Chapter 1 Securing Stable Food Supplies

1. Food self-sufficiency ratio and food self-sufficiency potential indicator

- In FY2019, the food self-sufficiency ratio on a calorie supply basis increased by 1 percentage point from the previous year to 38%, mainly due to higher wheat yields. On a production value basis, the ratio remained the same as the previous year at 66%.
- To improve the food self-sufficiency ratio/potential, it is necessary to strengthen domestic production bases by fostering and securing business farmers. consolidating and intensifying farmland, increase consumption of domestic agricultural products and strengthen links between agriculture and the food industry, etc.
- To improve the food self-sufficiency ratio, which reflects the feed self-sufficiency ratio, it is necessary to improve both the food domestic production ratio (which reflects the activities of the livestock industry regardless of whether feed is produced domestically or imported) and the feed self-sufficiency ratio.
- With diversifying risk factors, such as the spread of COVID-19, there are growing expectations for increases in food self-sufficiency ratio and stronger food security.
- Food self-sufficiency potential indicators which show potential production are higher than the estimated energy requirement levels when the indicators are based on potato-based cultivation and lower when the indicators are based on rice and wheat-based cultivation.

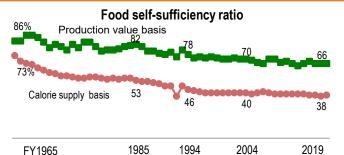












Source: "Food Balance Sheet," MAFF Note: Figures for FY2019 are approximations

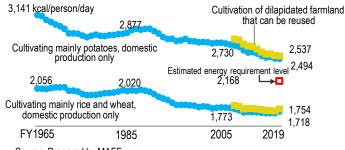
Food domestic production ratio (Unit: %)

		Calorie supply basis	Production value basis
Foo-	d domestic production	47(38)	69(66)
	d domestic production of livestock products	62(15)	68(56)
	Beef	42(11)	64(56)
	Pork	49(6)	57(45)
	Chicken eggs	96(12)	98(67)
Feed self-sufficiency ratio			25

Source: Prepared by MAFF Notes: 1) Figures for FY2019

2) Figures in parentheses represent the comprehensive food self-sufficiency ratio, which reflects the feed self-sufficiency ratio.

Trends in food self-sufficiency potential indicators

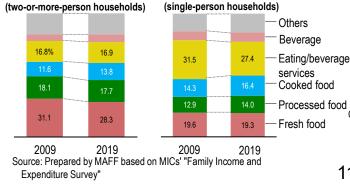


Source: Prepared by MAFF

2. Food consumption trends

- The ratio of pre-cooked food spending to total food spending increased for both two-or-more-person households and single-person households in 2019.
- More consumers answered "delicious" as the reason for purchasing frozen foods. This was a factor in the increase in expenditures on pre-cooked foods.

Changes in the breakdown of food consumption expenditure by household type



Appeal of frozen foods (multiple answers) 2020 63.1 % No need to cook 2017 2014 57.6 Can be stored 54.6 Delicious 52.6 Saves time 35.3 Can use only what is needed

Source: Prepared by MAFF based on Survey on Actual Use of Frozen Food Products by the Japan Frozen Food Association

Note: Total calculated based on percentages of men and women, as only data of men and women were published in 2014.



3. Exploration of demand through the creation of new values







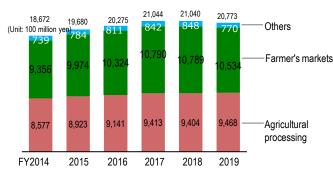




Creation of new value chains to meet demand

- Total annual sales of agricultural production-related businesses (the processing and direct sales efforts by farmers, etc.) totaled 2,077.3 billion yen in FY2019, down 26.8 billion yen from the previous year.
- To address the issues faced by agriculture, forestry, and fisheries businesses engaged in AFFrinnovation, the government has set up support centers for AFFrinnovation at the national and prefectural levels to provide advice and support for management improvement efforts.

Total sales from agricultural production-related businesses



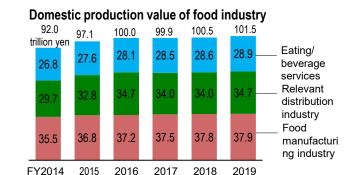
Source: Prepared by Source: Prepared by MAFF, "Comprehensive Survey on AFFrinnovation"

Enhancement of competitiveness in the food industries

- The domestic food industry production value in 2019 was 101.5 trillion yen, up 1.0 trillion yen from the previous year.
- Compared to the previous year, increases included factory-shipped appetizers, sushi, boxed lunches, breads, etc. in the food manufacturing industry, margin value in the retail industry* in relevant distribution industries, and the sales at restaurants and bars in the eating and beverage services industry.

*Margin value = Sales value - Cost of sales

Promote efforts to improve the productivity of the food industry by demonstrating the use of advanced technologies, including Al-based inspection equipment, and to streamline food distribution by linking product and logistics information data.



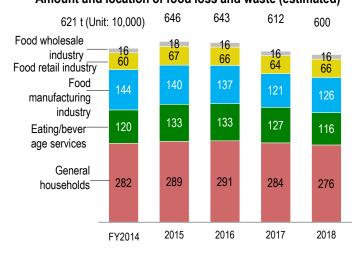
Source: Prepared by MAFF, "Economic relation tables on agriculture and food industries'

Note: Figures for 2019 are approximations

Addressing environmental issues such as food loss and waste

- Japan's food loss and waste has been on a downward trend in recent years, and in FY2018, it was estimated to be 6 million tons per year, down 120,000 tons from the previous year.
- The Government of Japan has promoted the relaxation of delivery deadlines for food retailers and the easing of expiry date labeling (year/month format, and date batch format) for food manufacturers.
- The government has conducted a survey of foodrelated businesses regarding the amount of food loss and waste generated in general households due to the spread of COVID-19 after March 2020. As a result, about 60% of the food industry as a whole responded that there was no change, while by industry, about 70% of the eating and beverage services industry reported a decrease.

Amount and location of food loss and waste (estimated)









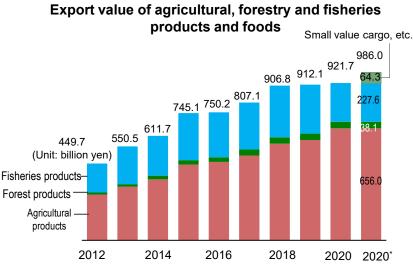




4. Strategic exploration of global market

Promoting the exports of agricultural, forestry and fisheries products and foods

- Due to the global spread of COVID-19, the export value of agricultural, forestry and fisheries products and foods decreased in the first half of 2020, compared to the same period in the previous year. However, the annual value was 921.7 billion yen, reaching a record high for the eighth consecutive year. The value of exports, including small value cargo, etc., was 986.0 billion yen.
- In April 2020, the government established the Headquarters for the Export of Agricultural, Forestry and Fishery Products and Food as a command tower for export promotion and formulated a basic policy and action plan to strategically and efficiently promote exports.
- Due to progress made in animal and plant quarantine consultations, the ban on exports or the quarantine requirements had been lifted for seven products from seven countries/regions in FY2020. This includes the abolition of the 30-month age limit on beef destined for Macao, making it possible to export top-quality, long-term fattened beef.
- Of the 54 countries/regions that introduced import restrictions and/or measures in the wake of the TEPCO Fukushima Daiichi nuclear power station accident, 39 countries/regions have removed their measures.
- As of the end of FY2020, there were 4,572 registrants for GFP*, which aims to support producers, etc. who are willing to engage in export and to promote cooperation among them. Also, 63 GFP global production areas that meet overseas needs and regulations were adopted.



Source: Prepared by MAFF based on Trade Statistics by MOF Note: * indicates figures for 2020, plus small value cargo, etc.

Countries/regions and products for which the ban on exports is lifted or quarantine requirements are relaxed in FY2020

Month	Destination country/region	Product	Contents
APR	USA	Pear	Expansion of production areas and removal of restrictions on certain varieties
	Macau	Chicken meat	Lifting of export ban
MAY	Thailand	Citrus fruits	Elimination of joint export inspections in some production areas and field inspection of citrus disease (SOS)
JUN	Macau	Beef	Removal of the 30-month age limit
	Saudi Arabia	Beef	Lifting of export ban
AUG	Australia	Strawberries	Lifting of export ban
OCT	EU	Black pine bonsai (including Nishiki-matsu bonsai)	Lifting of export ban
	Singapore	Meat products	Lifting of export ban on the use of raw materials imported from third countries

^{*}Abbreviation for Global Farmers / Fishermen / Foresters / Food Manufacturers Project.

Promotion of Japanese food and ingredients

At the end of FY2019, a total of 6,069 stores had been recognized as Japanese Food and Ingredient Supporter Stores Overseas that proactively use food products made in Japan. A total of 1,719 foreign chefs had obtained their Certification of Cooking Skills for Japanese Cuisine in Foreign Countries and a total of 145 persons had been recognized as Japanese Cuisine Goodwill Ambassadors. who effectively disseminate the appeal of Japanese food and dietary culture in Japan and abroad.

Certification of Japanese food ingredients and Japanese food

		•	(Unit: stores, people)
	Stores that support Japanese food products	Persons certified in cooking skills for Japanese cuisine	Goodwill Ambassadors for Japanese Cuisine
Europe	700	173	31
Africa	0	6	1
Asia	4,236	1,337	22
Middle East	69	7	5
Oceania	138	13	6
North America	603	137	12
Central and South America	323	46	10
Japan	-	-	58
Total	6,069	1,719	145

Source: Prepared by MAFF Note: As of the end of 2020

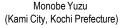
Intellectual property protection

Under the Geographical Indications (GI) Protection System. protects the names regional distinctive products as intellectual property, 12 new products were registered in FY2020, totaling 106 products.

In October 2020, the Revised Act on Improvement and Increased Production of Livestock, which prevents improper distribution of livestock genetic resources, and the Act on Prevention of Unfair Competition on Genetic Resources of Livestock, which protects the value of wagyu genetic resources, came into effect.

Product samples registered under the GI protection system in FY2020







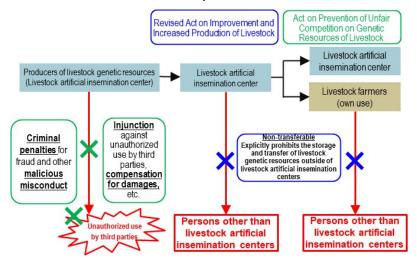
Fukuyama Kuwai (Fukuyama City, Hiroshima Prefecture)



Toyama Hoshigaki (Nanto City, Toyama Prefecture)

Source: Prepared by MAFF

Outline of the Revised Act on Improvement and Increased Production of Livestock and the Act on Prevention of Unfair Competition on Genetic Resources of Livestock





5. Deepening of the connection between consumers, food and agriculture













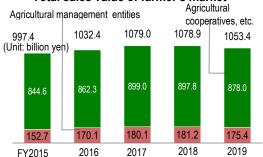
Efforts for local production for local consumption

The total sales value of farmer's markets in FY2019 was 1,053.4 billion yen, down 2.4% from the previous year. The annual sales value of farmer's markets, operated by agricultural cooperatives, was 878 billion yen, accounting for 80% of the total.

Protection/transmission of Japanese food culture

Information on 17 prefectures was added to the database "Our Regional Cuisines -Beloved tastes and flavors we want to pass on to the next generation" which contains information on the histories, origins, and recipes of regional cuisines selected by each region, thus providing information on 27 prefectures.

Total sales value of farmer's market



Source: Prepared by MAFF, "Comprehensive Survey on AFFrinnovation" Note: "Agricultural cooperatives, etc." refers to agricultural cooperatives, local governments, the third sector, producer groups, etc.

<Case Study > Let's learn about "food" through hands-on experience (Miyazaki Prefecture)

Kobayashi City, Miyazaki Prefecture, creates opportunities for learning about local cuisine and healthy cooking through cooking classes, etc.

In particular, the activities targeting elementary and junior high school students and their parents are designed to convey the origin of the names of local dishes. In addition, the program provides opportunities to pass on food culture and rediscover local attractions



parent-child challenge course

6. Promotion of shokuiku (food and nutrition education)









- In March 2021, the Fourth Basic Plan for the Promotion of shokuiku was established in light of the situation surrounding shokuiku, such as the health of the citizens, changes in the environment with regard to food and nutrition, and the digitization of society. This plan covers approximately five years, from FY2021 to FY2025.
- This plan focuses on the following three areas: (1) Promotion of shokuiku supporting lifetime physical and mental health. (2) Promotion of shokuiku supporting sustainable food and nutrition, and (3) Promotion of shokuiku in response to the "new normal" and digitalization.
- The government added a new target for the guidance on local products by diet and nutrition teachers. Also, more assignments of more diet and nutrition teachers will be promoted.
- The "Health Japan 21(the 2nd term)" and "200 grams of Fruits Every Day!" recommend consumption of 350g of vegetables and 200g of fruits respectively. However, these recommendations have not been met (actual figures were 280.5g for vegetables and 100.2g for fruits as of 2019). In order to increase the intake, it is important to both promote and raise awareness among consumers.

Goals for shokuiku Promotion in the Fourth Basic Plan for the Promotion of shokuiku

- 1. Increase the number of citizens who are interested in Shokuiku.
- 2. Increase the number of "kyoshoku" occasions for breakfast or dinner with family members.
- 3. Increase the percentage of citizens participating in kyoshoku in communities as they hope.
- 4. Decrease the percentage of citizens skipping breakfast.
- 5. Increase efforts to use local products in school lunches, etc.
- 6. Increase the number of citizens who adopt dietary habits in consideration of
- 7. Increase the percentage of citizens who put into practice a healthy diet from day to day where they take care to maintain an appropriate weight and limit salt intake in order to prevent or treat noncommunicable diseases.
- 8. Increase the percentage of citizens who take time to eat and chew well.
- 9. Increase the number of volunteers engaging in the promotion of shokuiku.
- 10. Increase the number of citizens who have agriculture, forestry, or fishery experience.
- 11. Increase the number of citizens who choose agricultural, forestry, and fishery products and foods with an awareness of production areas and the producers.
- 12. Increase the number of citizens who choose environmentally friendly agricultural, forestry, and fishery products and foods.
- 13. Increase the number of citizens who take action to reduce food loss and waste.
- 14. Increase the percentage of citizens who have received and pass on traditional cuisines and table manners from their communities or families.
- 15. Increase the percentage of citizens who have basic knowledge on food safety and are able to make appropriate decisions based on it.
- 16. Increase the percentage of municipalities that have created and implemented the Municipal Plan for the Promotion of Shokuiku.

Additional and expanded goals



7. Ensuring food safety and consumer confidence taking international activities into consideration









- ➤ Based on scientific evidence, MAFF develops and disseminates measures for preventing and reducing chemical / microbiological hazards in food at necessary stages throughout the food chain from farm to table.
- The Food Labeling Standards were revised in March 2021 to enable the labeling of unpolished or polished rice to indicate the place of production, variety, and year of production, even if the rice has not been certified by Agricultural products inspection.

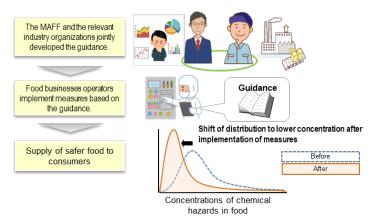
Example of food labeling for unpolished or polished rice after the revision of the Food Labeling Standards

Raw	Place of production	Variety	Year of production
unpolished rice	Single source rice Niigata Prefecture Koshi Hikari 2021 Based on Agricultural product inspection certification (*)		
	Place of	Variety	Year of
Raw	production	Variety	production

Source: Prepared by MAFF, based on data from the Consumer Affairs Agency

Example of measures to reduce chemical hazards in food

In October 2020, guidance for food business operators was published to improve the safety of foods containing fats and oils. This guidance outlines the principles and examples of measures to reduce 3-MCPD esters and glycidyl esters in food that occur unintentionally during the refining process of fats and oils.



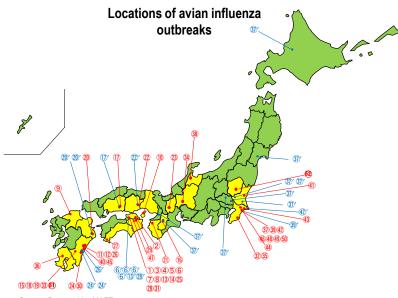
Source: Prepared by MAFF

8. Strengthen measures for animal and plant quarantine



Avian influenza

- In November 2020, an outbreak of highly pathogenic avian influenza occurred in Kagawa Prefecture for the first time in about three years, and as of the end of March 2021, 52 cases had been confirmed on farms in 18 prefectures.
- SDF cooperated in the culling in affected farms in response to requests (28 times as of the end of March 2021).
- The government notified prefectures across the country to (1) conduct simultaneous checking for appropriate biosecurity management, (2) conduct simultaneous emergency disinfection nationwide, and (3) conduct emergency quarantine exercises.
- Detailed information was disseminated including leaflets with easy-to-understand explanations of the arrival statuses of wild birds and the seasonal nature of the virus.



Source: Prepared by MAFF

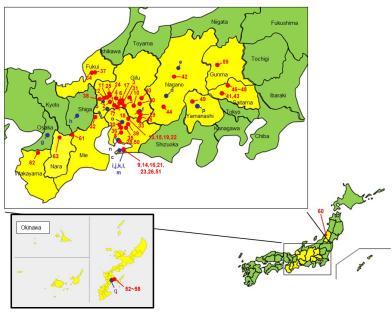
Notes: 1) As of the end of March 2021

2) Numbers indicate the order of occurrence. Numbers in red indicate farms where outbreaks occurred. The numbers in blue, which are the same as the numbers in red, mean farms where some poultry were culled, identified as "animals suspected to be affected" since epidemiological linkage with affected farms were confirmed, such as movement of poultry, etc.

CSF (classical swine fever)

- The first outbreak of CSF in Japan in 26 years occurred in September 2018, with 63 cases reported in farms in 12 prefectures as of the end of March 2021.
- Based on the Specific Domestic Animal Infectious Disease Quarantine Guidelines for Classical Swine Fever (CSF), the government has designated 30 prefectures as recommended vaccination areas as of the end of March 2021.
- A revision of the Biosecurity Standards has been implemented, including mandatory measures to establish a manual of biosecurity management at each farm, to prevent wildlife from entering, and stricter heating standards for eco-feed.

Locations of CSF outbreaks



Source: Prepared by MAFF

Notes: 1) As of the end of March 2021

2) Numbers indicate the order of occurrence. Numbers indicate farms where outbreaks occurred in rearing swine. Alphabetical marks indicate where some pigs were culled, identified as "animals suspected to be affected" since epidemiological linkage with affected farms were confirmed, such as movement of pigs, etc.

- In March 2020, the Act on Domestic Animal Infectious Diseases Control was partially revised for the purpose of preventing the introduction of transboundary animal diseases such as foot-and-mouth disease (FMD) and highly pathogenic avian influenza (HPAI) from overseas, both of which have enormous impacts on the livestock industry. The quarantine system was strengthened by increasing the number of animal quarantine officers and quarantine detector dogs.
- To prevent the entry/spread of plant diseases and pests in Japan, quarantine inspections on imported plants, surveys around points of entry, and emergency control of the entered pests have been implemented.
- Since June 2020, a number of detections of Oriental fruit flies (a serious threat to citrus fruit) have been reported in Kagoshima prefecture, etc. In response, MAFF, in cooperation with the prefectures, implemented control measures such as installations of plates that attract and kill male adults.



A detector dog for animal and plant quarantine



Plate for attracting and killing adult male Oriental fruit flies

9. Establishing comprehensive food security in anticipation of food supply risks















Efforts to prepare for unexpected events in normal times

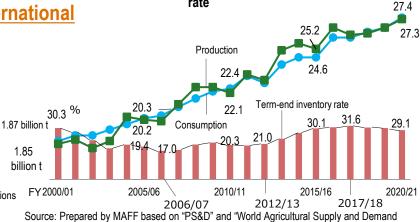
- In FY2020, the government conducted risk analyses and assessments of food security for three risk categories: large-scale natural disasters, extreme weather events, infectious diseases in livestock, and new infectious diseases such as COVID-19.
- In January 2021, "contagious disease epidemics" was added to the "Food Security Guideline in case of Emergency" as a risk affecting food supply. Global grain production, consumption, term-end inventory

Understanding and analyzing international food supply and demand

- The world grain production increased for the third consecutive year, mainly due to growth in crop yields. Consumption increased due to population growth, higher income levels, etc.
- The world's population is projected to grow from 7.8 billion in 2020 to 9.74 billion* by 2050 *Source: World Population Prospects 2019, United Nations
- It is necessary to take all possible measures to ensure food security based on the trends of international supply and demand due to the instability of global food supply and demand.

Securing a stable supply of imported grain and food

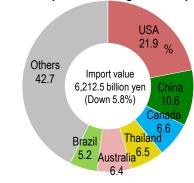
- Japan's agricultural imports in 2020 were 6,212.5 billion yen, year on year decrease of 5.8%.
- The government has maintained and strengthened good relations with import partner countries and collected relevant information in order to ensure the stable supply of the imported major agricultural products upon which Japan depends.



Estimates" by USDA (as of March 2021) Note: 1) Grains are the sum of wheat, coarse grains (corn, barley, etc.), and rice (milled rice)

2) Term-end inventory rate = Term-end inventory quantity / Consumption quantity x 100

Japan's overall import ratio of agricultural products by country



Source: Based on Trade Statistics by MOF Notes: 1) Final results for CY2020

Japan's status of EPAs/FTAs, etc.

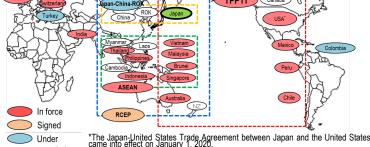
2) Figures in parentheses are year-on-year basis.





10. Status of international negotiations

- As of the end of FY2020, 21 EPAs/FTAs, etc. have been put into force or signed.
- In November 2020, the RCEP Agreement was signed, and in January 2021, the UK-Japan EPA came into effect.



Source: Prepared by MAFF Note: As of the end of MAR 2021

negotiation