

Plan to Promote the Establishment of Global Food Value Chain

December 9, 2019

**Public-Private Council for Promoting
Global Food Value Chain**

Table of contents

I. Basic view	1
(1) Establishment of Food Value Chain Utilizing Japan's Technology and Know-how.....	1
(2) Measures Taken to Date Based on GFVC Strategy.....	2
(3) Formulation of New Plan to Promote Establishment of FVCs	2
(4) Targets	3
II. Perspective of Measures under New Plan.....	4
(1) Targeted Measures in Each Country and Region	4
(2) Support for Establishment of Corporate Consortia and Planning	7
(3) Promotion of Overseas Business Expansion by Regional Companies	7
(4) Integrated Promotion of Export and Investment	8
(5) Promotion of Overseas Deployment of Smart Agricultural Technologies.....	9
(6) Consistent Support for Overseas Business Development through Public-Private Council for Promoting GFVC.....	10
III. Plan by Country/Region.....	11
1. ASEAN.....	12
2. China	15
3. India.....	17
4. Middle East (mainly Saudi Arabia/UAE).....	20
5. Africa.....	22
6. Central and South America (mainly Brazil/Argentina).....	24
7. Russia	26
8. Australia	28
<Outline of Plan to Promote the Establishment of Global Food Value Chain>	30
 <Reference>	
Major achievements of five years with the GFVC Strategy	
– Support of private-sector companies' overseas business expansion	45

Plan to Promote the Establishment of Global Food Value Chain

I. Basic view

(1) Establishment of Food Value Chain Utilizing Japan's Technology and Know-how

The world food market continues to expand by international population growth and changes in people's eating habits caused by an increase in income. According to an estimate (in March 2019) by the Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (PRIMAFF), the food and beverage markets in the 34 countries and regions in the world are expected to reach 1,360 trillion yen in 2030, a 1.5-fold increase from 2015. Of those markets, the market scale in the Asian region including China and India is expected to grow from 420 trillion yen to 800 trillion yen, a 1.9-fold increase, in the same period.

In particular, demand for high value-added food with attractive features such as “freshness”, “safety” and “high quality” is increasing internationally with the changes in eating habits of the middle class and affluent population that is growing thanks to strong economic growth. Under such circumstances, developing and emerging nations are increasing their interest in stabilizing the food supply as well as adding high value to domestic food and they are paying attention to overseas markets, taking the opportunity of the creation of the gigantic economic blocs such as TPP. On the other hand, those countries have not yet established satisfactory Food Value Chains¹ (hereinafter referred to as “FVCs”), which is a process to add value to food strategically, due to the lack of technology and know-how. Consequently, there are increasingly active movements to promote domestic agricultural and food industries by inviting investment of overseas enterprises that have excellent technology and know-how.

By contrast, the scale of Japan's food and beverage market is expected to shrink due to the decreasing and aging population. For this reason, participation in the establishment of FVCs in developing and emerging nations is expected to provide Japan's food industry² with big business opportunities in which they can acquire gigantic markets by taking advantage of Japan's “strength” that has been developed to date - a variety of food-related technologies and know-how such as highly sophisticated agricultural production, food manufacturing and distribution systems, high-quality cold chains, advanced and convenient Japanese-style food distribution systems, reduced environmental load and the like. Promotion of overseas business development from Japan's food industry making use of the aforementioned business opportunities is expected to contribute to the stable growth and economic development in developing and emerging nations, promote exports through FVCs which are to be established and increase farmers' income on an international balance of payment basis.

In addition, establishment of FVCs is expected to contribute to the achievement of SDGs through the eradication of poverty and hunger and achievement of sustainable consumption and production in developing nations.

¹ Food Value Chain (FVC) is a series of activities that creates and builds value at every stage from production, manufacturing, processing, distribution to consumption of agricultural, forestry and fisheries. Developing FVCs will deliver higher value as a whole for producers, manufacturers, distributors and consumers who constitute FVCs.

² The food industry covers a wide range of sectors including production, manufacturing/processing, distribution and consumption of agricultural, forestry and fisheries products. It also includes industries related to flowers, seeds, agricultural inputs, agricultural machinery and food processing machinery.

(2) Measures Taken to Date Based on GFVC Strategy

The Ministry of Agriculture, Forestry and Fisheries (MAFF) established the “Public-Private Council for Promoting Global Food Value Chain” (June 2014) composed of mainly Japanese private-sector companies that are motivated to develop overseas businesses based on the “Global Food Value Chain Strategy” (hereinafter referred to as the “GFVC Strategy”) formulated in June 2014. Through the Council, MAFF has supported overseas business development of Japan’s food industry through the establishment of FVCs mainly in developing and emerging nations for the past five years.

MAFF has deployed various efforts to achieve this goal. Specifically speaking, MAFF shared information and identified challenges in expanding investment and acquired a general idea of the investment climate in the investee countries through professional research into those challenges. Additionally, MAFF promoted the creation of favorable business and investment environments by holding policy dialogues with investee countries’ governments and forums participated in by investee and investing countries’ companies and supported matching of Japanese and overseas companies by dispatching public-private missions and participating in exhibitions.

The number of the Council’s member companies and organizations has increased from the original 77 to more than 450 through these activities. More importantly, various achievements have been made such as the formulation of bilateral programs for the establishment of FVCs, improvement of the investment climate such as relaxation and elimination of regulations and acceptance of Japanese standards and systems for agricultural products and food in investee countries and promotion of Japanese companies’ overseas operations through the support to help establish relations with investee countries’ governments and companies.

Consequently, overseas sales³ by the food-related industries (i.e. food manufacturing industry and foodservice industry) reached 5.9 trillion yen in fiscal 2017, achieving the GFVC Strategy’s fiscal 2020 target for overseas sales (approximately five trillion yen) ahead of schedule.

(3) Formulation of New Plan to Promote Establishment of FVCs

Given that overseas markets are expected to keep expanding and needs for investment are expected to increase in partner countries from now, it is considered that there is great potential for overseas business operations by more Japanese companies including SMEs. On the contrary, in many developing and emerging nations, Japanese companies are too few for the local market potential. In addition, these countries have barriers for business expansion by foreign companies, such as investment regulations, import regulations and unique specifications and standards for food.

In this kind of situation, the Japanese government and private-sector companies need to take strategic measures through further collaboration in order to survive the competition with companies from other countries and expand overseas business development of Japan’s food industry. In particular, the following measures are considered to be important:

- Shift from the existing uniform measures to the targeted measures focusing on each country and region;
- Shift from the support for individual companies to the support for overseas business development through collaboration between several companies that constitute each element of FVCs for large ripple effects;
- Promote overseas business development by regional companies through collaboration with companies which have already been operating overseas;
- Promote export and investment in an integrated manner;
- Introduce Japan’s new “strength” such as smart agriculture.

³ Source: METI “Basic Survey on Overseas Business Activities” questionnaire information

In light of the above situation, we will newly formulate a “Plan to Promote the Establishment of Global Food Value Chain” based on the experience and knowledge acquired through the activities by the Public-Private Council for Promoting Global Food Value Chain in the past five years with a view to further accelerate overseas business development by Japan’s food industry through the establishment of FVCs in investee countries.

Based on this plan, we will promote overseas business development by Japan’s food industry through the establishment of FVCs in developing and emerging nations by utilizing Japanese technologies and know-how under collaboration among the Council members – private-sector companies, universities, research institutes, local governments, government-affiliated organizations, government ministries and agencies and diplomatic establishments overseas. In doing so, we will take measures by closely collaborating with organizations which are related to the establishment of FVCs, the food industry’s overseas business development and export promotion of agricultural, forestry and fisheries products and food. Specifically, these organizations include the JICA Platform for Food and Agriculture (JiPFA), Infrastructure Strategic Council for Economic Cooperation, Business Council for Africa, Field for Knowledge Integration and Innovation (FKII) under the Council of Industry-Academia-Government Collaboration and Consortium for New Export Nation.

With this, we aim to develop the food industries in Japan and partner countries (i.e. establishment of a Win-Win relationship) and contribute to the stable supply of food all over the world as well as in Japan. At the same time, through the establishment of FVCs, we aim to promote export of Japanese agricultural, forestry and fisheries products and food to partner countries and the creation of a favorable export environment.

(4) Targets

- [1] Increase the number of member companies and organizations of the Public-Private Council for Promoting Global Food Value Chain to 800 in five years;
- [2] Increase the number of Council member companies⁴ operating overseas to 200 in five years.

⁴ Number of Japanese companies that have established local companies with 10% or more Japanese investment. 124 member companies were operating overseas as of October 2019. (Source: The Weekly Toyo Keizai “List of Companies Operating Overseas – By Nation, 2018”)

II. Perspective of Measures under New Plan

We will further promote overseas business development of Japan's food industry through the establishment of FVCs in partner countries from the below-mentioned major perspective under the new plan based on the achievements made to date, challenges identified and possibility of developing new technologies.

(1) Targeted Measures in Each Country and Region

Taking account of a variety of measures implemented and achievements made in the past five years, the situation of private-sector companies' business operations (Table 1), the stage of FVC development and challenges for FVCs vary considerably in each country and region. In order to further promote overseas business development of Japan's food industry, it is very important to understand and analyze those situations in detail and take measures to meet the actual situation in each country and region.

To achieve this goal, we compiled Chart 1 which provides an overview of the situation of overseas business by Japanese companies, the development stage of FVCs and major challenges in the countries and regions where we took measures to establish FVCs to date. According to the actual situation of each country/region depicted in Chart 1, we also formulated a plan by country/region which stipulates effective measures for business operations by private-sector companies. (Page 11-) We aim to promote overseas business development of private-sector companies by taking targeted measures to support those companies in these countries/regions.

In particular, by taking account of the situation of overseas business operations by companies, we will focus on the following areas:

- [1] Areas in which few Japanese companies operate or invest despite market potential
 - Promote market penetration through collaboration of multiple companies (mainly in India, Africa and Russia)
- [2] Areas in which some Japanese companies operate or invest
 - Promote creation of favorable business and investment environments through relaxation and elimination of regulations to help companies undertake and expand businesses smoothly (mainly in Central and South America)
- [3] Areas in which many Japanese companies operate or invest
 - Promote introduction of Japanese specifications, standards and production systems with a view to establishing a strong business environment for stabilization and further development of business operations (Introduce Japanese-style food standards and systems, Japanese-style agricultural production and management technologies, and sophisticated food-related technologies and develop required human resources for operation) (mainly in the ASEAN countries, China and Australia)

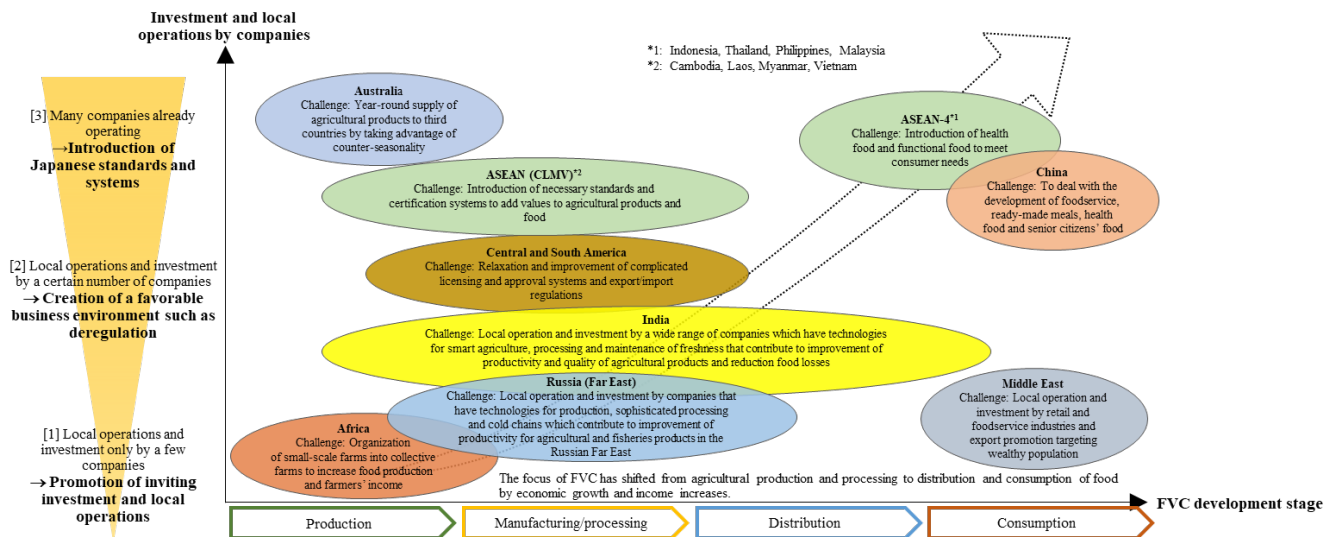


Chart 1: Situation of Local Operations/Investment by Companies, Development Stage of FVC and Major Challenges in Each Country/Region

* Development stage of FVC in each country and region:

- Strong needs for improvement in productivity and quality in Africa;
- A wide range of needs in India and the Russian Far East, including needs for improvement in productivity and quality, highly sophisticated processing and maintenance of freshness;
- Increasing needs for production of safe agricultural products and smart agricultural technologies in Central and South America and the ASEAN countries (CLMV nations - Cambodia, Laos, Myanmar and Vietnam) as FVCs have been established from production through distribution in these countries;
- As FVCs have been established from distribution to consumption (downstream) in the ASEAN-4 nations and the Middle East, needs for safe food and high value-added food such as health food and functional food are increasing particularly among the wealthy population;
- As FVCs have been considerably developed in China, needs for high value-added food, including needs for foodservice/ready-made meal sectors, health food and senior citizens' food, are growing especially in the middle class;
- There are needs in Australia for year-around export of agricultural products to third countries by working together and taking advantage of the counter-seasonality with Japan in agricultural production;

**Table 1: Situation of Business Expansion by Japan's Food Industry
in Developing and Emerging Nations**

	Overseas sales (million yen) [Food manufacturing industry/foodservice industry] (FY2012 ⇒ FY2017)	Number of companies operating overseas, related to the agriculture, forestry and fisheries industry or food (2012 ⇒ 2017)
ASEAN	507,088 ⇒ 952,065	219 ⇒ 352 (Breakdown) • Agriculture, forestry and fisheries: 20 ⇒ 27 • Food processing: 143 ⇒ 187 • Food wholesale: 35 ⇒ 79 • Food retail (supermarkets): 6 ⇒ 7 • Foodservice: 15 ⇒ 52
China	1,048,961 ⇒ 1,866,766	313 ⇒ 337 (Breakdown) • Agriculture, forestry and fisheries: 8 ⇒ 10 • Food processing: 181 ⇒ 170 • Food wholesale: 57 ⇒ 78 • Food retail (supermarkets): 17 ⇒ 19 • Foodservice: 50 ⇒ 60
India	4,701 ⇒ 3,471	9 ⇒ 16 (Breakdown) • Agriculture, forestry and fisheries: 2 ⇒ 2 • Food processing: 4 ⇒ 9 • Food wholesale: 2 ⇒ 3 • Food retail (supermarkets): 0 ⇒ 0 • Foodservice: 1 ⇒ 2
Middle East	0 ⇒ 0	2 ⇒ 4 (Breakdown) • Agriculture, forestry and fisheries: 0 ⇒ 1 • Food processing: 1 ⇒ 1 • Food wholesale: 1 ⇒ 2 • Food retail (supermarkets): 0 ⇒ 0 • Foodservice: 0 ⇒ 0
Africa	0 ⇒ 0	8 ⇒ 10 (Breakdown) • Agriculture, forestry and fisheries: 3 ⇒ 3 • Food processing: 3 ⇒ 5 • Food wholesale: 2 ⇒ 2 • Food retail (supermarkets): 0 ⇒ 0 • Foodservice: 0 ⇒ 0
Central and South America	228,076 ⇒ 264,648	63 ⇒ 52 (Breakdown) • Agriculture, forestry and fisheries: 24 ⇒ 19 • Food processing: 19 ⇒ 19 • Food wholesale: 20 ⇒ 13 • Food retail (supermarkets): 0 ⇒ 0 • Foodservice: 0 ⇒ 1
Russia	* ⇒ 0	4 ⇒ 4 (Breakdown) • Agriculture, forestry and fisheries: 1 ⇒ 1 • Food processing: 1 ⇒ 0 • Food wholesale: 1 ⇒ 3 • Food retail (supermarkets): 0 ⇒ 0 • Foodservice: 1 ⇒ 0
Australia	81,213 ⇒ 244,175	49 ⇒ 50 (Breakdown) • Agriculture, forestry and fisheries: 18 ⇒ 15 • Food processing: 20 ⇒ 21 • Food wholesale: 10 ⇒ 11 • Food retail (supermarkets): 0 ⇒ 0 • Foodservice: 1 ⇒ 3

* Source of overseas sales: METI "Basic Survey on Overseas Business Activities" questionnaire information

"* for Russia" means that the number of companies operating in Russia is kept secret as the total number is only one or two.

* Source of number of companies operating overseas: Toyo Keizai Inc. "List of Companies Operating Overseas"

(2) Support for Establishment of Corporate Consortia and Planning

Although support was provided for Japan's food industry when they expanded overseas business, only individual support was provided for each company. Consequently, only limited achievements were made in many cases.

On the other hand, in order to expand overseas business operations of Japanese companies by taking advantage of Japan's "strength", collaboration of several companies which individually constitute each stage of FVCs is effective in deploying Japanese technologies, know-how and products collectively. It is also considered to have large ripple effects as it promotes overseas business expansion of SMEs which faced difficulty in expanding overseas business independently to date. Such collaboration of several companies is considered to be effective particularly in countries and regions where FVCs have not been established, but those countries and regions lack corporate entities that make such a specific plan.

For this reason, MAFF plays leading roles by collaborating with government-affiliated organizations to proactively support the establishment of corporate consortia and consortia's planning and promote overseas business expansion through collaboration of several companies according to targeted measures for FVC establishment in each country/region including India, Africa, Russia, etc.

In this case, as establishing joint venture companies or collaborating otherwise with local companies is important for efficient business development, efforts will be made to gather information on candidate companies for local business partners and establish opportunities for business meetings.

(3) Promotion of Overseas Business Expansion by Regional Companies

In the past, overseas expansion by Japan's food industry was mainly undertaken by large companies based in major cities. Activities of the Public-Private Council for Promoting Global Food Value Chain were also focused on the Tokyo Metropolitan area.

However, there are many agricultural producers and small- and medium-sized food processors in regional areas that have excellent technologies wanted overseas. Regional SMEs are, however, behind others in overseas expansion because they have not recognized the possibility and potential of overseas markets and also because their corporate capability would not last until commercialization and industrialization due to their limited human resources and funds. Nonetheless, SMEs may be able to seize an opportunity and quickly expand into overseas markets as they make decisions relatively quickly.

Therefore, we will provide information we have gathered to date and know-how of overseas business expansion and introduce a variety of support tools to regional producers and SMEs by holding local seminars and meetings based on the recognition that SMEs are important players. At the same time, to promote overseas business expansion of regional companies we will support their participation in corporate consortia as explained in the above (2) and collaboration with companies which have already been operating overseas.

(4) Integrated Promotion of Export and Investment

In order to further expand exports of Japanese agricultural, forestry and fisheries products and food, we should not just pursue exporting “goods” but also consider integrating approaches with the food industry’s effort for overseas expansion (investment), such as local production, processing and store operation, which requires establishment of FVCs. These measures are considered to expand exports of Japanese agricultural, forestry and fisheries products and food by grasping local needs more precisely and, at the same time, increase farmers’ income on an international balance of payment basis.

Table 2: Patterns of Overseas Business Development (Investment) that Drives Exports

Pattern	Outline	Example
<Pattern 1> Local operation of restaurants or stores	Japanese companies open and operate stores or restaurants overseas (or give licenses) so that Japanese products would be used for part (or all) of the products or food which are sold or served locally.	The foodservice and retail industries operate restaurants or retail shops overseas. Food and products (e.g. rice, seasonings, Japanese sake, etc.) which are served or sold in those restaurants or retail shops are exported from Japan.
<Pattern 2> Wholesale	Japanese companies operate import and wholesale business of food overseas (through M&A depending on the case) so that Japanese products would be used for part of the products handled.	Trading firms of food establish subsidiaries overseas. They procure food from overseas including Japan and in the region and sell the procured food to the local foodservice and retail industries.
<Pattern 3> Installation of product manufacturing facilities	Japanese companies install manufacturing facilities overseas (or give technical licenses) so that part (or all) of the ingredients would be produced in Japan.	Confectionery manufacturers construct factories overseas, procure part of the ingredients (e.g., high value-added ingredients such as matcha or powdered green tea) from Japan and sell final products within the region or in the surrounding countries.
<Pattern 4> Installation of ingredients production facilities	Japanese companies produce ingredients overseas (or give technical licenses), process those ingredients in Japan and export final products overseas.	Japanese food manufacturers give licenses to overseas farms to produce agricultural products which suit their own products and then import the produced agricultural products into Japan. After processing those agricultural products into final products, the final products are exported to overseas markets.

The above Table 2 summarizes patterns of overseas business development that drives exports. For example, as shown in Pattern 1 - “Local operation of restaurants or stores”, if Japanese companies operate restaurants serving Japanese food or retail shops selling Japanese “bento” lunch boxes and side dishes in other countries, they are expected to help increase exports of Japanese ingredients and foodstuffs which are used in those dishes/products. In particular, Japanese food such as “bento” has a unique characteristic of containing “small amounts of many different kinds of food items”. For this reason, promotion of Pattern 1 may lead to greater overseas operations by the food-related industries and larger exports of agricultural, forestry and fisheries products, food and related materials.

From this point of view, we will promote export and investment in an integrated manner mainly through the business of Japanese meals and Japanese food products while taking account of unique characteristics and needs of each country and region. At the same time, we will promote the establishment of cold chains as they are important in spreading Japanese meals and Japanese food products.

We will also promote measures to address the issue of food safety standards and quarantine conditions in each country under the Export Promotion Headquarters to be established newly by MAFF as those standards and conditions are barriers for export of Japanese agricultural, forestry and fisheries products and food.

(5) Promotion of Overseas Deployment of Smart Agricultural Technologies

Japanese smart agricultural technologies have potential for contributing to the solution of various kinds of challenges not only for domestic agriculture but for agriculture in the Asian region as it has similar agricultural styles and climatic conditions to those in Japan. For example, Japanese smart agricultural technologies have potential for contributing to the improvement of farmers' business, production of safe agricultural products, reduction of environmental loads, promotion of organizing farmers in developing nations, and so on. Having said that, Japanese smart agricultural technologies have not been introduced overseas sufficiently at the moment due to the technologies being in their budding stage even in Japan, a shortage of information on the local communications infrastructure and relevant legislation concerning smart agricultural technologies, and the need for localization among other reasons.

For this reason, bearing in mind smart agricultural technologies that have potential for overseas introduction as shown in Chart 2, we will work on introducing smart agricultural technologies which are effective in each country and region by grasping the communications infrastructure environment, relevant legislation and specific needs and by promoting the creation of necessary environments through bilateral policy dialogues with the governments of partner countries such as the ASEAN countries while collaborating with the relevant ministries and agencies. At that time, we will promote the improvement of smart agricultural technologies to meet the needs in each country through collaboration with local companies.

Additionally, what is important for smart agriculture is implementing efficient agricultural management by utilizing various types of data such as climate, soil and management data and the like. Although Japan established a data platform aiming for cooperation among private-sector companies, called "Agricultural Data Collaboration Platforms" (WAGRI), the first of its kind in the world, in its effort to promote the creation of a favorable environment for data usage, establishment of such data platforms has not started in many developing and emerging countries.

Because of this, we will collaborate with the Cabinet Office to support the establishment of agriculture-related data platforms mainly in the ASEAN countries by introducing WAGRI and providing WAGRI's know-how. In doing so, we will bear in mind the Smart Food Chain (SFC) system on which research and development are conducted in order to expand WAGRI from the production field to processing, distribution and consumption fields, will promote utilization/coordination of data concerning the entire FVC that is linked to the movements of "goods" from production to consumption, and will work on creating a favorable environment for adding high value to agricultural products.

In taking the above-mentioned measures, we will pay attention to the prevention of leakage of high-level technologies and data and the protection of intellectual properties as they are directly related to the strength of Japanese agriculture.

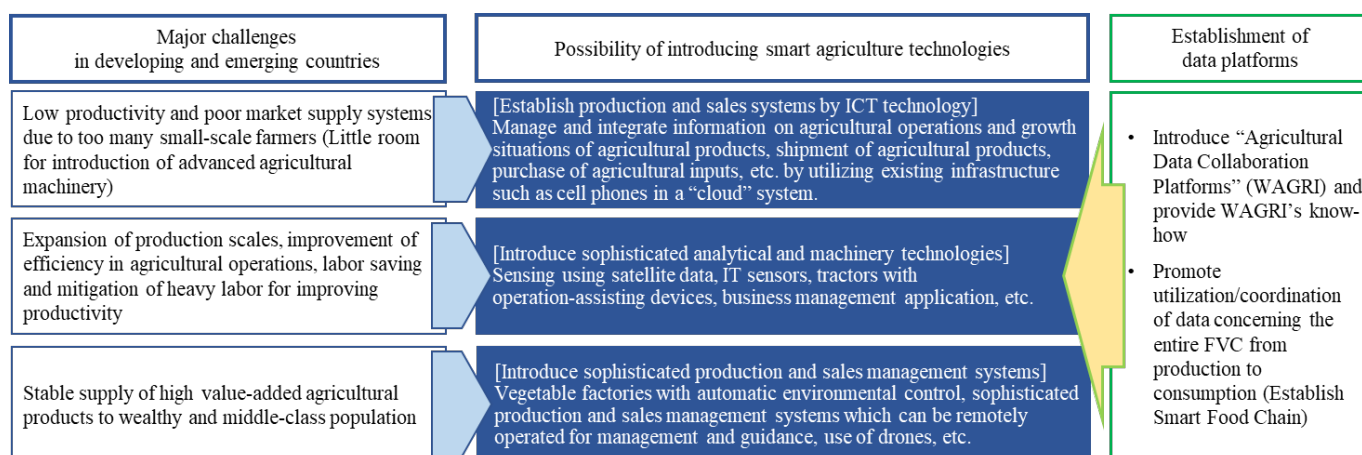


Chart 2: Possibility of Introducing Smart Agriculture Technologies in Each Country and Region

(6) Consistent Support for Overseas Business Development through Public-Private Council for Promoting GFVC

In order to implement the aforementioned measures, we will continue to fully utilize the Public-Private Council for Promoting GFVC as a platform for establishment of FVCs, and promote overseas business development of Japan's food industry by establishing a system to consistently support through a series of steps from information gathering to actual business operations by companies under the industry-academia-government collaboration.

Additionally, cooperation and collaboration with the governments of partner countries is essential in promoting overseas business development of the food industry through the establishment of FVCs. For this reason, by holding bilateral policy dialogues and public-private sector forums with the participation of public and private sectors of Japan and partner countries and by dispatching public-private sector missions, we will promote the discussions on the establishment of FVCs, request for relaxation and elimination of regulations, publicize Japanese companies' technologies, establish relations between private-sector companies and partner countries, and promote the formulation of bilateral programs that facilitate business development of private-sector companies, which will contribute to the promotion of the aforementioned measures from (1) to (5).

III. Plan by Country/Region

Based on “II. Perspective of Measures under New Plan,” country/region-specific plans mainly for countries and regions where we have worked on establishing FVCs are presented in the following, providing our policy of targeted measures to establish FVCs in each country and region.

When actually implementing these measures, flexible approaches should be taken according to the situation of each country and region understood through further efforts for gathering information on local business/investment environments including country risks and trends of potential competitors from other countries.

To promote investment by Japanese companies, it is also important to build recognition of their excellent technology/know-how which meets the increasing needs for safe and healthy food, as well as recognition of Japanese meals and Japanese food products. To this end, the public and private sectors will get together and promote these Japanese resources strategically. In addition, we should also consider the possibility of long-term business development including future export to third countries.

1. ASEAN

Key points for establishment of FVCs

[CLMV]

- Promotion of Japanese production technologies, specifications/certification systems, etc. required for production of safe agricultural products and food, and development of human resources

[ASEAN-4]

- Promotion of Japanese-style specifications/standards concerning health/functional food targeting mainly the wealthy population and cold chains, and development of human resources

(1) Major Measures Taken to Date

MAFF has established frameworks for bilateral policy dialogues with Vietnam, Myanmar, Indonesia, Thailand, Cambodia, and the Philippines, holding discussions on FVC establishment with the participation of public and private sectors from Japan and the partner countries. Particularly, Japan has so far formulated “The Medium- to Long-Term Vision for Japan-Vietnam Agricultural Cooperation” and “The Food Value Chain Road Map in Myanmar (2016-2020)” with the respective countries, and in addition, promoted the development of human resources required for FVC establishment, the introduction of Japanese standards and systems, and the creation of a favorable investment environment through holding bilateral policy dialogues and funding projects implemented by the ASEAN Secretariat while gathering/sharing information concerning halal rules and other important systems when investing in other countries.

(2) Situation of Business Operations by Japan’s Food Industry

With a population of around 640 million, the ASEAN region is a huge market, where the number of food-related companies from Japan has increased by more than 100 in the past five years and sales of the food manufacturing industry and the foodservice industry have almost doubled thanks to the region’s high economic growth in recent years. The number of Japanese companies in sectors from food processing through foodservice has surged especially in countries where per capita GDP is high including the ASEAN-4 countries, and is on the rise in Vietnam as well. In contrast, in the CLMV countries, where development is relatively slow, the number of companies in sectors from production through food processing has grown due to a comparative advantage in production cost while industrial parks and infrastructure have been developed.

More companies in various sectors from production through consumption are expected to expand into this region, considering the region’s economic growth which is expected to continue, demographic dividend based on the region’s population, a large part of which is made up by the young generations, and a shift of food processing facilities which leave China for this region due to TPP11.

In addition, with an effort by the Institute for the Development of Agricultural Cooperation in Asia (IDACA) as a trigger, Japanese agricultural organizations have started exchanges with counterparts in other Asian countries. There are also cases of Japanese producers creating overseas production bases in connection with the securing of agricultural workers in Japan.

(3) Current Situation and Possibility of FVC Establishment

(Production of safe agricultural products)

As there is a growing interest in safe food among consumers, especially those in the middle- to high-income bracket, some local agricultural producers and food companies are trying to meet such needs inside and outside of the region by working on production of high-quality, safe agricultural products/food. Many farmers, however, do not have sufficient knowledge concerning technologies/know-how required for production of high value-added agricultural products, and relevant standards, etc. are yet to be widely accepted. This poses a challenge especially to food companies (agricultural product processing, prepared food processing, etc.) that are already operating locally as it is hard for them to procure a certain amount of agricultural products/ingredients that meet a certain standard.

Therefore, we need to promote Japanese standards and certification systems along with various technologies owned by Japan's food industry including ICT-based production management technology and develop production systems for safe, high-quality agricultural products/food which meet the needs of consumers in the ASEAN region and third countries while developing required human resources and organizing producers.

(Development of cold-chain networks)

Food which needs temperature management, including frozen/chilled food, high value-added agricultural products, and meat/fisheries products, are rapidly increasing due to diversifying lifestyles especially in urban areas, and a cold-chain network is indispensable for the transportation of these products. The development of such a network, however, is not sufficient except in some major cities and knowledge/know-how required for managing temperature during transportation and storage has not spread widely.

Therefore, it is considered effective to promote the development of high-quality, food distribution systems through the introduction of Japanese cold chain technologies while also promoting the development of necessary human resources for the dissemination of temperature management technologies in addition to spreading the use of hard infrastructure such as refrigerated warehouses.

(Restrictions on foreign investment)

As a change of diet continues, demand, especially in urban areas of the ASEAN-4 countries, is expected to keep growing for the food retail industry where we can take advantage of Japan's strength including convenience stores. Business development of Japanese retailers is expected to increase business opportunities for Japanese food manufacturers and distributors and help popularize Japanese food including "bento" lunch boxes. In the meantime, many countries have restrictions in place on foreign capital invested in food retailers in order to protect local small retailers. Therefore, relaxation and elimination of related regulations is important.

(Health/nursing meals)

Based on increasing interest in health issues especially among people in the middle- to high-income bracket in the ASEAN-4 countries, demand for food in which Japan has an advantage, i.e., functional nutritional food, food for specified health uses, and food with functional claims, is expected to grow going forward.

(4) Key Points and Measures for Establishment of FVCs

Based on the above, to expand business of Japan's food industry in this region, we will place a priority on the promotion of Japanese-style production management technologies/know-how, standards and certification systems, which contribute to production and supply of high value-added agricultural products/food to meet the rapidly-increasing needs among people in the middle- to high-income bracket for safety, high quality and health, together with the development of required human resources and deregulation.

Considering the stage of FVC development in particular, we will focus our efforts on production through distribution in the CLMV countries and distribution through consumption in the ASEAN-4 countries. (In Vietnam, which is closing the gap in economic scale with the ASEAN-4 countries, we will make consumption-stage efforts as well.)

By utilizing advanced cold-chain networks to be established through these measures to supply high value-added agricultural products/food and required human resources, we will also try to increase exports of Japanese agricultural, forestry and fisheries products/food.

(Major measures)

- [1] Promote the development of human resources required for FVC establishment and the introduction of Japanese-style standards and certification systems through courses set up by donations to universities in the ASEAN region.
- [2] Conduct research and obtain information on each country's communications infrastructure and related laws to spread smart agriculture and other information required by relevant parties and at the same time promote related technologies by working with the governments of partner countries
- [3] Promote research for the development of standards and certifications, including GAP, HACCP, and organic food standards, which contribute to the improvement of added value of agricultural products/food, and the development of human resources through collaboration with partner countries (mainly the CLMV countries)
- [4] Promote human resources development for local producers and organization through exchanges between agricultural cooperatives in order to realize a stable supply of agricultural products acceptable to food-related companies/factories that are already operating locally (mainly the CLMV countries)
- [5] Appeal to partner countries, promoting the introduction of Japanese health/functional foods and standards for cold chains through bilateral policy dialogues and public-private sector forums, and also promote the development of human resources (mainly the ASEAN-4 countries)
- [6] Request deregulation through bilateral policy dialogues concerning food retailing business which could contribute to greater export of food products made in Japan and popularization of Japanese food and work to create favorable investment environments (mainly the ASEAN-4 countries)
- [7] Support the development of systems to appropriately protect/utilize new plant varieties as intellectual property in order to introduce elite cultivars

2. China

Key points for establishment of FVCs

- Efforts in the markets of foodservice and ready-made meals to meet the demand of the growing middle class, and promotion of high-quality, high value-added food, etc. in which Japan can take advantage of its strength, e.g., senior citizens' food and health food catered to the growing needs of the aging, health-conscious population
- Relaxation/elimination of various regulations, rules, etc. and creation of favorable business/investment environments by obtaining the latest information on regulations

(1) Situation of Business Operations by Japan's Food Industry

With the world's largest population, China is a huge market that continues to show prominent growth, where more than 300 companies have entered and operated especially in sectors from manufacturing/processing through consumption. Sales of the food manufacturing/foodservice industries almost doubled in the past five years although the number of Japanese companies operating locally remained almost unchanged during the same period. As the middle-class population continues to grow, sales are expected to increase as well.

(2) Current Situation and Possibility of FVC Establishment

(Food safety)

As needs for safe food are growing especially among the middle class in the midst of rapid diversification/advance of diet, opportunities are expected to increase for Japanese companies to utilize finely designed technologies/know-how which Japan's food industry has developed concerning high value-added "food." However, to secure/expand a market share in a stable manner in China which enjoys a rich dietary culture with tradition and diversity, where people are rapidly shifting their orientation towards food from "quantity" to "quality," it is important to analyze/grasp tastes and specifications Chinese people want while gaining clear understanding of what attracts Chinese consumers and what sales strategies are required when trying to differentiate products in terms of food safety and health benefits, which people are increasingly interested in, and utilizing new trends (of the young generations) and cultural events.

(Foodservice, ready-made meal markets)

The foodservice market including food delivery service is rapidly expanding and diversifying not only in fast-growing coastal areas but also major inland cities due to the trend toward the nuclear family and resulting preferences for a convenient diet, the development of transportation/communication means, an overseas tour boom, etc. In addition, the market of ready-made meals including salad, rice balls, etc. is gradually growing as the number of convenience stores increases. Aiming to increase domestic consumption and stabilize the people's livelihood, the Chinese government is expected to accelerate efforts for raising the level of the distribution sector and improving the environment for people's consumption. Therefore, Japanese companies should expand business in the foodservice sector to meet the newly generated consumption demand while using imported foodstuffs from Japan, and strengthen development/sales activities of side dishes among other things.

(Senior citizen's food/nursing meals)

The Chinese population is expected to be aging more rapidly in a greater scale than Japanese. As Japan has become an aging society ahead of China, there is an increasing number of opportunities for Japanese companies to provide senior-care-related business utilizing Japan's experience/know-how. In fact, some Japanese nursing-care-related companies have entered the Chinese market.

Accordingly, it is considered effective to promote localizing and introducing senior citizens' food and nursing meals in which Japan leads under the collaboration with the senior-care-related industry.

Companies may be able to tap into the baby food market as China goes through improvement of living standards and a declining birthrate as well.

(Investment environment)

In China, Japanese companies are likely to see more business opportunities thanks to the expected growth in demand for various high value-added foods. However, local business development and export of Japan-made food products face barriers such as various regulations and rules which still remain in place, frequent changes in regulations and rules, and complicated administrative procedures.

(3) Key Points and Measures for Establishment of FVCs

Based on the above, with a view to expanding business of Japan's food industry in China, we will provide support for PR and promotion activities contributing to business development of companies in the fields of foodservice, ready-made meals, health food, senior citizens' food, nursing meals, etc. to meet various needs that are more advanced due to the growing middle class and aging population while keeping in mind the need of localization appropriate for the vast country and its food culture and the rapid development of e-commerce which covers inland and rural areas as well. At the same time, we will make a focused effort on the creation of favorable business/investment environments, which are essential for the utilization of Japan's strength, through promoting relaxation/elimination of various regulations and rules. Through these efforts, we will promote more export of Japanese agricultural, forestry and fisheries products/food to the huge market of China.

(Major measures)

- [1] Utilize SNS, exhibitions and various other methods and conduct PR and promotion activities with clear understanding of what attracts Chinese people in order to encourage development and sales activities of various products appropriate for the Chinese culture in which people strongly associate "food" with "health" while fully utilizing the development of e-commerce in promising business fields including fields related to foodservice/ready-made meals and food that caters to the needs of growing health-conscious population and seniors, nursing meals, etc.
- [2] Promote efforts for relaxation/elimination of various regulations and rules, which is required for business development by Japan's food industry, and for the creation of favorable business/investment environments by gathering the latest information on regulations through close collaboration among industry, academia and government

3. India

Key points for establishment of FVCs

- Promotion of partnership between Indian companies and a variety of Japanese companies which have technologies concerning smart agriculture which contributes to the improvement of productivity/quality of agricultural products and the reduction of food losses, as well as technologies concerning processing/freshness maintenance
- Relaxation/elimination of India's unique regulations, rules, etc. and creation of favorable business/investment environments by obtaining the latest information on regulations

(1) Major Measures Taken to Date

Based on a memorandum signed in November 2016, MAFF and the Ministry of Agriculture & Farmers Welfare of India hold Joint Working Group meetings with the public and private sectors of both countries participating. In October 2018, the two countries agreed on “The Program for Promoting Investment into India by Japan in the Field of Agriculture and Fisheries” to enable the two ministries to support business development by Japanese companies in India. By working with India's Ministry of Food Processing Industries, Japan also participated as a partner country in the World Food India 2017, one of the largest trade fairs of the food industry held in India in October 2017 by the said ministry under the leadership of Prime Minister Modi, and signed a memorandum in October 2018 to hold Joint Working Group meetings.

In India, a federal country, languages and cultures vary depending on the state, and laws and regulations also vary depending on the state government. There are also multiple states which have a population of more than 100 million. Accordingly, it is impractical to make investment in the entire country. As cooperation with state governments is effective in facilitating smooth business expansion, Japan has signed a Memorandum of Cooperation with Andhra Pradesh (AP), Uttar Pradesh (UP), and Maharashtra (MH), three states which Japanese companies are especially interested in, and are holding dialogues.

Through these efforts, we are promoting relation-building between Japan's food industry and India's central/local governments and private-sector companies, supporting Japanese companies' business development.

(2) Situation of Business Operations by Japan's Food Industry

India has a population of over 1.3 billion, the second largest in the world, and is expected to be the world's most populous country in 2024, hence a promising food market, where the growth of the affluent/middle-class population is expected to continue thanks to the high economic growth driven by the country's demographic dividend. On the other hand, the number of food-related companies which entered the Indian market is 16, far fewer than in the ASEAN region or China, partly due to low per-capita GDP, underdeveloped infrastructure, difference in food culture, traditional commercial distribution, etc. To secure a greater share of the Indian market that will grow fast, we need to promote our food industry's local expansion.

(3) Current Situation and Possibility of FVC Establishment

(Production/supply of agricultural products/food)

While India is a world-leading producer of grain, vegetables, fruits, etc., farmers' income is extremely low. This is because a majority of farmers are small-scale farmers, lacking production/processing technologies, hence poor productivity and product quality. It is also because food losses occur due to a lack of food processing technologies and underdevelopment of distribution networks including cold chains with storage warehouses.

In the meantime, due to a declining rural population, the need for increased efficiency and labor-saving in agricultural production are growing; in addition, the middle class is growing, working women are increasing, lifestyles are changing and disposable income is increasing. Due to these factors, needs for safe, high-quality agricultural products, processed foods, etc. are growing every year. Accordingly, the Indian government is highly interested in the improvement of agricultural productivity and product quality, food processing, and cold-chain development, which will contribute to income increase for farmers and people in rural areas, and looking to foreign investment which brings related technologies to the country.

Therefore, it is considered effective to establish FVCs which contribute to the increase of farmers' income by promoting the introduction of food-processing and freshness-maintenance technologies which help contribute to food loss reduction, in addition to improving productivity and quality of agricultural products by utilizing Japan's smart agriculture technologies under the cooperation with India's central and local governments.

It is also hoped that Japanese companies will enter partnerships with startups in India where many startups (venture firms) utilizing advanced technologies such as AI, IoT, and data analysis, have been set up recently. Through such partnerships, Japanese companies should contribute to food loss reduction by establishing a unique distribution system to deal with the local environment where cold chains are underdeveloped.

(Investment environment)

Foreign investment to India was long been held back through the country's complicated tax system and tough restrictions on foreign investment to protect home industry. When Prime Minister Modi took office in 2014, he started promoting the "Make-in-India" initiative which aimed to make the country a world-class hub for manufacturing/export. Through simplifying tax systems and deregulating foreign investment, the country is now actively promoting new investment and business expansion by foreign companies.

However, local business development and export of Japan-made food products face barriers such as some unique regulations on food and foreign investment which still remain in place, frequent changes in regulations and rules, and complicated administrative procedures.

(Popularization of Japanese food)

As the number of Japanese companies which operate in India has grown, the number of restaurants serving Japanese food has also grown in the country's major cities. However, due to the difference in food culture, people's conservativeness in food, and preference for home cooking, the number of such restaurants is still too few to establish Japanese food as a brand. In the meantime, people, especially those in the wealthy class in urban areas, are becoming increasingly health-conscious, staying away from too much oil and sugar, a characteristic of Indian cuisine, so it is considered effective to promote health benefits of Japanese food in popularizing Japanese food.

(4) Key Points and Measures for FVCs

As discussed above, although the number of Japanese companies operating in India is still few, there is a growing need for FVC establishment in a variety of fields, including smart agriculture that contributes to the improvement of productivity and quality of agricultural products and reduction of food losses, processing/freshness-maintenance technologies, healthy Japanese food, etc. Accordingly, we will make focused efforts on promotion of expansion into India by Japanese companies which have technologies related to these fields, relaxation/elimination of India's unique regulations, rules, etc. and creation of favorable business/investment environments by obtaining the latest information on regulations.

In doing so, we will mainly target the states with which Japan has signed a Memorandum of Cooperation. In urban areas in particular, we will also promote the expansion of retail/foodservice companies which provide Japanese meals, food, etc., which could lead to greater export of Japanese agricultural, forestry and fisheries products/food.

(Major measures)

- [1] Promote integrated business development by multiple companies by supporting formation of consortia and formulation of business plans by Japanese companies which have technologies concerning smart agriculture which contributes to the improvement of productivity/quality of agricultural products and the reduction of food losses, as well as technologies concerning processing/freshness maintenance. In addition to that, promote partnership with Indian startups which utilize advanced technologies.
- [2] Conduct research and obtain information on the country's communications infrastructure and related laws to spread smart agriculture and other information required by relevant parties and at the same time promote related technologies by working with the Indian government.
- [3] Formulate programs which contribute to business development of Japan's food industry through Joint Working Groups with the Ministry of Agriculture & Farmers Welfare and Ministry of Food Processing Industries of India, dialogues with state governments, public-private missions, etc. Also work towards the creation of favorable business/investment environments through relation-building between Japanese companies and governments/companies of India, relaxation/elimination of regulations, collection of the latest information on regulations, and simplification of administrative procedures.
- [4] Support creation of B2B business by publicizing technologies/know-how owned by Japan's food industry and the appeal of Japanese food including safety and health benefits through participating in or holding various events including exhibitions, seminars and business meetings in India.

4. Middle East (mainly Saudi Arabia/UAE)

Key points for establishment of FVCs

- Expansion by retail/foodservice companies which provide Japanese meals, food, etc. to wealthy population as the main target
- Creation of favorable investment environment through detailed understanding of the halal system and other things and relaxation/transparency enhancement of unique food regulations

(1) Major Measures Taken to Date

MAFF obtains information on the current situation of FVCs and business/investment environments of the region by dispatching public-private missions.

(2) Situation of Business Operations by Japan's Food Industry

Thirteen Middle Eastern countries (not including Syria) together have a population of around 260 million. While per-capita GDP varies extensively among the 13 countries, from 551 dollars of Yemen to 60,804 dollars of Qatar, it tends to be high in countries producing crude oil or natural gas, as exemplified by the 21,120 dollars of Saudi Arabia and 37,226 dollars of UAE, making the region a food market which has a large, affluent population. However, partly due to the difference in food culture, Japanese food has a low profile and few Japanese food companies have entered the market. Therefore, we need to promote the expansion of our food industry into the region to capture demand of the wealthy class.

(3) Current Situation and Possibility of FVC Establishment

(Popularization of Japanese food)

As the Middle Eastern food culture (meat, spice, use of a lot of oil, etc.) is totally different from Japanese food culture, Japanese food in general has a low recognition level. Accordingly, few people know that a Japanese-style diet helps maintain and promote health. In addition, due to expensive slotting fees at local supermarkets and others, and poor understanding of local needs, few Japanese restaurants are operated by Japanese companies and many transactions in the region by Japanese companies remain at export of samples.

However, interest in Japanese food is gradually growing especially among the affluent population thanks to the recent Japanese food boom across the world, and so-called “B-class dishes” such as beef bowls and curry which originated in Japan may become popular especially among the young generations, in addition to the better-known sushi and wagyu. Demand for safe, high-quality food is also increasing among the local wealthy class due to growing health consciousness.

(Unique food regulations, etc.)

In the meantime, as a majority of people in this region are Muslim, food they eat has to be halal food. There are also unique food regulations and cumbersome procedures, which are obstacles to business expansion by retail/foodservice industries and export of Japan-made food.

(Safe agricultural products)

With a dry, harsh climate, the region has limited arable land, relying on import for much of the farm produce including grain, fruits and vegetables. Under such conditions, the region is considered to have potential demand for water-saving plant factories and greenhouse horticulture which could supply fresh, safe vegetables throughout the year to meet the needs of people in the middle- to high-income bracket, so there are possibilities of producing high-quality vegetables through the introduction of Japanese technologies, and supplying them to local supermarkets and restaurants. However, many consumers still prefer cheap imported vegetables and are not used to eating fresh vegetables as salad, it is important to stimulate demand for raw vegetables at the same time.

(4) Key Points and Measures for Establishment of FVCs

As discussed above, while the number of Japanese companies operating locally is still low, demand for Japanese meals/food is growing especially among the affluent population. Therefore, we will promote the expansion of Japanese retail/foodservice companies providing Japanese meals/food to the wealthy population as the main target, as it helps expand export of agricultural products/food including health food in which Japan has strength. We will also make focused efforts on the creation of favorable business/investment environments through detailed understanding of the halal system and others and relaxation/transparency enhancement of import/export regulations.

(Major measures)

- [1] Support business development by Japanese companies from agricultural production facilities to retail/foodservice industries by presenting concrete plans for provision of Japanese food by combining locally produced food and food imported from Japan through a corporate consortium. Also provide opportunities where Japanese companies can conduct local business on a trial basis and find preferences and needs of local consumers, by setting up a floor selling Japanese products.
- [2] Collect/analyze information on various halal rules and unique food regulations that are a challenge for Japan's food industry when trying to enter the market, and request enhanced transparency in regulations and simplification of procedures through bilateral policy dialogues. Also work toward the creation of favorable business/investment environments by concluding a Memorandum of Cooperation with the governments of partner countries and by promoting formulation of bilateral programs to promote investment by Japanese companies.
- [3] Invite celebrities (e.g., influencers) who have influence in popularization of Japanese meals/food, persons from candidate partner companies in the foodservice sector, import and wholesale business operators, etc. to Japan and introduce Japanese meals and Japan-made food products to them in order to gain recognition. Also approach students from the Middle East studying in Japan and travelers from the region and ask them to disseminate information on Japanese food, etc.

5. Africa

Key points for establishment of FVCs

Promotion of expansion of Japan's food industry into the market while at the same time working on the establishment of FVCs through enhancing agricultural productivity, adding high value to agricultural products, and organizing small-scale farmers into collective farmers through the digitalization of information on agriculture and farmers

(1) Major Measures Taken to Date

The Japanese government makes the following efforts which contribute to the improvement of productivity and income of African farmers through the Tokyo International Conference on African Development (TICAD), thereby supporting efforts of related private-sector companies.

- CARD (Coalition for African Rice Development): Doubling the yield of rice in sub-Saharan Africa in 10 years
- SHEP (Smallholder Horticulture Empowerment and Promotion): Switching from subsistence agriculture to profitable agriculture
- IFNA (Initiative for Food and Nutrition Security in Africa): International cooperation concerning nutritional improvement

The Japanese government has also established the “Platform for Promotion of African Agricultural Development” composed of MAFF, the Ministry of Foreign Affairs, and JICA to respond to requests for agricultural cooperation from leaders of African countries in TICAD VI, and dispatched senior agricultural policy advisors to three countries (Kenya, Zambia, and Senegal).

The Japanese government is also promoting efforts to support organization of small-scale farmers into collective farmers through the digitalization of information on agriculture and farmers (promotion of cooperative shipment/purchasing, etc.) by collaborating with private-sector companies in cooperation with the Working Group on Agriculture, Africa Business Council established in June 2019. In addition, the Japanese government has established a framework for bilateral policy dialogues with South Africa and Kenya respectively, and held discussions for FVC establishment.

(2) Situation of Business Operations by Japan's Food Industry

Made of 54 countries, Africa is a promising food market with a population of around 1.21 billion, which is expected to double to 2.5 billion by 2050. However, due to the region's per-capita GDP which still remains low at around 1,800 dollars on average, coupled with its geographically distant location, the expansion of Japan's food industry into the market is negligible, except for some agricultural production and food processing companies. Under such circumstances, a few companies have started working on setting up agriculture-related startups in Africa, so we need to promote the expansion of our food industry to secure a substantial share of the market in the future.

(3) Current Situation and Possibility of FVC Establishment

(Improvement of productivity/quality of rice and others)

The agriculture, forestry and fisheries industry is the main industry of Africa, accounting for more than half of the working population, but many of them are small-scale farmers with poor productivity. While increasing and stabilizing production, especially of grain including rice, is important for responding to a rapid population growth in the future, African countries are increasing import of grain and other things every year because of poor productivity and product quality caused by a lack of production/processing related technologies available to farmers and insufficient investment of capital goods (machinery, materials, agricultural chemicals/fertilizers, etc.) Therefore, it is hoped that technologies will be introduced through a combination of economic cooperation and private investment to improve productivity and quality of agricultural products.

(Promotion of a switch to market-oriented agriculture)

Farmers' sales/negotiation capabilities in markets are extremely low because many farms are individually operated without a market-conscious production strategy. For this reason, farmers are not able to sell their products in appropriate markets at appropriate prices, which constitutes a cause for their low income, and support for technical improvement/system establishment to promote a switch to market-oriented agriculture and development of required environment are needed.

(4) Key Points and Measures for Establishment of FVCs

As discussed above, although there are still only few Japanese companies operating locally, needs are growing in the region for the improvement of agricultural productivity and product quality as well as a switch to market-oriented agriculture in order to increase farmers' income. Therefore, we will make focused efforts on the expansion of Japanese companies which have technologies to meet these needs.

On another note, as Africa is a promising food market, we will work towards FVC establishment while also striving to increase recognition of Japanese meals/food so that export of Japan-made agricultural, forestry and fisheries products and food would increase in the future.

(Major measures)

- [1] Continue support for enhancing agricultural productivity of Africa and adding high value to agricultural products through CARD, SHEP, etc. by collaborating with related institutions including JICA in order to support a growing population. With CARD, in particular, we will work towards transfer of postharvest processing technologies and introduction of agricultural machinery by utilizing ODA and thereby promote the expansion of Japanese private-sector companies into the market as expertise which Japan has accumulated through many years on the establishment of value chains of rice is expected to be utilized.
- [2] Promote organization of small-scale famers into collective farmers through the digitalization of information on agriculture and farmers by working with organizations such as Africa Business Council, JICA Platform for Food and Agriculture (JiPFA), etc. At the same time, support the establishment of FVCs which connect from postharvest rice milling to storage to distribution to consumption and promote the expansion of Japanese private-sector companies (in the fields of production materials, distribution, sales, etc.) related to these efforts.
- [3] Promote the development of infrastructure for FVC establishment in Africa by dispatching agricultural policy advisors who formulate ODA projects that could organically connect the entire value chain and support policy planning of countries which they have been dispatched to.

6. Central and South America (mainly Brazil/Argentina)

Key points for establishment of FVCs

- Creation of favorable business/investment environments through improvement of complicated tax systems, relaxation of foreign investment restrictions, and improvement of various cumbersome procedures concerning licensing and approval (standardization/transparency enhancement/simplification/streamlining of customs clearance and various procedures)
- Improvement of efficiency in production/processing of agricultural and livestock products and promotion of adding high value to products through the introduction/utilization of smart agricultural technologies, etc.

(1) Major Measures Taken to Date

MAFF has established continual dialogue opportunities between governments and private sectors with Brazil and Argentina respectively: “Japan-Brazil Agriculture and Food Dialogue” and “Japan-Argentina Joint Committee on Agriculture, Livestock, Fishing, Forestry and Agroindustrial Cooperation.” These dialogues are regularly held to promote the following efforts in the two South American countries: 1) Creation of favorable business/investment environments that contribute to the local expansion of Japan’s food industry and the promotion of export of Japan’s agricultural, forestry and fisheries products/food; 2) Introduction/utilization of Japanese companies’ technologies to increase competitiveness of the agriculture/livestock farming industry and the food industry; and 3) Improvement of grain transportation infrastructure.

(2) Situation of Business Operations by Japan’s Food Industry

Although Central and South America, especially South America, is geographically distant from Japan, the region is one of the world’s leading food producers, important for Japan’s food security, and at the same time a huge market as a total of 640 million people live in Central and South America. Due to these factors, more than 50 Japanese companies, including those in the fields of agricultural production and food manufacturing/food wholesale, have entered the market. The number of Japanese companies entering the market has been somewhat on the decline in recent years, but sales of the food manufacturing industry and the foodservice industry are growing.

(3) Current Situation and Possibility of FVC Establishment

(Complicated systems for taxes, licensing and approval, etc.)

As exemplified by the case of Brazil, which is known for so-called “Brazil cost,” which refers to high business cost due to complicated tax systems, various cumbersome procedures concerning licensing and approval, excessive protection of workers, and poor infrastructure network, the business/investment environments of Central and South America are less developed, presenting an obstacle to the expansion of Japanese companies.

In Brazil where grain production is growing, cost reduction by development of domestic transportation infrastructure is an important challenge in strengthening the country’s international competitiveness, so development of grain transportation infrastructure continues to draw strong interest from Japanese companies.

(Enhancing productivity/adding high value to products)

Among Central and South American countries, Brazil and Argentina are especially vast, being the leading export countries of corn, soy beans, crude sugar, beef, chicken, etc. and are important countries for Japan in terms of food security. While large-scale grain production continues in Brazil, some farmers are trying to improve productivity and product quality through the introduction/utilization of smart agricultural technologies in the Cerrado, the central place of the country's grain production. Japanese companies may be able to help improve the country's food supply capability by introducing Japan's smart agricultural technologies.

Both Brazil and Argentina are striving for departure from export which relies heavily on primary products, enhanced competitiveness in export by adding high value through processing of agricultural and livestock products, and environmentally-friendly, sustainable agricultural production. It is hoped that Japanese companies will help the two countries' initiatives by introducing/utilizing Japan's technologies/know-how including more advanced technologies for processing and freshness maintenance and more efficient technologies to reduce environmental load.

(Japanese society)

With the world's largest Japanese society (outside of Japan) of around 2.1 million people (1.9 million in Brazil, 100,000 in Peru, 65,000 in Argentina, 20,000 in Mexico, etc.), Central and South America is one of the most pro-Japanese regions in the world. Many locals of Japanese descent are engaged in agricultural production, hoping to expand their business through collaboration with Japanese companies. Under such circumstances, MAFF is promoting human resources development through technical training provided to farmers of Japanese descent in five South American countries (Brazil, Argentina, Paraguay, Bolivia, and Peru) and business-matching activities with Japanese companies.

(4) Key Points and Measures for Establishment of FVCs

Based on the above, we will make focused efforts on the creation of favorable business/investment environments through improving complicated tax systems, and promotion of production of high value-added agricultural products through the introduction/utilization of smart agriculture in order to promote business expansion into Central and South America by Japan's food industry and export of Japan's agricultural, forestry and fisheries products/food. When promoting export of Japan's agricultural, forestry and fisheries products/food, we will work together with local Japanese societies.

(Major measures)

- [1] Through bilateral policy dialogues with Brazil and Argentina, request solving of challenges facing business expansion by Japan's food industry, e.g., improvement of complicated tax systems, relaxation of foreign investment restrictions, and improvement of various cumbersome procedures concerning licensing and approval (standardization/transparency enhancement/simplification/streamlining of customs clearance and various procedures). In bilateral policy dialogues with Brazil, work towards reduction of grain transportation cost and securing of a stable supply of grain through request for improvement/development of the country's grain transportation infrastructure.
- [2] Promote the introduction/utilization of technologies owned by Japanese companies including smart agricultural technologies, advanced processing technologies, freshness-maintenance technologies, and technologies to reduce environmental load through collaboration with government organizations of partner countries, JICA Platform for Food and Agriculture (JiPFA), etc.
- [3] Promote creation of business through collaboration between Japan's food industry and local farmers of Japanese descent who have acquired Japanese technologies and know-how by holding cooperation/exchange projects with those local Japanese farmers. At the same time, promote securing and development of human resources who can support business operation and product development by Japan's food industry.

7. Russia

Key points for establishment of FVCs

- Expansion of Japanese companies (into the Russian Far East) which contribute to improving productivity of the local agriculture and fisheries industry and making the region an export base
- Expansion of Japanese retail/foodservice companies into major cities including Moscow (European Russia)

(1) Major Measures Taken to Date

The governments of Japan and Russia promote the eight-point cooperation plan which Prime Minister Abe presented to President Putin in May 2016. MAFF supports the expansion of Japan's food industry into the Russian Far East by providing information through the "Platform for Agriculture, Forestry and Fisheries in the Russian Far East and other regions of Russia" whose members include Japanese private-sector companies, dispatching public-private missions, and holding bilateral policy dialogues with the Ministry of Agriculture of Russia. Through these efforts, many projects are being formed with cooperation between the private sectors of the two countries, including projects for developing vegetable greenhouses in the Far East and increasing productivity of soy beans, grain, etc.

(2) Situation of Business Operations by Japan's Food Industry

While Russia has great potential as a market thanks to high per-capita GDP, very few food companies of Japan have entered the market due to the economic confusion after the Soviet collapse and its uncertain business environment. Under such circumstances, the number of companies interested in doing business in Russia is growing as a result of recent promotion of Japan-Russia cooperation, so we need to promote the expansion of such companies into the market.

(3) Current Situation and Possibility of FVC Establishment

(Increase of soy bean/grain production)

The Russian government is working to increase production of agricultural products with a target of nearly doubling the export of agricultural and fisheries products to 45 billion dollars by 2024. In the Russian Far East, production of soy beans (not genetically modified) has surged, being exported mainly to China while production of wheat and corn is on the rise as well. As Japan imports vast amounts of soy beans and grain, the Russian Far East, which is close to Japan, is a potential new source for non-genetically-modified soy beans, wheat, corn, etc. However, productivity, product quality, and processing technology of the region are low and the infrastructure required for transportation/storage of soy beans/grain is not well developed.

For this reason, it is hoped that the region will utilize Japan's production/advanced processing technologies and thereby produce high-quality non-genetically-modified soy beans/grain and processed products made of such local produce which meet the needs of Japanese users and that the region will increase export to Japan and third countries through the introduction of Japan's distribution systems and know-how to the infrastructure development promoted by the Russian government.

(Unused marine resources)

In the waters of the Russian Far East, there are many unused marine resources including squid and seaweed, as the fishing and aquaculture industries have not been fully developed to meet the needs of consumers at home and abroad. The region also lacks well-developed post-catch processing systems, freshness-maintenance technologies, and transportation networks, being unable to supply high-quality products. For this reason, it is hoped that the region will increase the use of marine resources in the Far East and expand export to Japan and third countries by utilizing Japan's processing, cold-chain technologies and tapping into unused marine resources.

(Greenhouse vegetable production)

While the Russian Far East faces a shortage of vegetables especially in winter, relying on import from China and other countries, demand is high for locally-produced, safe vegetables due to concerns about the safety of Chinese vegetables. For this reason, multiple vegetable greenhouse facilities were constructed, in cooperation with Japanese companies, providing fresh, safe vegetables to local residents in winter as well. The region, however, still relies on import for much of its vegetables, and demand for greenhouse vegetables produced through Japanese technologies remains high.

(Popularization of Japanese food)

In Moscow and Saint Petersburg in European Russia, Japanese food is gaining popularity thanks to interest in high-quality food and health especially among the middle class and affluent population, and the number of Japanese restaurants ranging from ramen shops to sushi restaurants to beef-bowl chains is growing, some of which are operated by foodservice companies from Japan.

In the meantime, transportation cost for delivering necessary foodstuffs for Japanese food to Moscow and other cities is still high, so it is necessary to develop a distribution network which enables economical provision of required Japanese foodstuffs in order to provide high-quality Japanese food to a wider consumer base. President Putin announced a target to accelerate the Trans-Siberian Railway's transportation time from Vladivostok to the country's western border to seven days by 2024 in his annual state-of-the-nation address in March 2018. Accordingly, the Russian government is working on the development of the freight transportation route of the Trans-Siberian Railway while, together with the Japanese government, promoting the use of the said railway. It is hoped that Japanese food will spread widely by benefiting from the development of this and other new transportation networks.

(4) Key Points and Measures for Establishment of FVCs

Based on the above, the Russian Far East, which is a prospective, new source of food, has needs for technologies/know-how for promoting increased productivity and export of agricultural and fisheries products meeting the needs of consumers in Japan and third countries. Therefore, we will make focused efforts on expansion into the market by companies which have related technologies.

We will also take advantage of the local Japanese food boom and promote expansion into the market by retail/foodservice companies providing Japanese meals/Japanese food to the affluent population as the main target, which could lead to more export of agricultural, forestry and fisheries products/food from Japan.

(Major measures)

- [1] Provide information on business/investment environments to private-sector companies through the Russian Far East Agriculture, Forestry and Fishery Platform and public-private missions dispatched to the Russian Far East and promote business matching with Russian private-sector companies, in cooperation with Russian central/local governments and related institutions.
- [2] Through corporate consortia, support business development through collaboration among multiple companies which contributes to making the Russian Far East a promotion/export base, e.g., increasing productivity of soy beans and grain including wheat and corn, utilizing unused marine resources and local processing of fisheries products, thereby expanding direct trade between Japan and Russia, and expanding vegetable greenhouse facilities.
- [3] Promote publicizing of technologies/know-how owned by Japan's food industry and the appeal of Japanese food including safety and health benefits through events held in Russia while also promoting the popularization of Japanese food through supplying food by using the Trans-Siberian Railway.

8. Australia

Key points for establishment of FVCs

- Establish a year-round supply system for agricultural products to third countries by taking advantage of the counter-seasonality between Japan and Australia.
- Promote Japan-Australia cooperation to introduce smart agricultural technologies under the different conditions from those in Japan.

(1) Major Measures Taken to Date

In the third Japan-Australia high-level dialogue on agriculture in March 2015, Japan and Australia agreed on a concept to expand market shares in the ASEAN region and other countries by producing and processing agricultural products mainly in Northern Australia utilizing Japanese technology, and exporting and supplying the produced products to the rapidly growing ASEAN markets throughout the year by taking advantage of the counter-seasonality in combination with exports of agricultural and fisheries products from Japan.

As the authority of the commonwealth government concerning agricultural policy is limited due to the strong power of state governments under the federal system in Australia and as seasonality and regional characteristics are different in each state, MAFF signed a Memorandum of Cooperation with four state governments to realize the above-mentioned concept. Additionally, by dispatching the public-private missions four times to Australia, MAFF is promoting local production of agricultural products by Japanese companies. At present, under the government-to-government framework, efforts are being made to produce agricultural products by a Japanese system and export those agricultural products for trial.

(2) Situation of Business Operations by Japan's Food Industry

Australia, an important food supply base for Japan, has high levels of income, livelihood and costs of living with per capita GDP of approximately 56,000 dollars, and a certain level of demand for Japanese products as a high-end market. As a result, approximately 50 companies are operating their businesses in Australia mainly in agricultural, forestry, fisheries and food processing industries.

(3) Current Situation and Possibility of FVC Establishment

(Agricultural production taking advantage of counter-seasonality)

Agricultural production in Australia that takes advantage of counter-seasonality is expected to complement the exports of similar varieties of agricultural products produced in Japan, keep and improve Japan's market share by realizing the year-round supply to third country markets including the ASEAN region, China and India where the economy and population are growing significantly. In particular, the wealthy and middle-class population that is growing rapidly in these regions has high needs for safe and environmentally-friendly agricultural products. As Australia has knowledge and know-how about such needs, the country has a large potential to become a production and supply base.

For this reason, Japan's food-related companies have strong interest in agricultural production in Australia. Some Japanese companies have even started agricultural production in Australia to disperse risks of natural disasters in Japan. However, due to its huge amount of land, Australia has less-developed infrastructure including cold chains, coupled with high labor costs and climatic risks such as droughts. Preventing the leakage of Japanese plant varieties of agricultural products is also a challenge.

(Cooperation in the smart agriculture sector)

Some areas, mainly in Northern Australia, are classified as arid zones just as parts of Africa and the Middle East are. As the environment and infrastructure for data communications are established and large-scale agriculture is implemented in those areas, they have potential to become a demonstration test site for the introduction of Japanese smart agricultural technologies to areas with different climatic conditions and different production scales from those in Japan.

(4) Key Points and Measures for Establishment of FVCs

Based on the above, we will promote Japanese-style agricultural production taking advantage of counter-seasonality and establishment of a year-round supply system to third countries with a view to expanding business operations by Japan's food industry in Australia. We, thereby, aim to expand exports of Japanese agricultural products to third country markets including the ASEAN region, China and India. Additionally, we will promote Japan-Australia cooperation in the field of smart agriculture.

(Major measures)

- [1] Produce agricultural and fisheries products which are of the same variety and same quality as Japanese products by taking advantage of counter-seasonality between Japan and Australia and export those products to third countries, and implement a trial production project to establish a production system for stable procurement of food ingredients.
- [2] Examine introduction of license systems in collaboration with responsible local companies to prevent the leakage of Japanese plant varieties and protect cultivation technologies and know-how.
- [3] Examine introduction of Japanese-style agriculture to the official occupational training program (TAFE).
- [4] Dispatch public-private missions to each state to identify specific challenges against local business operations and request the Australian side to improve the investment environment (e.g., establishment of infrastructure).
- [5] Taking account of future introduction of smart agricultural technologies to Africa and the Middle East, promote Japan-Australia cooperation in the field of smart agriculture by undertaking demonstration tests in regions of Australia which are classified as the same climate zone as Africa and the Middle East.