Agricultural and Rural Development



Bringing Together the Strengths of Japan to Achieve Goal 2 of the SDGs: Zero Hunger

Overview of the Issue

A look at global food security shows that more than 800 million people still do not have sufficient access to food and nutrition.¹ Regional disparities remain huge as well. In agricultural and rural development, efforts are required to promote agriculture in general and a food value chain (FVC) that contributes to economic growth in particular, as are efforts to improve food production and nutrition. All these efforts should be made in ways that help to achieve, in particular, two of the 17 Sustainable Development Goals (SDGs), that is, Goal 2: Zero hunger; and Goal 14: Life below water. This in turn requires bolstering networks that make it possible to make better use of the strengths of private businesses, universities and research institutions, and industrial associations, among other organizations.

JICA's Activities

1. Toward Economic Growth

JICA aims to strengthen the entire food value chain, covering production, processing, distribution, and consumption of agricultural products. In fiscal 2018, JICA worked with the ASEAN Secretariat to put together a concept note on the ASEAN-JICA Food Value Chain Development Project, aimed at developing a high-quality, safe, and export-oriented FVC.

JICA is deploying the Smallholder Horticulture Empowerment and Promotion (SHEP) approach, which was originally developed in Kenya, in other countries. The SHEP approach encourages farmers to change their attitudes from "grow and sell" to "grow to sell" for higher income. It has been introduced in Malawi, Ethiopia, and Zimbabwe, as well as in Asian countries such as Nepal, thus contributing to the participation of more women farmers in farm management.



Madagascar: A cooking demonstration using a cookbook compiled by a Japan Overseas Cooperation Volunteer (Photo by Shinichi Kuno)

2. Human-Centered Development (Nutrition Improvement)

Under the Initiative for Food and Nutrition Security in Africa (IFNA), JICA contributes to nutrition improvement with a cross-sectoral approach that covers agricultural promotion, health, education, and water and sanitation. In April 2018, JICA organized a workshop in Senegal to develop country-specific action plans for nutrition improvement activities. The workshop was attended by representatives from 10 countries. JICA also formulated nutrition improvement projects in Madagascar and Nigeria.

3. Peace, Stability, and Security

In Colombia, JICA promoted community business as part of efforts to develop a regional development model for postconflict rural recovery. JICA is considering directions in its assistance to Iraq with agricultural and rural development. In Afghanistan, JICA is supporting the promotion of rice cultivation.

4. Responses to the Global Issue of Food Security

(1) Coalition for African Rice Development (CARD)

CARD's commitment to doubling rice production in Sub-Saharan Africa for a 10-year period ending in 2018, which was made at the Fourth Tokyo International Conference on African Development (TICAD IV) in 2008, was fulfilled when rice production jumped from 14 million tons to 28 million tons during this decade. The expected growing demand for rice prompted the launch of CARD Phase 2, which aims to further double rice production in the region from 28 million tons to 56 million tons from 2019 to 2030 [-> see page 8]. Phase 2 plans to implement the RICE (Resilience, Industrialization, Competitiveness, Empowerment) approach—a package of effective strategies based on the outcomes of past development cooperation.

(2) Resilience to Climate Change

JICA extends various forms of support in constructing irrigation facilities, strengthening water users' associations, promoting rice varieties tolerant to adverse climate conditions, improving agricultural extension services, and introducing agricultural insurance to areas vulnerable to inclement or abnormal weather. As for agriculture insurance, JICA conducted a survey on the feasibility of weather index insurance in Africa. In Ethiopia, a country prone to drought, JICA launched technical cooperation aimed at achieving synergy between this type of insurance and agricultural extension.

(3) Sustainable Management of Fishery Resources and Promotion of Aquaculture

In small island countries, JICA is implementing a technical cooperation project for fishery resources management based

^{1.} Food and Agriculture Organization of the United Nations, "2018 The State of Food Security and Nutrition in the World" $\,$

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on "co-management," a concept that fisheries share ownership and responsibility with the government authorities.

JICA's cooperation in this field also includes training for developing the capacity to prevent illegal, unreported, and unregulated (IUU) fishing in the Pacific region [→ see the case study on page 25], as well as technical cooperation aimed at promoting inland aquaculture through the "farmer to farmer extension" approach.

(4) Livestock and Animal Health

In Mongolia, JICA extends technical cooperation to the school of veterinary medicine of a national university, the only such school in the country. This cooperation focuses on strengthening veterinary medicine education, training practicing veterinarians, and controlling animal protozoan diseases. JICA's technical cooperation in this field in Kyrgyzstan aims to facilitate the export of raw milk to neighboring countries, improve animal breeding management, and strengthen animal health as part of efforts to promote the dairy farming industry in the country.

5. New Initiatives

(1) Cooperation with Private Businesses

During fiscal 2018, JICA organized a platform meeting on the stable production of sesame in developing countries and their export of the product to Japan as well as on agricultural cooperation for Myanmar. The meeting provided an opportunity to share information and exchange views with Japanese businesses. To accelerate partnership with such businesses, JICA stepped up preparations for launch of a JICA Platform for Food and Agriculture.²

(2) Cooperation with Universities

JICA and the Japan Intellectual Support Network in



Senegal: The added value of octopus products are developed by fisher organizations and government under the concept of "co-management." (Photo by Shinichi Kuno)

Agricultural Sciences (JISNAS)³ co-organized a forum on the development of developing countries' human resources in agriculture, forestry, and fisheries through public, private, and academic collaboration. Participants discussed, among other topics, Japan's experiences in development that should be communicated to students from the developing world who are studying in Japan.

(3) Cooperation with Local Communities

JICA stepped up preparations for development cooperation aimed at achieving two objectives: (1) making good use of the expertise of Japanese agricultural cooperatives in revitalizing agriculture and rural communities; and (2) training community leaders through this activity.

(4) Utilization of Innovation Technologies

The diversification of artificial satellites and the advancement in IoT technology are broadening the possibility that the use of satellite technology will help developing countries address some of the challenges facing them. In agriculture, JICA is working closely with the Japan Aerospace Exploration Agency (JAXA) to verify the functional evaluation of irrigation facilities and to explore possible uses of satellites in combating IUU fishing.

 For details, visit: https://www.jica.go.jp/activities/issues/agricul/jipfa/ku57pq00002jjx83att/jipfa_brief_description_en.pdf
For details, visit: http://jisnas.com/en/index.html.





Cuba takes over Japan's agricultural technologies



Technical training in frijol bean cultivation for agricultural extension workers

Although rice is Cuba's stable food, the country's self-sufficiency in rice is estimated at as low as 50%. Boosting rice production and self-sufficiency constitutes one of Cuba's key policies.

For a period of 15 years from 2003, JICA has been assisting Cuba in increasing its rice production, contributing to expanding its production base. The agricultural extension system that JICA has introduced on a trial basis was highly appreciated by the Cuban government. In January 2017, JICA launched this project to apply this system to other key grains such as frijol beans and corn.

For some years, Cuba has been making

a gradual shift in the production system from large state farms to agricultural cooperatives that value the profit of individual farmers. In line with this shift, this project focuses on developing a system of spreading appropriate agricultural technologies to individual farmers and training extension workers.

Under the project, some Cubans received training in Japan, learning the history of agricultural extension in Japan and experiencing Japanese lifestyles while staying in Japanese private homes. This training program was warmly received by these participants.