poverty spend a substantial portion of their family budget on food, increasing agricultural income plays a significant role in improving nutrition. In addition, promoting production of food for personal consumption (e.g. home gardens, small livestock barns) and producing and supplying horticulture crops through SHEP effectively improve nutrition. On the other hand, increasing agricultural income and promoting production do not always lead to better nutrition in residents, especially among women and children. JICA must therefore raise awareness about nutrition through educational activities.

(4) Gender

Women make up 43% of the working population in agriculture in low- and middle-income countries and over 50% in regions like Sub-Saharan Africa that offer few employment opportunities outside agriculture¹⁸. Meanwhile, there are gender disparities in rights and access to land, assets, and agricultural equipment, and women have only limited participation in decision-making by producers' cooperatives. To resolve these issues, it has been estimated that a 20 to 30% increase in agricultural production by women can increase overall agricultural production in developing countries by 2.5 to 4.0% and reduce the number of the world's hungry by 12 to 17%¹⁹. Consequently, cooperation projects in agricultural and rural development must take a gender perspective and resolve issues from three views: building related policies and systems, capacity building for women, and changing society's attitudes and behavior.

(5) Financial Inclusion

To smallholders, agricultural management and family budget are inseparably linked. Although many have sources of revenue outside agriculture, major expenses like medical fees, dealing with disasters, and ceremonial occasions like weddings and funerals result in a lack of funds to use in agriculture. Accordingly, a key part of support for smallholders is assessing ecosystems surrounding farmers, assessing overall capital needs for both

¹⁸ FAO, 2015

¹⁹ FAO, 2011

agricultural management and daily life, assessing farmers' financial and digital literacy, and supporting access to essential financial services.

What is the JICA Global Agenda?

JICA's cooperation strategies for global issues. JICA, with its partners, aims to show global impacts realizing the goals set under JICA Global Agenda. JICA Global Agenda and its goals will be shared among partner countries and various actors, enhancing dialogue and collaboration, therefore, maximizing the development impacts. Through these efforts, JICA will comprehensively contribute to the achievement of the SDGs by 2030 as well as realize Japan's Development Cooperation Charter which focus on "human security," "quality growth," and "addressing global challenges".



Nibancho Center Building, 5-25 Nibancho,
Chiyoda-ku, Tokyo 102-8012, Japan
Email: jicaed@jica.go.jp



Japan International Cooperation Agency (JICA) is an international cooperation organization that is centrally responsible for the implementation of bilateral assistance among Japan's Official Development Assistance. JICA cooperates with about 150 countries and regions around the world.

https://www.jica.go.jp/english/our_work/thematic_issues/index.html