



Further Spreading the Appeal of Japanese Food to the World

MAFF has been making such efforts as promoting sales led by ministers, transmitting information via overseas media, organizing Japanese-food related events and improving the export environment in order to convey accurate information to the world about the appeal of Japanese food and food culture while proactively expanding exports of Japanese food.

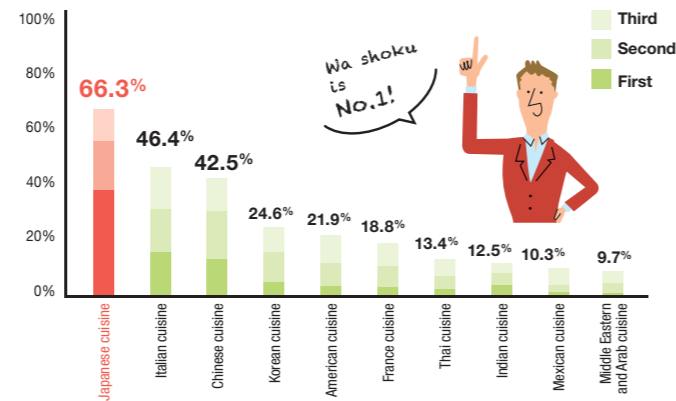


Japanese Food as the World's Most Popular Cuisine

The 2013 registration of “Washoku, traditional dietary cultures of the Japanese” as an Intangible Cultural Heritage of Humanity of UNESCO has triggered a large worldwide Japanese food boom. In a survey by the Japan External Trade Organization (JETRO), Japanese dishes ranked top in the category of “favorite foreign cuisine.” It is estimated that the number of Japanese restaurants in overseas countries has reached approximately 89,000 (as of July 2015), a 60% increase from the previous survey (January 2013).

To expand exports of Japanese food we are promoting sales led by ministers, conveying information through overseas media and holding Japanese-food related events featuring leading chefs as part of efforts to communicate the appeal of Japanese food and food culture to the world.

●Ranking of Favorite Foreign Cuisine



Multiple responses possible. Number of responses as a percentage of number of respondents. Cuisine from one's own country was excluded from the choices.
Source: Prepared based on JETRO's Survey on Japanese Foods Directed at Overseas Consumers

Sales Led by Ministers

Receptions at Japanese embassies and consulates in each country, trade shows and exhibitions are attended by the Prime Minister, the Minister of Ministry of Agriculture, Forestry and Fisheries and other ministers who introduce the appeal of Japanese food.



Emphasizing the appeal of Wagyu beef at a Wagyu promotion

Overseas Exhibitions

Events and exhibitions are held overseas under the theme “Japan's Food Culture and Tourism” to introduce Japanese food and traditional crafts and to sell products.



Hong Kong Food Expo held in Hong Kong

Washoku Cuisine Competition

With the aim of discovering talented chefs capable of conveying the magnificence of Japanese food in countries around the world, foreign chefs are invited to Japan to participate in a food competition where they compete in Washoku skills.



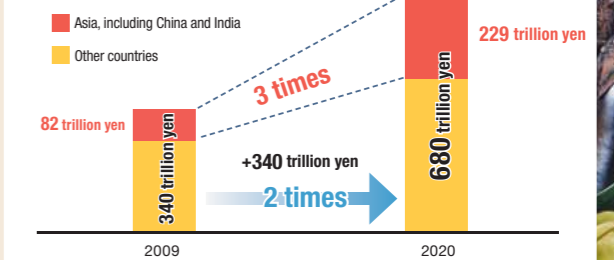
Washoku World Challenge 2015



World Food Market Expected to Double by 2020

Although Japan's food market is shrinking, the world food market is forecast to double from 340 trillion yen (2009) to 680 trillion yen (2020) due to an expansion of consumer markets and an increase in the affluent class, mainly in newly emerging countries. The Asian market, including China and India, especially is projected to expand sharply with an approximately threefold increase. Taking this opportunity, how food exports can be increased is a key point for further development of Japan's agriculture, forestry and fisheries.

●World Food Market



Source: Prepared by MAFF based on estimates from AT Kearney.
Notes: 1. Converted at the rate of 94.6 yen/US\$1, which was the average exchange rate for 2009.
2. Asia, which includes China and India, is the sum total for China, Hong Kong, Korea, India and ASEAN (Indonesia, Singapore and Thailand).
3. The size of the market does not include Japan.



Aim for Exports of 1 Trillion Yen through the From x By x In Strategy

The “FBI Strategy” was formulated as an initiative for responding to this demand and raising Japan's presence in world food markets.

This strategy aims at promoting the spread of Japan's food culture and improving the food export structure of the whole country. The strategy also aims at integrally undertaking three activities, namely, promotion of the use of Japanese food as ingredients of world cuisines (Made From Japan), overseas

expansion of Japanese food culture and food industries (Made By Japan) and promotion of the export of Japanese agricultural, forestry and fishery products and foods (Made In Japan). The FBI strategy derives its name from the first letters of “From,” “By” and “In.”

Under this strategy, MAFF aims to raise the export value of agricultural, forestry and fishery products and foods from 611.7 billion yen in 2014 to 1 trillion yen in 2020.

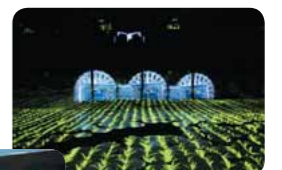
●Export Value of Agricultural, Forestry and Fishery Products and Foods



Expo Milano 2015

Expo Milano 2015 was held in Milan, Italy, from May 1 to October 31, 2015. With the theme of “Feeding the Planet, Energy for Life,” Expo Milano 2015 featured the participation of 148 countries and regions as well as various international institutions. The expo also focused on food-related issues shared by humankind as well as on solutions and contribution measures while also introducing diverse food cultures. Japan operated the Japan Pavilion under the theme “Harmonious Diversity” and introduced Japanese foods and food culture. Through an array of exhibits, the Japan Pavilion

also introduced various efforts in the field of agriculture, forestry and fisheries as well as in food; extensive knowledge and skills found throughout Japanese food; and the ways Japanese food culture can contribute to solutions to global-scale issues such as food-related problems. The Japan Pavilion included an authentic Japanese restaurant and food court offering an abundant variety of cuisines and enabled visitors to experience the diversity and techniques of Japanese food as well as Japanese hospitality.



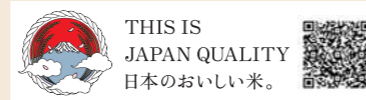


Nationwide Export Promotion

To achieve the goal of raising the export value of Japan's agricultural, forestry and fishery products and foods to 1 trillion yen in 2020, MAFF formulated the "Export promotion strategy of agricultural, forestry and fishery products and foods" (export strategy) and newly established the "Export Strategy Execution Committee" to boost the exports of the whole country.

Within the committee, task forces set up for each priority product (fishery products, rice and rice processed products, forestry products, flowers, vegetables and fruit, beef and tea) discuss responses to their respective issues. At the same time, efforts are made to expand exports through export bodies set up for each priority product.

Various logos convey to overseas consumers the appeal of the high quality and tastiness of Japanese products.



Minister of Ministry of Agriculture, Forestry and Fishery in talks with the Turkish Minister of Food, Agriculture and Livestock



Response to Import Restrictions

MAFF provides information such as inspection results on radioactivity levels in food while requesting import controls based on sound science to the countries which restrict importation of food from Japan. Direct lobbying efforts such as utilizing summit meetings and foreign visits by cabinet members are also encouraged.



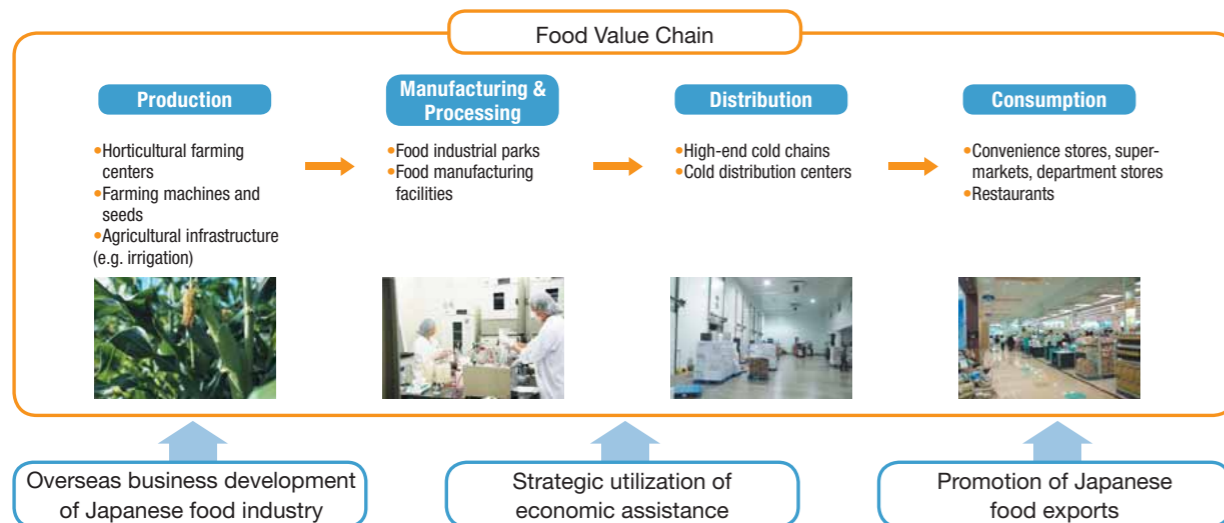
Developing "Food Value Chains"

In order to accelerate strategic participation in global markets, MAFF is supporting the development of "Global Food Value Chains" through international cooperation by public sectors and overseas investments by private sectors.

Developing food value chains is defined as adding values at each stage from producers to consumers and enhancing linkage through chains. It can be achieved by introduction of irrigation facilities, processing technologies and cold chains*.

It contributes to the promotion of overseas business of Japanese private companies which have advanced technologies concerning food processing and low-temperature transport, exports of Japanese foods and the development of agriculture and food-related industries in developing countries.

*Cold chain: Distribution network that transports products maintaining low temperatures.



Encouraging People to "Visit," "Eat" and "Buy"

MAFF is also promoting initiatives for increasing the number of tourists to Japan and to link their "desire to eat real Japanese dishes in Japan with an expansion of exports of agricultural, forestry and fishery products and foods.

In working toward promoting an increase in tourists to Japan, MAFF is establishing the "Hospitality of Food" structure

that will encourage people to "Visit" Japan and "Eat" and "Buy" Japanese food. We also promote tourism in rural areas to give tourists an opportunity to experience both the genuine home of authentic Japanese dishes and activities in rural areas. Accordingly, we contribute to the revitalization of local communities and expand employment.

◆ Creating Rural Landscape and Local Cuisine System (tentative name)

With the public and private sectors working together, MAFF is creating a rural landscape and local cuisine system (tentative name) that links local foods to the appeal and stories of landscapes for the purpose of spurring the desire of overseas tourists to visit Japan while also communicating the appeal of Japanese food and food culture.

◆ Responses to Multilingual Needs and Various Customs

MAFF is promoting responses to multilingualization at restaurants such as preparing foreign-language menus in addition to responding to needs for vegetarian and Halal dishes. We are also creating emblems indicating restaurants that actively welcome foreign tourists as well as disseminating information in collaboration with restaurant websites.



Sake cellar tour that provides experience in sake brewing (Hokkaido)

◆ Improving the Environment for Sales of Souvenir Gifts

To make it easier for foreign tourists to purchase regional agricultural products and foods, MAFF promotes tax exemptions on purchases at roadside stations and farmers markets. We are also working to ensure smoother animal and plant quarantine inspections when tourists take out from Japan souvenir gifts such as agricultural and livestock products.



Revitalization of Regional Communities Utilizing Globally Important Agricultural Heritage Systems (GIAHS)

GIAHS is an initiative under which the Food and Agriculture Organization of the United Nations (FAO) designates remarkable agricultural land use systems (including forestry and fisheries) and landscapes which are rich in globally significant biological diversity evolving from the co-adaptation of the community with its environment and its needs and aspirations for sustainable development. They have an intricate relationship with their territory, cultural or agricultural landscape or biophysical and wider social environment. In Japan's designated regions, efforts are being made to revitalize rural areas by promoting the branding of agricultural products that utilize regional characteristics and promoting green tourism.

Designated Regions in Japan (As of October 2015)

Region	Agricultural System
Sado region, Niigata Prefecture	Sado's Satoyama in harmony with crested ibis
Noto region, Ishikawa Prefecture	Noto's Satoyama and Satoumi
Kakegawa peripheral region, Shizuoka Prefecture	Traditional tea-grass integrated system in Shizuoka (local name: Chagusaba)
Aso region, Kumamoto Prefecture	Managing Aso Grasslands for Sustainable Agriculture
Kunisaki Peninsula Usa region, Oita Prefecture	Kunisaki Peninsula Usa Integrated Forestry, Agriculture and Fisheries System



Crested ibis feeding in paddy field (Sado Region)



Terraced paddy fields connecting Satoumi and Satoyama



Increasing Motivated and Competent Farmers

To ensure progressive agriculture amid economic and social changes, which include a declining population and the advance of globalization and information communications technology (ICT), it is essential to increase the number of motivated and competent farmers who can respond to consumer needs with originality and ingenuity free from the traditional mindset as well as by making decisions independently.

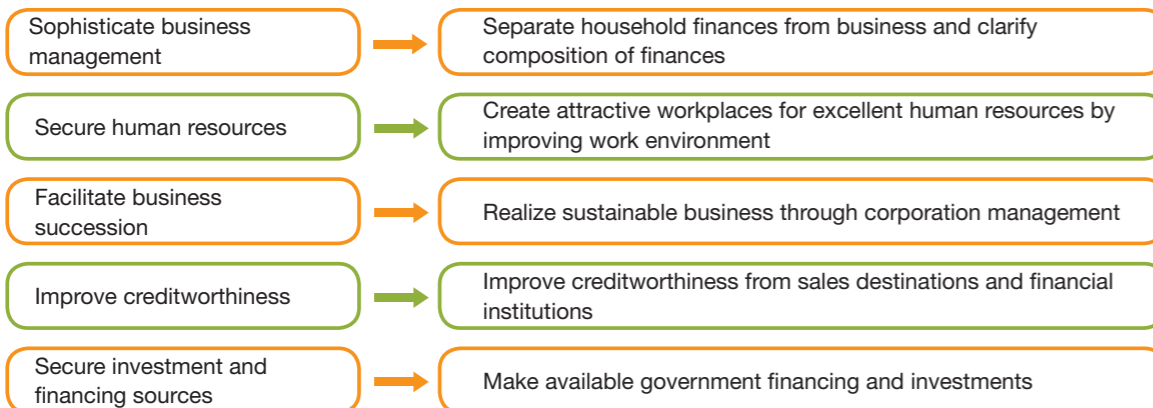


Incorporation of Agricultural Management Entities and Enrichment of Management Practices

Promoting the incorporation of agricultural management entities is an effective means of increasing the number of business-minded farmers. This approach offers numerous benefits: sophisticating business management, securing stable employment, facilitating business succession, improving creditworthiness and expanding employment opportunities in agriculture.

Although, the number of incorporated management entities has doubled over the past 10 years, our target is increasing this number fourfold to 50,000 entities during the next 10 years. Efforts are being made to improve the support system for incorporation through providing a consultation service as well as the enrichment of agricultural management practices.

●Main benefits of incorporation of agricultural management entities



Initiatives for Advanced Incorporated Entities

The Funakata Farm Group in Yamaguchi Prefecture has built a new management model for the sixth industrialization as a corporate group undertaking agricultural production (primary industry), processing (secondary industry) and guest farms (tertiary industry). Group founder Kazuaki Sakamoto established the Funakata Farm Group in 1969 to undertake dairy farming. In 1972 he reorganized the group as Funakata Farm Group Ltd. based on the idea that incorporating agricultural management and expanding the scope of and diversifying management was the most effective means of establishing agriculture as an independent business. Subsequently, he progressed with combining and diversifying operations that included the establishment of Green Hill ATO (guest farm for learning (1987)) and Milk Town (manufacture and sale of milk and dairy products (1990)). To coordinate overall operations within the group, he established the Green Wind Cooperative in 1990. In 2003, Mr. Sakamoto established Hana no Umi (Flower Ocean) for undertaking large-scale systemized production of vegetable seedlings on an expansive area of land reclaimed by drainage. As a result of building a framework enabling the continuation of management with the sixth industrialization, Mr. Sakamoto has created a venue that currently employs a total of more than 300 regular and part-time staff as a source of employment for the local region.



Encouraging New Farmers

The average age of persons engaged in agriculture is around 66. By age bracket, the population of farmers is conspicuously unbalanced, with persons aged 60 and above accounting for around 70% of farmers while persons aged 40 and below make up just about 10% of all farmers. In view of this situation, efforts must be made to increase young farmers to ensure the sustainable development of agriculture. However, during the start-up phase of agricultural management, besides unstable operations, farmers face a number of issues that include obtaining necessary farming technologies and management know-how and securing essential funds. Accordingly, efforts are being made to secure new farmers through the implementation of a variety of measures: providing income support during training and immediately after commencing operations, supporting farmers employed by agricultural corporations, holding seminars for obtaining farming technologies and management know-how and offering interest-free loans.

Starting as Farmers in Gifu Prefecture

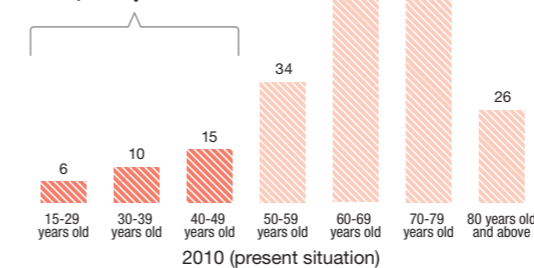


Masaki and Yuko Kato are newly started as farmers who moved from Shiga Prefecture to Gifu Prefecture. This couple received the grant for young farmers (management start-up type) that supports securing income immediately after starting farming operations.

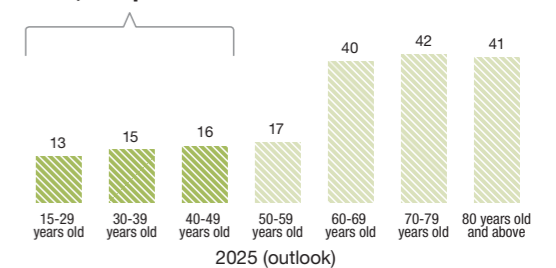
●Estimation of the Number of Farmers (2025)

Unit: 10,000 persons

310,000 persons



440,000 persons



Reference: 1. Prepared from MAFF's Census of Agriculture and Forestry (reclassified compilation) and the Ministry of Internal Affairs and Communications' National Census (questionnaire information independently compiled by MAFF).
2. Outlook: Increases and decreases every five years for each age group (as well as for the newly added number of persons in the youngest age group (15-19 years old)) assumes numbers trend at the same rate as between 2005 and 2010 while the number of farmers aged 40 and below doubles.

The unbalanced age composition will improve assuming that the number of young farmers who remain farmers doubles as a result of the increase of new farmers from younger age groups.



Promoting Active Roles for Women Farmers

Women farmers account for nearly half of persons engaged in farming and play a crucial role in the advancement of agricultural management and in developing the sixth industrialization. Agriculture could be developed further if work environments that enable women to perform their capabilities even more

are improved.

Therefore, MAFF will comprehensively support the creation of environments in which women can fully show their capabilities, including by expanding opportunities for women farmers to play active roles.

Nougyou-Joshi Project

The Nougyou-Joshi Project is an initiative that links the production capabilities, wisdom and market powers that women farmers have cultivated in their daily lives, work and involvement with nature with company technologies, know-how and ideas for the development of new products and services and information. This project collaborates with companies and organizations inside and outside the agricultural business and conveys information from various perspectives about women who play active roles in farming.



Nougyou-Joshi Project logo

Examples of Product Development Incorporating the Ideas of Women Farmers



Mid-year gifts that use products of women farmers



Nougyou-Joshi Pack for light trucks that incorporated the opinions of women farmers



Establishing a Strong Agricultural Structure

A strong agricultural structure must be established to make agriculture a progressive industry amid the ongoing aging of farmers and expansion in abandoned cultivated land.



Farmland Consolidation for Business-Minded Farmers

For Establishing a Strong Agricultural Structure

The current age composition of farmers is conspicuously unbalanced and under these circumstances there are concerns of a sharp rise in the number of farmers retiring as well as a surge in abandoned cultivated land within five and 10 years. Amid this situation, to ensure the sustainable development of agriculture, it is necessary to establish an agricultural structure whereby efficient and stable agricultural management undertakes a major portion of production. Therefore, it is essential to improve environments in which farmers who take on challenges with good business sense and independent decision-making can play leading roles. Comprehensive efforts are being made to concentrate and intensify farmland for business-minded farmers, aiming to increase the ratio of farmland used by business-minded farmers from the current 50% to 80% over the next 10 years.

Farmland Consolidation by Public Corporations for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Banks)

To accelerate the farmland consolidation for business-minded farmers, a public corporation for farmland consolidation (Farmland Banks) was established in each prefecture in 2014. The Farmland Banks rent agricultural land from the land lender (person wishing to rent out the land) and lease land to farmers after consolidation that enables ease of use (sublease). Executing this scheme requires discussion among farmers within the region to facilitate the farmland consolidation for business-minded farmers toward solving problems concerning farmland and people in the local region, namely the shortage of business-minded farmers and expansion of abandoned cultivated land, while also having ongoing discussions to create a blueprint for the future of villages and regions (people and farmland plan). Initiatives for solving problems concerning farmland and people through Farmland Banks are getting underway in various regions, such as the example in Wakasa Town, Fukui Prefecture.

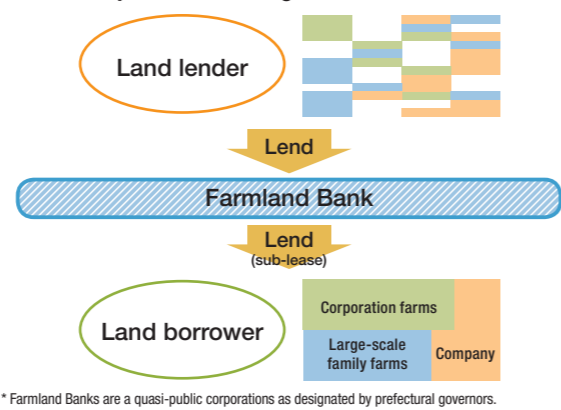
State of Devastated Agricultural Land (objective survey and estimate by municipalities)

Unit: 10,000 ha

Year	Total area of devastated agricultural land	Reusable devastated agricultural land (A category)	Devastated agricultural land expected to be difficult to reuse (B category)
2013	27.3	13.8	13.5

Note: "Devastated agricultural land" is defined as agricultural land currently not provided for cultivation and that has been devastated due to the abandonment of agriculture and on which the cultivation of crops under normal agricultural operations is objectively deemed impossible.

Make into aggregated and easy-to-use agricultural land for persons wishing to rent out the land.



Example of Farmland Consolidation (Wakasa Town, Fukui Prefecture)

In Wakasa Town, Fukui Prefecture, there were discussions with coordination from regional promotion officials with expertise in local circumstances for regions where sustaining farmland was difficult due to the aging of farmers. Accordingly efforts were made to consolidate farmland for nearby farmers with the Farmland Bank acting as an intermediary.



Before using the Farmland Bank (land concentration rate for core farmers: 40%)



After using the Farmland Bank (land concentration rate for core farmers: 80%)



Strengthening the Agricultural Infrastructure

For Dramatically Raising Productivity

Improvement of the agricultural infrastructure is also important for concentration and intensification of farmland for core farmers and for realizing highly profitable agriculture. For this reason, MAFF promotes farmland consolidation of rice paddy fields into large plots in collaboration with Farmland Banks. Also, efforts are promoted to improve farmland conditions (for multipurpose use) that enable conversion into dry fields by enhancing drainage capacity and to develop new agricultural irrigation and drainage systems that realize labor-saving water management.

Integrated Farmland Consolidation for the Entire Region

Before consolidation



Small-plot farmland, narrow farm roads, poor drainage

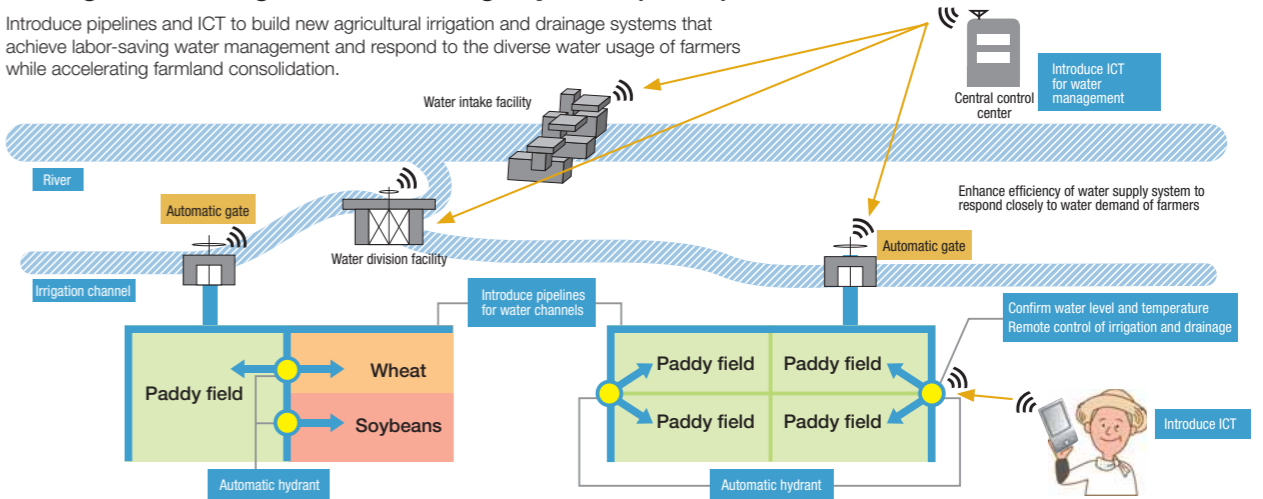
After consolidation



Large-plot farmland, improved farm roads, improved water and drainage canals

New Agricultural Irrigation and Drainage Systems (Model)

Introduce pipelines and ICT to build new agricultural irrigation and drainage systems that achieve labor-saving water management and respond to the diverse water usage of farmers while accelerating farmland consolidation.

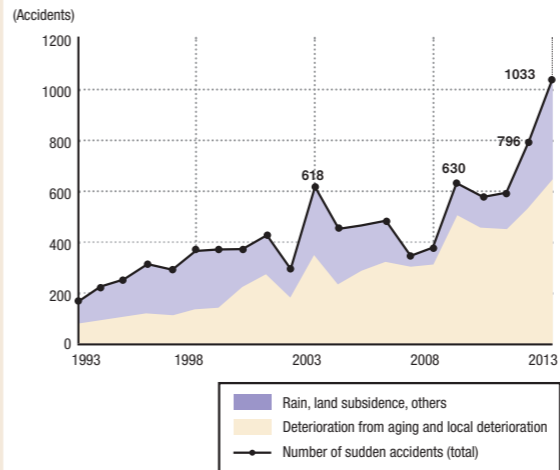


Extending the Life of Facilities and Improving Resilience against Natural Disasters

Irrigation facilities have been built nationwide, such as irrigation channels, reservoirs and dams that supply necessary water for agriculture along with drainage canals and pump stations that drain rainwater. In recent years, however, these facilities can no longer fulfil their intended functions due to a tendency for disasters such as earthquakes and torrential rains to be more

violent, while the deterioration of the facilities is progressing due to aging. Accordingly, efforts are being made to promote measures that make agricultural irrigation and drainage systems quake resistant, extend the lives of these facilities and prevent flood damage in rural areas.

Trends in the Number of Sudden Accidents on Actual Facilities



Tendency toward frequent sudden accidents such as pipeline ruptures



Measures for Disaster Prevention and Mitigation in Rural Areas



Flood damage in rural areas due to torrential rains



Implement water drainage measures

Improvement of drainage pump stations



Agricultural and Livestock Products Indispensable in Japanese Food Culture

In Japan, a variety of agricultural and livestock products are produced in accordance with the conditions and circumstances of each region. Regarding the main agricultural products such as rice, vegetables, fruits, flowers and livestock products indispensable in Japanese food culture, various support measures are being implemented for expanding production and consumption.

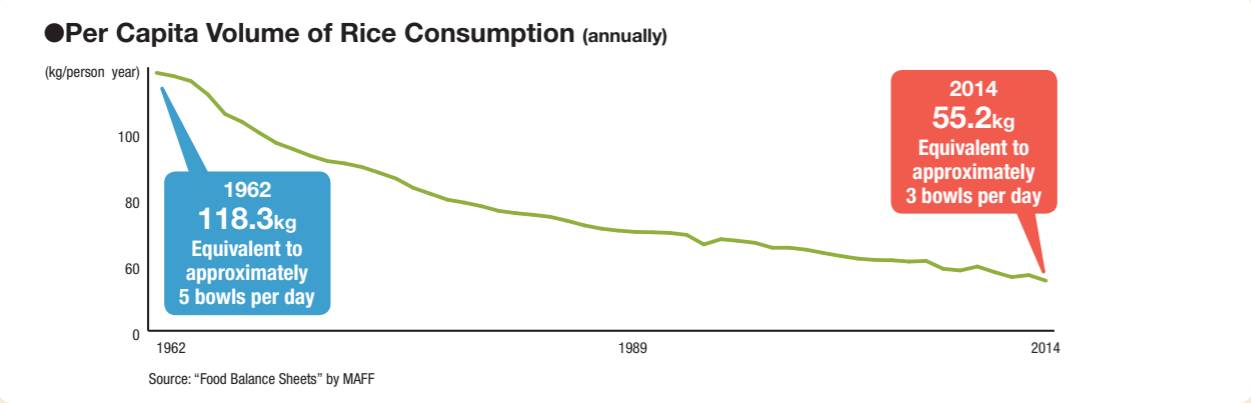


Full Utilization of Paddy Fields with Crops Demanded

Per capita rice consumption has decreased by nearly half during the past 50 years due to the aging of society, the declining population and changing dietary patterns. This trend is estimated to continue.

On the other hand, besides producing rice, paddy fields also have multifunctional roles that include preventing flooding and

soil erosion and stabilizing the water volume of rivers. This is why paddy fields must be maintained in the future. Accordingly, efforts are being made toward the full utilization of paddy fields by shifting production away from rice as a staple food to crops demanded such as rice for feed, wheat and soybeans.



Boosting Consumption of the Important Staple “Rice”

Various support measures are being implemented to maintain and raise consumption of rice, which is an indispensable and important staple food of the Japanese people. These include promoting the school lunch program for

children, who are the future generation of consumers, and promoting stable transactions of industrial-use rice for home-meal replacement and eating-out, which account for approximately one-third of consumption of rice as a staple.

Branding of Livestock Products Utilizing Rice for Feed

The creation of distinctive livestock products that utilize rice for feed is being watched with interest. For example, the yolk color of eggs of hens fed on a lot of rice is lighter. For swine fed on a lot of rice, oleic acid in fat increases and linoleic acid decreases and pork quality improves. Utilizing these characteristics, efforts for branding of livestock products are being made in various regions. Livestock products produced using rice for feed are supported by consumers because these products use domestic feed, enhance flavor and make effective use of paddy fields.



Egg from a hen fed on a lot of rice for feed



School lunch program



Meeting arranged for buyers/suppliers of industrial-use rice



Vegetables, Fruits and Flowers

◆ Vegetables

In recent years the purchase of fresh vegetables has declined. On the other hand, there has been an increase in purchases of processed vegetables such as for salads and demand for processing and/or industrial-use vegetables now accounts for around 60% of total demand for vegetables.

Meanwhile, within processing and/or industrial-use demand, the share of domestically produced vegetables has declined to around 70% due to a rise in imported vegetables. Therefore, MAFF provides support such as for the introduction of new technologies for production of processing and/or industrial-use vegetables toward raising the share of domestically produced vegetables.



JA Tonamino departed from operations centered on rice cultivation and shifted to agricultural products demanded. It built a mechanized integrated system and set up the Hokuriku region's first dedicated onion low-temperature drying, sorting and storage facility for stable shipments.

◆ Fruit

Fruit cultivation is labor intensive with numerous operations requiring advanced technologies. Therefore, realizing labor-saving operations and reducing working hours are important issues. Efforts are being made to develop and introduce new cultivation technologies and expand the scale of operations. To boost demand for fruit, initiatives are being promoted to develop varieties that meet customer needs and to introduce these in production regions as well as to develop fruit processed products.



Shine Muscat

This yellow-green grape is a new variety registered in 2006. This grape has a muscat aroma and high sugar content and can be eaten together with the skin. Cultivation is not difficult and extends across a wide area from Tohoku to Kyushu. Land area under cultivation has increased approximately eightfold over the past four years.

Photograph provided by NARO Institute of Fruit Tree Science

◆ Flowering Plants

Various initiatives are being implemented to promote the flowering plants* industry and flower culture. These include establishing a stable production and supply structure for flowers, increasing the usable life of plants, streamlining distribution, promoting exports, utilizing flowers for public facilities and community development, and undertaking flower nurturing activities.

Additionally, a supply structure is being established for domestically produced flowers that will be used for decorations at the Tokyo Olympics and Paralympics both inside and outside of venues as well as for victory bouquets.

* Flowering plants include such ornamental plants as cut flowers, potted flowers, flowering trees, bulbous plants, flower bed seedlings, grass and ground-covering plants.



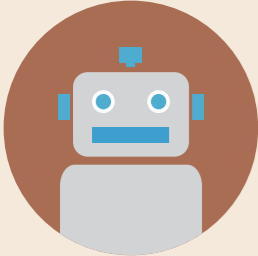
Regional flowering nurturing activities



Providing Safe and Good-Quality Domestic Livestock Products

Such important livestock products as milk, dairy products, beef, pork, chicken and hen eggs are sources of protein and calcium. To deliver safe and good-quality domestic livestock products to consumers, support is being provided for the economic stability of livestock farmers and for raising their productivity.





Opening the Way to the Future through Cutting-Edge Technologies

To make agriculture a progressive industry, it is necessary to fully utilize the resources and potential of rural areas through technological innovation. For this purpose, efforts are being aimed at expanding the scale of agricultural operations and realizing labor-saving and low-cost operations by introducing cutting-edge technologies from interdisciplinary fields such as robots and information communications technology (ICT).

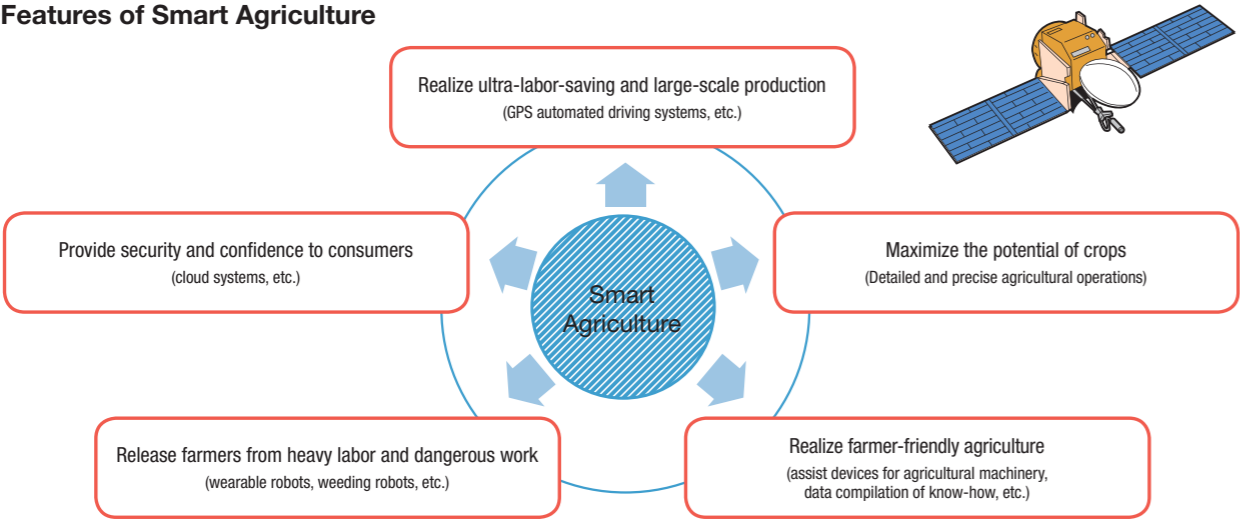


Toward the Realization of Smart Agriculture

“Smart agriculture” involves using robot technologies to improve soil productivity, plant seeds, weed and harvest as well as to record farmwork using cloud systems. This new type of agriculture is now moving closer to reality. Smart agriculture utilizes leading-edge technologies such as

robot technologies and ICT to enable ultra-labor-saving and high-quality production. MAFF undertakes initiatives including the research and development and on-site introduction of leading-edge technologies to realize smart agriculture.

●Features of Smart Agriculture



Utilization of Robot Technologies

To realize on-site labor-saving operations in the agricultural, forestry and fisheries and food industries, MAFF promotes the introduction of robot technologies in collaboration with the robot and other industries. That includes the automation of work using GPS* automated driving systems and the mechanization and

automation of heavy human work. These technologies are based on the “Japan’s Robot Strategy” decided at meetings of the Headquarters for Japan’s Economic Revitalization.

*GPS: Global positioning system



Collaborative work system that simultaneously performs two work operations with a driverless tractor and a tractor with a driver



Wearable robot lessening the burden of unloading work

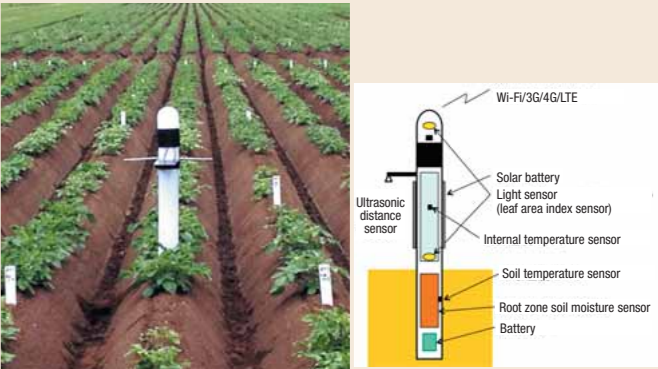


Automated robot puts food in lunch boxes



Utilization of ICT

The sophistication and efficiency of production systems through accumulated data analysis using ICT is expected to also enable efficient operation in extensive fields. Progress is also being made in research enabling “craftsmanship” to be put into a database and manuals that allow even people with little experience to use sophisticated technologies. This could bring hopes for the smooth succession of technologies to younger generations and for an increase in new farmers.



Potato cultivation management using ICT



Next-Generation Greenhouse Horticulture

Greenhouse horticulture is indispensable for stable supplies and production of vegetables and other agricultural products. However, many of these products require warming in winter, making it essential to break away from reliance on fossil fuels from the perspective of cost reductions and global warming. For this reason, MAFF promotes the establishment of next-generation greenhouse horticulture bases that consolidate

facilities for large-scale operations and perform advanced environmental control through the use of ICT. These facilities undertake total operations from production to preparation and shipment while reducing costs through the use of local energy such as woody biomass. Besides breaking away from reliance on fossil fuels, it is expected to raise the income of producers and create jobs locally.

●Model of Next-Generation Greenhouse Horticulture



Functional Agricultural, Forestry and Fishery Products

MAFF is undertaking research and development on agricultural, forestry and fishery products possessing functional ingredients. In research carried out to the present, we have discovered that *O*-methylated catechin contained in “Benifuuki” green tea is effective in alleviating the effects of eye and nose discomfort caused by house dust, etc., and that beta-cryptoxanthin contained in satsuma mandarin oranges is effective in maintaining the health of bones.



Benifuuki green tea containing *O*-Methylated catechin