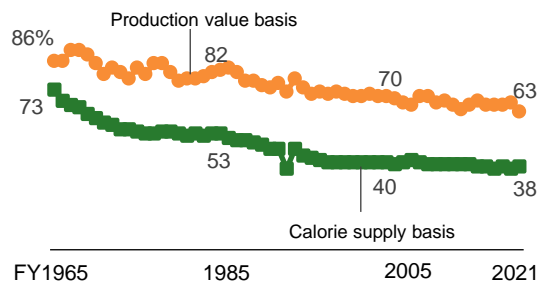


Chapter 1 Securing Stable Food Supplies

In FY 2021, the total food self-sufficiency ratio on a calorie supply basis was 38%, up 1 percentage point from the previous year. The total food self-sufficiency ratio on a production value basis decreased by 4 percentage points from the previous year to 63%

- In FY 2021, the total food self-sufficiency ratio on a calorie supply basis was 38%, up 1 percentage point from the previous year due to increases in the planted area and yield for wheat and soybeans, and a recovery of eating-out service demand for rice. The total food self-sufficiency ratio on a production value basis decreased by 4 percentage points from the previous year to 63% due to an increase in feed import value for livestock products and raw material imports value such as oils and fats, as well as an increase in import unit value for meat, etc.
- The food domestic production ratio on a calorie supply basis (not reflecting feed self-sufficiency ratio) increased by 1 percentage point from the previous year to 47%. The feed self-sufficiency ratio remained at 25%, the same as the previous year.
- The food self-sufficiency potential index has been flat in recent years due to an increase in the yield of wheat and other crops in rice- and wheat-centered cropping system, amid a decrease in the area of farmlands. On the other hand, in potato-centered cropping, the index tends to decline due to a decrease in the labor force (total working hours).

Japan's total food self-sufficiency ratio

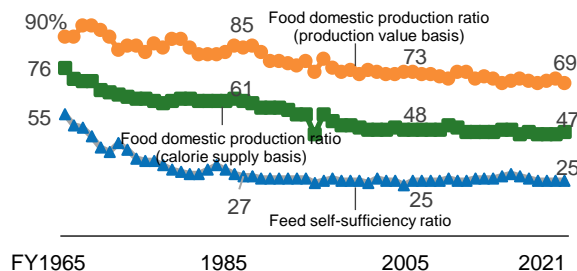


Source: MAFF, "Food Balance Sheet"

Notes :1) FY2021 shows an estimate.

2) The food self-sufficiency ratio is an indicator of the amount of domestic food consumption that is covered by domestic production.

Japan's food domestic production ratio and feed self-sufficiency ratio

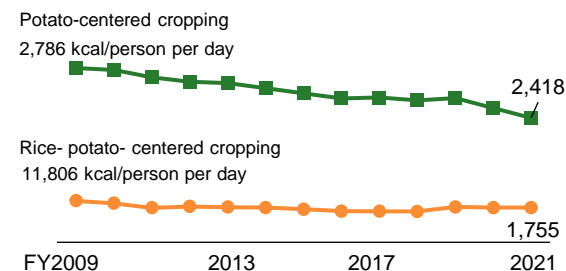


Source: MAFF, "Food Balance Sheet"

Notes :1) FY2021 shows an estimate.

2) The food domestic production ratio reflects the activities of the livestock industry and evaluates the status of domestic production, regardless of whether the feed is domestically produced or imported

Japan's food self-sufficiency index



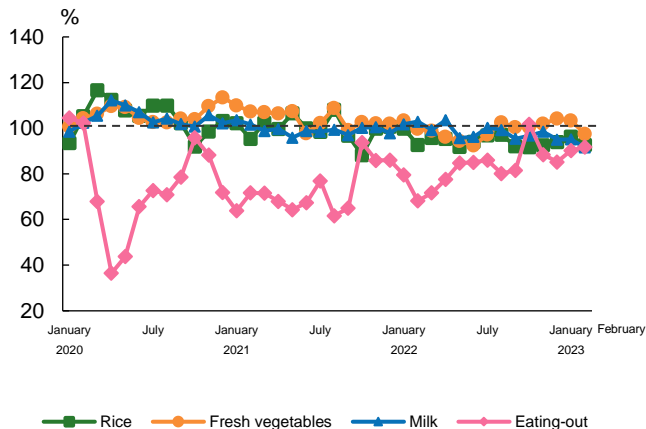
Source: Prepared by MAFF

Note: The food self-sufficiency potential index is an indicator that evaluates the potential production capacity of food. It is a trial calculation of the calorie supply a day per person, in the case of maximum use of farmlands, etc. and when calorie efficiency is maximized, with consideration of a certain degree of nutritional balance.

While eating-out sales are on a recovery path, izakaya (Japanese style pub) and other sales recovery is lagging behind

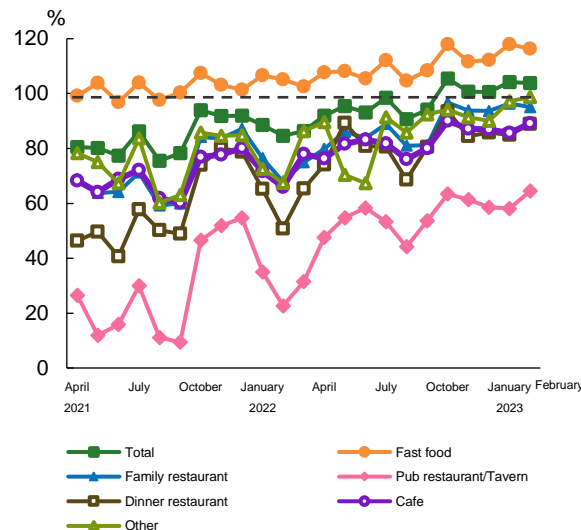
- Spending on eating-out has dropped sharply since March 2020 amid the spread of COVID-19. Since then, there have been series of recoveries and declines, and the effects have not ceased in 2022.
- Overall sales in the food Service industry in 2022 are on a recovery track. Meanwhile, sales recovery is slow, especially in pub restaurants and izakaya (Japanese-style pub). In this era of changing lifestyles, it indicates that demand for banquets has not recovered to a sufficient level in the businesses that serve alcoholic beverages during the evening.
- Support has been provided for businesses affected by COVID-19, including promotion of sales channel development and boosting demand for restaurants.
- The food consumption expenditure by consumer households, In nominal terms, increased compared to the previous year. It decreased in real terms, excluding price changes.

**Monthly food expenditures per person
(Compared to the same month in 2019)**



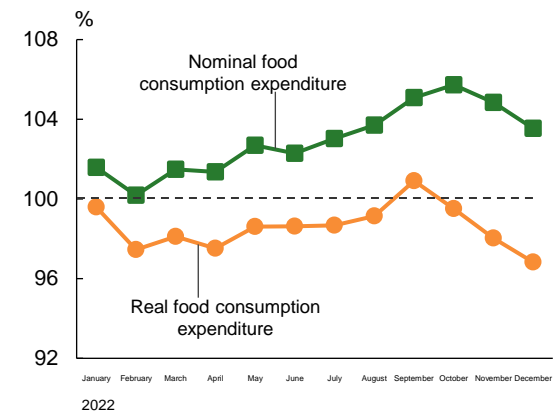
Source: Compiled by MAFF based on the data of MIC, "Family Income and Expenditure Survey"

**Sales in the Food Service Industry by
business category
(Compared to the same month in 2019)**



Source: Compiled by MAFF based on the data of Japan Foodservice Association, "Food Service industry Market Trend Survey"

**Monthly food consumption expenditure
per capita compared to the same month
the previous year**

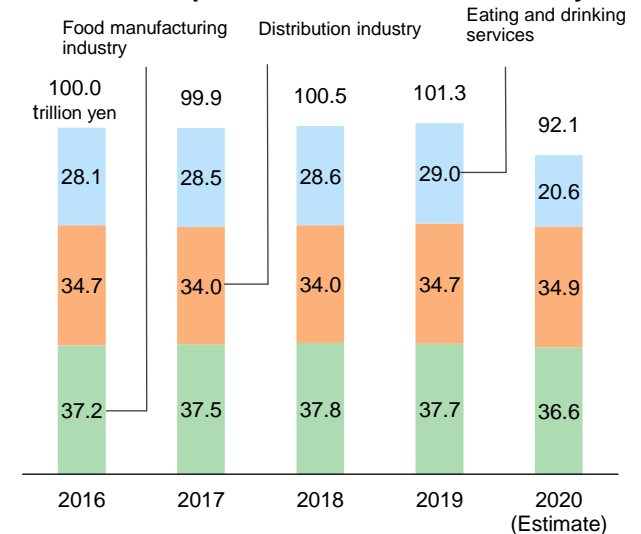


Source: Compiled by MAFF based on the data of MIC, "Family Income and Expenditure Survey"

Promoting rationalization and sophistication of distribution, reduction of food loss and waste, and efforts to promote food tech for sustainable development of the food industry

- Domestic production of the food industry in 2020 was 92.1 trillion yen, down 9.2 trillion yen from the previous year due to the spread of COVID-19.
- There are concerns about the impact of the so-called "2024 problem in logistics," which will be applied to overtime caps of truck drivers.
- In order to reduce the restraining time of truck drivers, switching to transportation using pallets, improving loading efficiency by standardizing the pallet size and corrugated boxes, and labor-saving and automation of inspection work utilizing ICT and AI have been promoted. In addition, developing joint logistics facilities and switching to rail and maritime shipping (modal shift) from truck transportation has been implemented.
- In order to reduce food loss and waste, a review of business practices, such as easing strict delivery deadlines and easing expiry date labeling, have been promoted.
- The Food Tech Public-Private Council formulated the vision and roadmap to promote food tech in February 2023.
- The revised Act on Japanese Agricultural Standards (JAS) came into effect in October 2022, and organic liquors (alcohol beverages) have been included in the scope of JAS for organic processed foods, for which organic equivalency arrangements would be pursued to facilitate export of organic products.

Domestic production of the food industry



Source: Compiled based on the data of MAFF, "Economic Accounts for Agriculture and Food Related Industries"

Note: Food manufacturing industry include the categories of beverages and tobacco.



Poster calling for reduction of food loss and waste

Promoting the understanding and popularization of Japanese food among foreign visitors to Japan by taking advantage of the resumption of inbound tourism

- Japan's dietary culture is a world-class cultural heritage and the foundation that supports agriculture, food, community, and diverse food industries. Understanding and extension of Japanese food and dietary culture among foreign visitors to Japan has been promoted by taking advantage of the resumption of inbound tourism.
- Japan Food Export Platforms were established in 6 countries and regions in FY2022 to provide comprehensive, professional, and continuous support to exporters in destination countries and regions.



Launch ceremony of Japan Food Export Platform (Thailand)

Promoting the protection and use of intellectual property to expand exports, and increase income and regional vitality

- Under the Geographical Indications (GI) Protection System, 11 new products were registered as GI in FY2022, bringing the total number of registered GIs to 128 nationwide. The operation of the GI protection system was reviewed, and the appraisal criteria were revised to contribute to export expansion.
- Promote efforts by the Plant Breeders' Rights Management Body to effectively protect Japan's plant varieties through overseas variety registration and contract cultivation on behalf of right holders and to establish a cycle to return licensing income to the development of new plant varieties.
- The dissemination of the "Guidelines for the Protection of Trade Secrets in the Agriculture Sector," which outlines how to manage confidential information, such as technology and knowhow, for the purpose of being legally protected as trade secrets, including explanation on actual implementation thereof from more practical viewpoints, has been made.

GI products registered in FY2022



Onnayama Daikon (radish)
(Nishitaku-machi, Taku City,
Saga Prefecture)



Omi Hinosan Hinona
(Hino-cho, Gamo-gun,
Shiga Prefecture)



DATE NO ANPO GAKI
(a kind of semi-dried persimmon fruit)
(Date City, Fukushima Prefecture
and others)



sanuki shiro miso
(Kagawa Prefecture)



Tamura no egoma oil
(Tamura City, Fukushima Prefecture)



Hida Beef
(Gifu Prefecture)



Awadori
(Tokushima Prefecture)



Tokachi Raclette
(Obihiro City, Hokkaido and others)



Tokushima Sudachi
(Tokushima Prefecture)



Kikugawa deep steamed green tea
(Shizuoka Prefecture)



Namegata Sweet Potato
(Namegata City, Ibaraki
Prefecture and others)

Promoting the efforts to realize the “Fourth Basic Program for *Shokuiku* Promotion”

- In promoting *shokuiku* (food and nutrition education), it is important for each citizen to raise awareness about “food,” acquire the ability to make appropriate judgement about “food” based on reliable information and practice a sound dietary pattern that promotes mental and physical health.
- Based on the Fourth Basic Program for *Shokuiku* Promotion, initiatives have been implemented, including the extension of the "Digital *Shokuiku* Guidebook," holding “The 17th National Convention on Promotion of *Shokuiku* in Aichi” and operating the "National Network for *Shokuiku* Promotion.”
- Support has been provided for the efforts to establish a variety of communal eating places in communities such as Kodomo Shokudo (Children’s Cafeterias), as well as free delivery of public grain reserves. Various effects are expected from the communal eating places in the communities, such as promoting *shokuiku*, taking measures against loneliness and isolation, and supporting the needy.
- Initiatives to help exchanges between consumers and producers have been implemented.



Using sugarcane seedling growing kits, promoting online hands-on *shokuiku* activities (Okinawa Prefecture)
Source: Alternative Farm Miyako



Source: NihonkaiKaihatsu, Incorporated.



Source: Waiwai Kodomoshokudo Project

Children's cafeteria providing a place to eat together

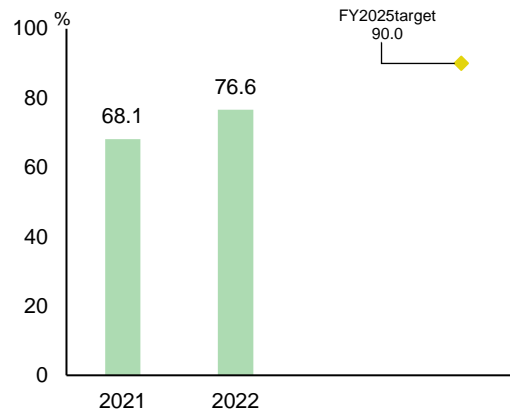


Farmers developing efforts to bring food and agriculture closer together (Tochigi Prefecture)
Source: Inasaku Honten

Maintaining and increasing the percentage of local products used in school lunch programs

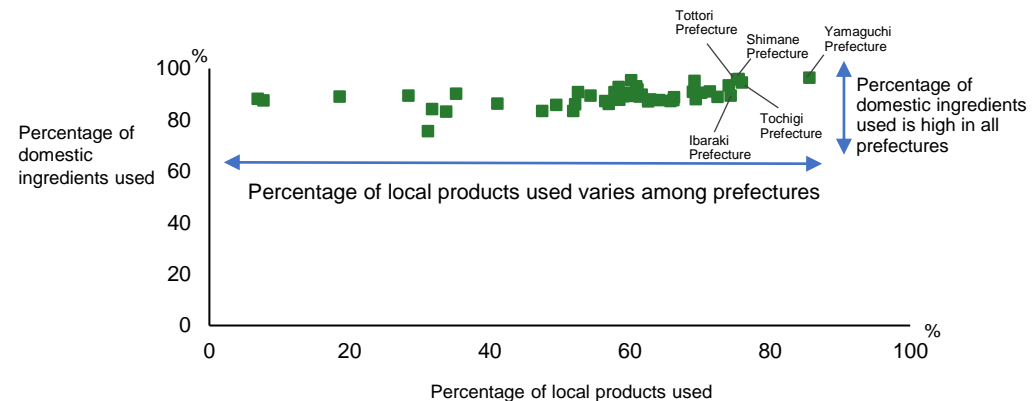
- School lunch programs are designed to maintain and promote children's health by providing nutritionally balanced meals. School lunch expenses vary by regions due to differences in menus and the number of meals served per year in each local government.
- Utilization of locally produced agricultural, forestry, and fishery products in meal service including school lunch programs is an effective means of promoting local production for local consumption. Maintaining and increasing the percentage of local products used in school lunch programs (on a monetary basis) will be promoted in order to practice a sustainable dietary pattern for children.
- The ratio of local products and domestic ingredients used in school lunch programs by each prefecture shows that while the percentage of domestic products used varies, the percentage of domestic ingredients used is more than 80% in most of the prefectures, indicating a high ratio nationwide.

The percentage of local products used in school lunch programs (on a monetary basis) that will be maintained or improved from FY2019 figure



Source: Compiled by MAFF based on the data of MEXT, "2022 Survey on the Use of Local and Domestic Produce in School Lunch Program"

The percentage of local and domestic ingredients used in school lunch programs by each prefecture



Source: Compiled by MAFF based on the data of MEXT, "2022 Survey on the Use of Local and Domestic Produce in School Lunch Program"

Note: The figures are for FY2022.

Promoting the appeal of food and agriculture through the national movement "NIPPON FOOD SHIFT"

- As the distance between food and agriculture widens, a national movement focused on deepening the link between food and agriculture "Thinking about Japan through Food. NIPPON FOOD SHIFT" was launched to foster public understanding of agriculture and rural areas, which is being developed through public-private collaboration.
- Focusing on Generation Z (people born in the late 1990s to the 2000s), MAFF has provided information regarding the efforts by agricultural, forestry, and fishery workers in various parts of the country, and regional food, as well as appealing local food and rural areas.
- Talk sessions, marches, and other events has been held across the country. The movement has been rolled out in various ways, including developing initiatives in collaboration with promotion partners, and providing information through public-private collaboration via media such as television, newspapers, magazines, websites, and social media.



Animated videos on the website explain the changes in the connection between food and agriculture in Japan



Thinking about Japan through food.
NIPPON FOOD SHIFT FES. Tokyo 2022

Promoting consumption expansion of domestic agricultural, forestry, and fishery products

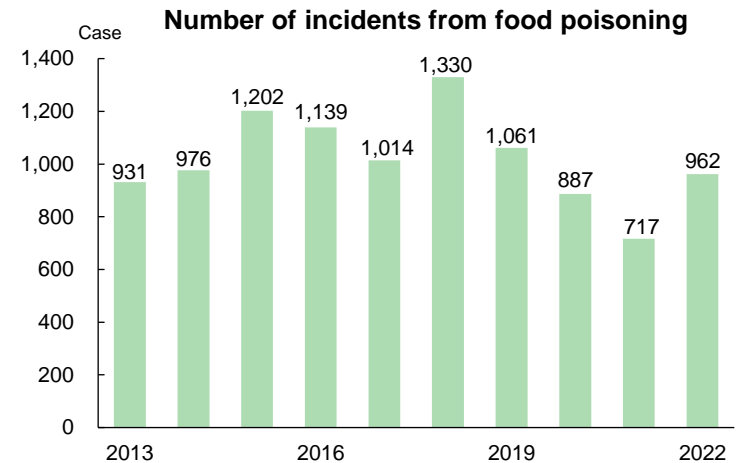
- In addition to providing information on the website "After all, rice is the first thing to eat!," the "Let's eat vegetables project" has been implemented. In June 2022, MAFF launched the "Smiles Project for Milk" for consumption expansion of milk.



The poster of the "Let's eat vegetables project"

Promoting activities to ensure food safety and consumer trust based on scientific knowledge, etc.

- The number of incidents from food poisoning in 2022 was 962, an increase from the previous two years.
- Taking into account the latest scientific knowledge and international trends, etc., concerted efforts are being made to ensure food safety. Simultaneously, efforts are being made to promote the dissemination of information on food safety.
- Labeling of the origin of ingredients for all processed foods, except imported products, has been mandatory from April 2022. Consumers can check the labels and choose products made from domestic ingredients.



Source: Ministry of Health, Labour and Welfare, Food Poisoning Statistics"

Taking measures to prevent the invasion and spread of livestock infectious diseases and plant pests

- Thorough frontline measures have been implemented, including utilization of quarantine detector dogs to prevent the entry of African swine fever, foot and mouth disease, and other diseases into the country.
- The spread of foul brood, a livestock infectious disease, has been prevented, which occurs and kills bee larvae when they ingest food containing the pathogen.
- The revised Plant Protection Act promulgated in May 2022 provides for the implementation of survey on the entry of pests under the Act, the expediting of emergency control, the establishment of a system to promote Integrated Pest Management focusing on outbreak prevention, the addition of items to the quarantine list, and the strengthening of the authority of plant protection officers.

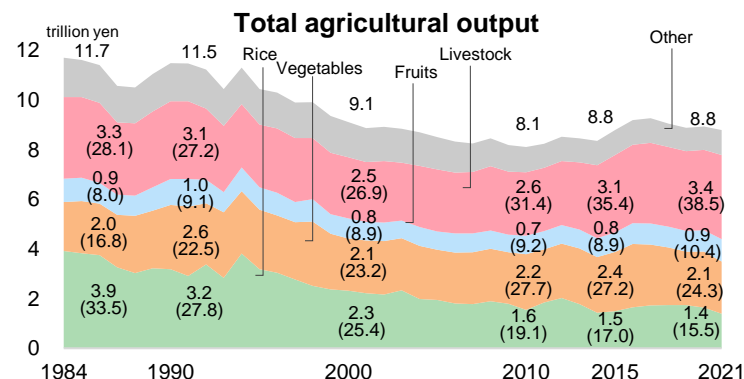


Animal and plant quarantine detector dog

Chapter 2 Sustainable Development of Agriculture

Total agricultural output in 2021 decreased by 1.1% from the previous year to 8.8 trillion yen

- Total agricultural output in 2021 was 8.8 trillion yen, a decrease of 1.1% from the previous year, due to lower prices of rice as a staple food and vegetables, while livestock production exceeded 3.4 trillion yen, the highest ever. By sector, livestock production increased, while rice and vegetables were on the decline.
- By prefecture, Hokkaido topped the list with 1.3 trillion yen, followed by Kagoshima with 0.5 trillion yen and Ibaraki with 0.4 trillion yen.



Source: MAFF, "Statistics of Agricultural Income Produced"

Notes: 1) Total agricultural output is estimated by subtracting intermediate products such as seeds and feed that are reinput into agriculture from the agricultural products produced in the year (including self-consumption) and multiplying the production quantity in each item by the farm household's yard sales price for each item. -

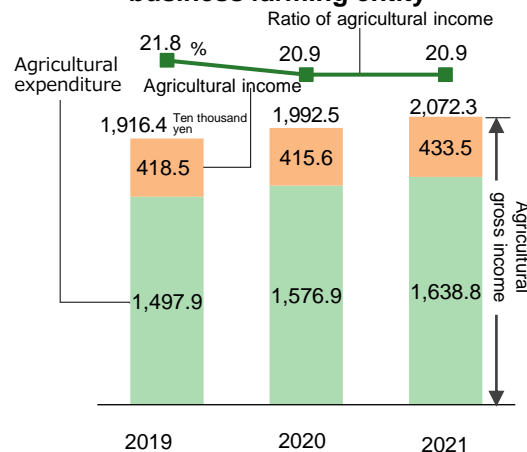
2) "Other" is the total of wheat, cereals, pulses, potatoes, flowers, industrial field crops, other crops, and processed agricultural products.

3) Figures in parentheses are the percentage to total output (%).

In 2021, agricultural income per business farming entity increased from the previous year to 4.34 million yen. Agricultural income as a percentage of the income per individual management entity is about 80%

- In 2021, agricultural gross income per business farming entity was 20.72 million yen and agricultural income was 4.34 million yen. Ratio of agricultural income was 20.9%.
- In 2021, the agricultural income, income related business of agricultural production, and non-agricultural business income per individual management entity were 1,152,000 yen, 12,000 yen, and 278,000 yen, respectively. Agricultural income as a percentage of total income of each business (dependent ratio on agriculture) increased by 0.9 percentage points to 79.9% compared to the previous year.

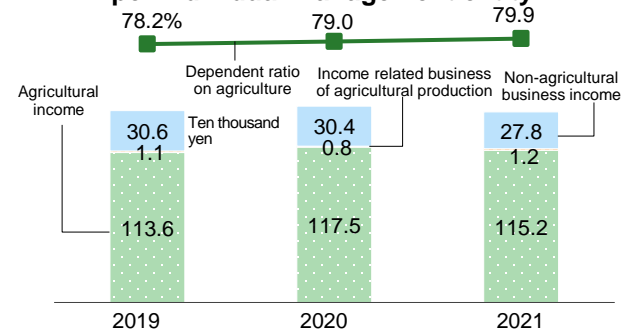
Agriculture income and expenditure per business farming entity



Source: MAFF, "Statistical Survey on Agricultural Management"

Note: Ratio of agricultural income = Agricultural income / Agricultural gross income x 100

Agricultural and other income per individual management entity



Source: MAFF, "Statistical Survey on Agricultural Management"

Notes: 1) Agricultural income is agricultural gross income (total income earned by farming) minus agricultural expenditure (all expenses required for farming).

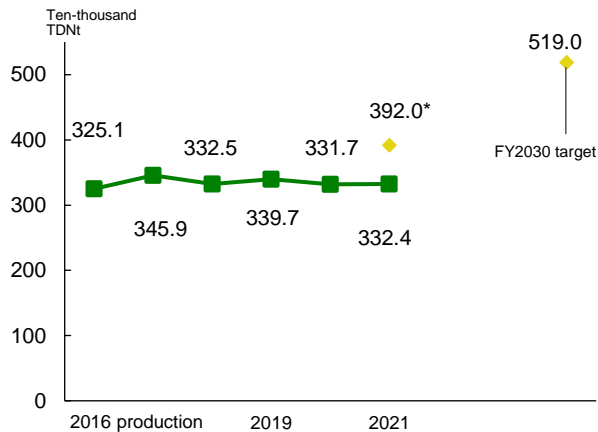
2) Income related business of agricultural production is gross income related business of agricultural production (gross income from businesses such as agricultural processing, farm household inns, farm restaurants, and tourist farms which are related to agriculture and managed by agriculture management entities) minus expenditures of related business of agricultural production (including labor and material costs required for the related business of agricultural production).

3) Non-agricultural business income is business income other than agriculture or related business of agricultural production (income from forestry, fishery, commerce, and industry as a side business in addition to agriculture) minus non-agricultural business expenditure (employment expenses, material cost, and other expenses incurred in the business).

Promoting initiatives to strengthen the production base of domestic feed and to improve the profitability of livestock farming in the region

- Beef production in FY 2021 was 336,000 t (same level as the previous year). Pork production in FY 2021 was 923,000 t (up 0.7% from the previous year).
- Forage crops production in 2021 was 3,324,000 TDNt (up 7000 t from the previous year). The planted area in 2022 was 1,026,000 ha (up 2.5% from the previous year).
- To strengthen the domestic feed production base, expanding the production and utilization of domestic feed including silage maize, strengthening the operation of feed production organizations, and developing grassland have been promoted.
- In October 2022, the 12th ALL JAPAN WAGYU SHOW was held in Kagoshima.
- Initiatives have been promoted to improve the profitability of livestock farming in the region and to produce sustainable livestock products.
- The Horse Racing Act was amended in November 2022. Under the law, the management base of local horse racing and the production base of horse production areas have been stably strengthened.

Production of forage crops



Source: Compiled by MAFF based on the data of "Crop Statistics", etc.

Notes: 1) Rice for feed is excluded.

2) Production is an annual base and target value is a fiscal base.

3) The asterisk* indicates the FY2021 target for measured index of policy evaluation.

4) TDN is total digestible nutrients.



Large-scale demonstration experiment of maize for grain

(Harvesting during field trips)

Source: JA ZEN-NOH



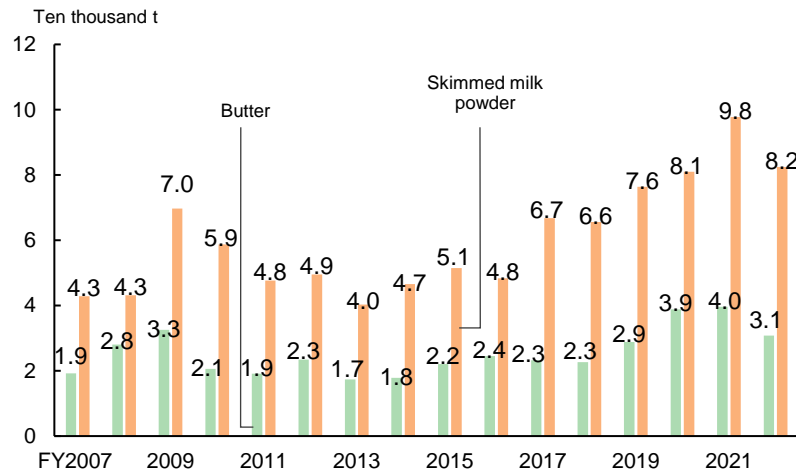
"The 12th ALL JAPAN WAGYU SHOW" held in Kagoshima in October 2022

(Once every five years, best Japanese beef cattle are brought together from all over the country to compete, showing the improvement results of Japanese beef cattle, and to share the future direction of Japanese beef cattle improvement).

Promoting early resolution of the supply-demand gap issue from both supply and demand perspectives

- Dairy management in Japan is facing a challenging operation environment due to a supply and demand gap of more than 400,000 tons in raw milk equivalent in a single fiscal year through decreased demand, amid soaring production costs such as feed costs.
- It is appropriate to reflect the increase in production costs in milk prices for the stability of dairy management, but negotiations on raw milk prices have been hampered by record-high level stocks of skimmed milk powder.
- In order to improve dairy management, it is necessary to prepare an environment in which rising production costs can be properly reflected in prices by promoting the early resolution of this supply and demand gap problem.
- Therefore, in order to improve the supply and demand gap of raw milk, producers and producer groups have made an agonizing decision to suppress raw milk production.
- For individual dairy management, in addition to measures to combat the rising cost of compound feeds, MAFF has taken measures to mitigate the impact of the rising feed cost by providing compensatory payments for increased feed cost and financial support.
- In addition, MAFF has provided supports to producer groups to curb production of raw milk through retiring dairy cows, reducing stocks of dairy products, and promoted initiatives called "Smiles Project for Milk", collaborative initiatives across industries to address issues of dairy industries. Furthermore, in order to cultivate new demand, MAFF has urgently supported activities such as providing milk at a reduced price to foreign visitors and Kodomo Shokudo (Children's Cafeterias).
- Raw milk price (nationwide) was raised by 10 yen/kg (excluding tax) for "milk for drink and other products" in November 2022, and by 10 yen/kg (excluding tax) for dairy products in April 2023, as a result of raw milk price negotiations between producer groups and dairy manufacturers.

Stocks of dairy products

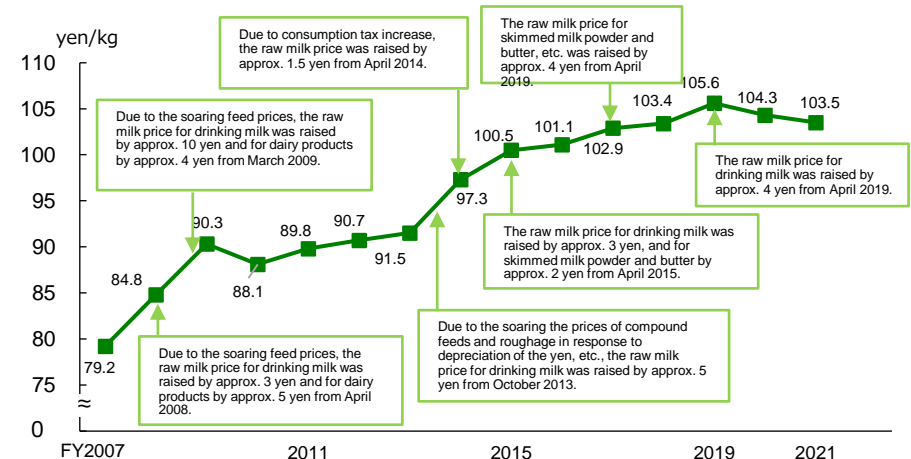


Source: MAFF "Statistics on Milk and Dairy Products"

Note: 1) Stocks are figures as of year-end. Figures for FY2022 are as of December 2022

2) Approximate figures for FY2021 and FY2022

Raw milk price (nationwide)



Source: Prepared by MAFF

Notes: 1) Raw milk price is calculated by deducting milk collection and transportation costs and fees from raw milk transaction prices and adding subsidy to raw milk used for dairy processing.

2) Raw milk prices for each fiscal year are calculated based on MAFF "Agricultural Price Statistical Survey."

3) Figures for each fiscal year are simple averages for each month including consumption tax.

4) From FY2007 to FY2009, the figures are based on FY2005. From FY2010 to FY2014, the figures are based on FY2010.

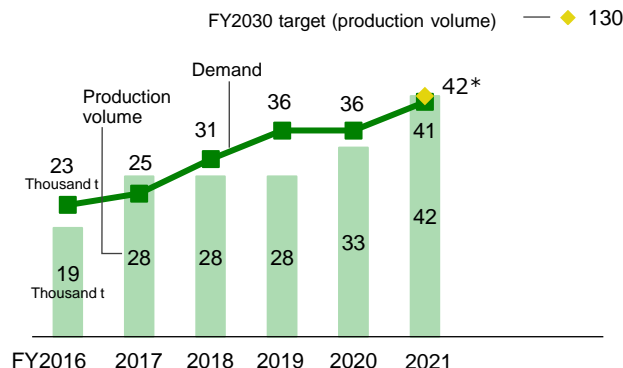
From FY2015 to FY2019, the figures are based on FY2015. From FY2020 to FY2021, the figures are based on FY2020.

5) Approximate figures are for FY2021.

Promoting conversion to rice for rice flour and other products, and production of field crops such as wheat and soybeans, for which domestic demand is increasing

- Production of rice for consumption as a staple food in 2022 was 6.701 million tons (down 4.4% from the previous year). Planted area was 1.251 million ha (down 4% from the previous year).
- In order to produce in response to consumer needs, stable trading through advance contracts or multi-year contracts that link production areas/producers with users, supporting crop diversion to rice for flour, etc., and providing information on stocks and prices have been implemented.
- In FY 2021, the demand for rice for rice flour was 41,000 tons (up 13.9% from the previous year). Production in FY 2021 was 42,000 tons. Expansion of domestic demand and exports to overseas gluten-free markets has been promoted.
- The planted area of wheat in 2022 was 227,000 ha (up 3.3% from the previous year). The planted area of soybeans in 2022 was 152,000 ha (up 3.7% from the previous year).
- Strengthening production systems and improving production efficiency in production areas has been promoted by supporting the aggregation of cropping and the introduction of farming techniques.
- In order to promote the production of field crops such as wheat and soybeans, for which domestic demand is increasing, MAFF has promoted support for efforts to convert paddy fields to upland fields and to create production areas for field crops, as well as utilizing a block rotation system in paddy fields.

Production and demand for rice for rice flour



Source: Prepared by MAFF

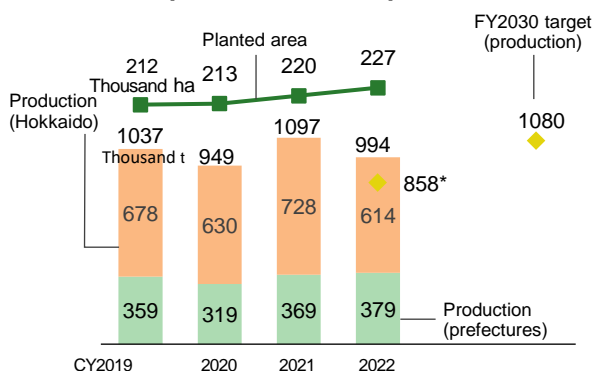
Note: The asterisk* indicates the FY2021 target for measured index of policy evaluation.



Developed and sold bread made from 100% home-grown rice flour with less allergy risks (Niigata Prefecture)

Source: Tainai Co., Ltd

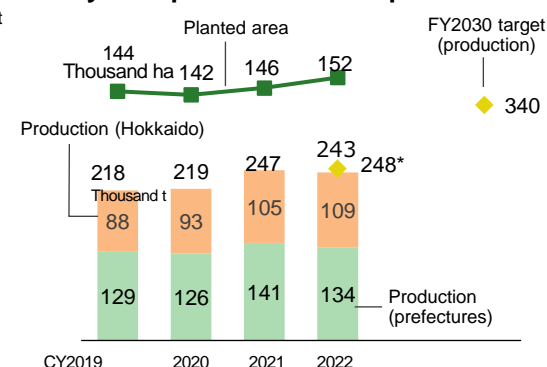
Wheat planted area and production



Source: Compiled by MAFF based on the data of "Crop Statistics", etc.

Note: The asterisk* indicates the FY2022 target for measured index of policy evaluation.

Soybean planted area and production



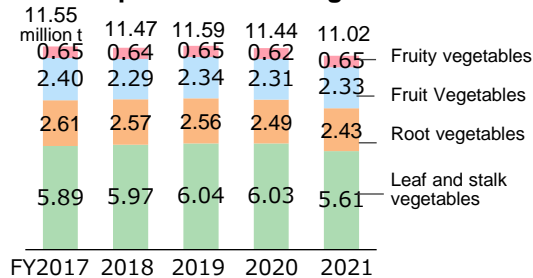
Source: Compiled by MAFF based on the data of "Crop Statistics", etc.

Note: The asterisk* indicates the FY2022 target for measured index of policy evaluation.

Promoting the development of horticultural production areas and the introduction of labor-saving tree forms of fruits

- Vegetable production in FY 2021 was 11.02 million t (up 3.7% from the previous year). In addition to improving infrastructure, developing horticultural production areas, and introducing machinery and facilities with high performance, MAFF has provided comprehensive support for the establishment of new production and distribution systems, and the introduction of crop stabilization technology to strengthen the production system for processing and manufacturing uses of vegetables.

Domestic production of vegetables



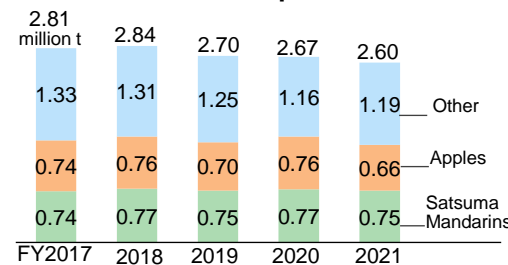
Source: MAFF, "Food Balance Sheet"
Note: FY2021 refers to an estimate.



Farmer working on highly environmentally controlled tomato cultivation (Fukui Prefecture)

- Fruit production in FY 2021 was 2.599 million t (down 2.8% from the previous year). The production base has been strengthened to meet domestic and international demand by promoting the introduction of labor-saving tree forms and mechanical work systems, as well as securing farmers and labor force.

Domestic fruit production



Source: MAFF, "Food Balance Sheet"
Note: FY2021 refers to an estimate.



Tall spindle planting of apples (Aomori Prefecture)

Promoting international-level GAP and farming safety measures

- The number of management entities that have acquired GLOBALG.A.P., ASIAGAP or JGAP certifications is 7,977 as of the end of FY2021. MAFF has promoted the expansion of the number of those entities engaging in the international-level GAP.
- In addition to improving the safety of farm machinery through the review of the safety inspection system, MAFF has promoted farmers' safety awareness-raising through development of instructors and training for farmers on effective accident prevention measures.

Case study: acquisition of GAP certification



Atsumi Agricultural High School has acquired GLOBALG.A.P. for chrysanthemums and tomatoes, which are the main commodities produced locally, by the students' own efforts for collecting necessary data and preparing for application form (Aichi Prefecture).

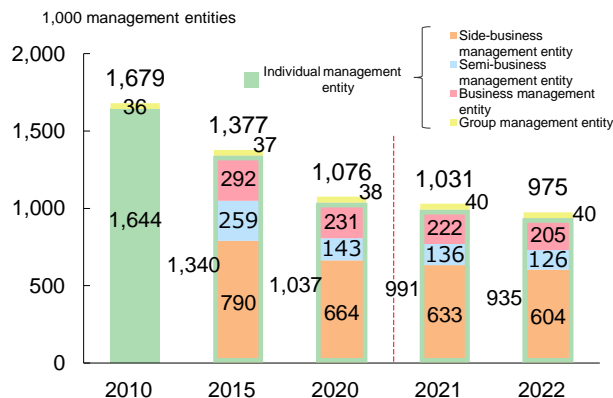


Farm work safety poster

The number of agriculture management entities has been on a downward trend, with the average age of core persons mainly engaged in farming rising to 68.4. Developing and securing business farmers is an urgent issue

- The number of agriculture management entities has been on a downward trend, with 975,000 in 2022, down 5.4% from the previous year. The number of individual management entities, which account for 96% of the total, decreased by 5.7%, while group management entities, accounting for 4% of the total, increased by 1.5%.
- The number of agricultural corporations in 2022 increased by 1.9% from the previous year to 32,000.
- The number of core persons mainly engaged in farming has been on a downward trend, with a decrease of 5.9% to 1.23 million in 2022. The number of those in the 50-64 and 65-74 age groups decreased by 9.3% and 7.8% respectively, compared to the previous year. 860,000 people are aged 65 or older, accounting for about 70% of the total, with the average age being 68.4.
- The number of certified farmers, whose agricultural management plan has been certified by the local government (hereinafter called "certified farmers"), in FY 2021 decreased by 2.2% from the previous year to 222,000. Certified farmers account for 22.8% of the agriculture management entities.
- MAFF has promoted planned management succession and recruitment of newcomers from younger generation to realize a balanced agricultural structure among generations. Policy support for farmers' pensions has also been implemented.

Number of agriculture management entities



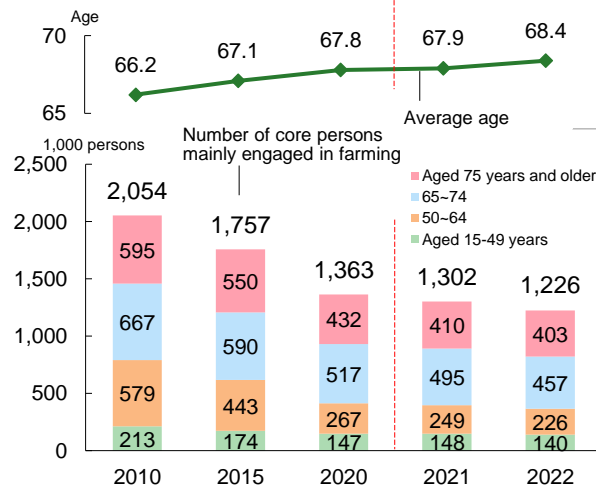
Source: Prepared based on the data of MAFF, "Census of Agriculture and Forestry" and "Survey on Movement of Agricultural Structure"

Notes: 1) Figures as of February 1 of each year.

2) Business management entity refers to an individual management entity whose main income is agricultural, with a family member under 65 years of age (engaged in self-employment agriculture for 60 days or more a year). Semi-business management entity refers to an individual management entity whose main income is non-agricultural, with a family member under 65 years of age (engaged in self-employment agriculture for 60 days or more a year). Side-business management entity refers to an individual management entity with no family member under 65 years of age (engaged in self-employment agriculture for 60 days or more a year).

3) Figures for 2021 and 2022 are the results of the survey on Movement of Agricultural Structure, and are estimates captured through sampling survey.

Number of core persons mainly engaged in farming and average age

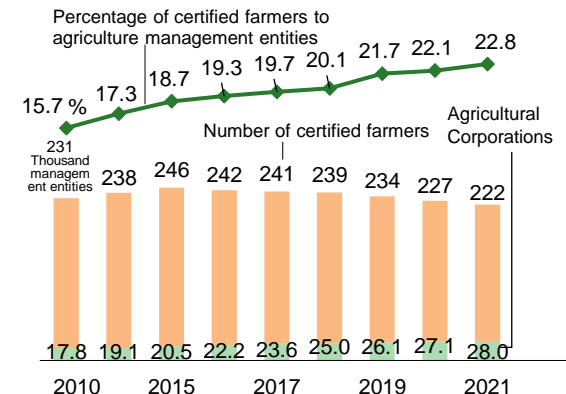


Source: MAFF, "2010 World Census of Agriculture and Forestry" (recompiled) and "2015 Census of Agriculture and Forestry" (recompiled), "2020 Census of Agriculture and Forestry" and "Survey on Movement of Agricultural Structure"

Notes: 1) Figures as of February 1 of each year.

2) Figures for 2021 and 2022 are the results of the survey on Movement of Agricultural Structure and are estimates captured through sampling survey.

Number of certified farmers



Source: Prepared based on the data of MAFF, "Status of Certified Farmers," "Census of Agriculture and Forestry," and "Survey on Movement of Agricultural Structure"

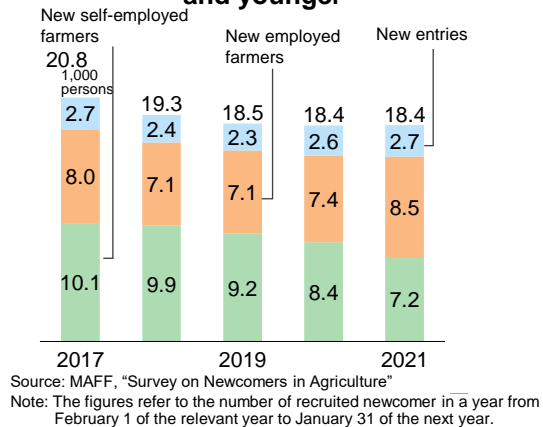
Notes: 1) Number of certified farmers is as of the end of each fiscal year.

2) Including specified corporations that are deemed to be certified farmers.

Providing support for newcomers to acquire farming techniques and secure funds

- The number of newcomers fell 2.7% to 52,000 in 2021. Of these, 18,000 are under 49 years of age. The number of new employed farmers exceeded the number of new self-employed farmers for the first time.
- Looking at the employment status of newcomers aged 49 years and younger just before employment, those who worked outside of agriculture were the most common.
- As newcomers face challenges such as learning farming techniques and securing funds, MAFF has provided support for providing funds for farming and securing machinery/facilities, etc.
- Farmer's academy had 1,737 graduates in FY 2021. Those who took up farming accounted for 54.2% of the total. The percentage of newly employed farmers was 33.2%.

Number of newcomers aged 49 years and younger



Case study: promotion of recruiting newcomers

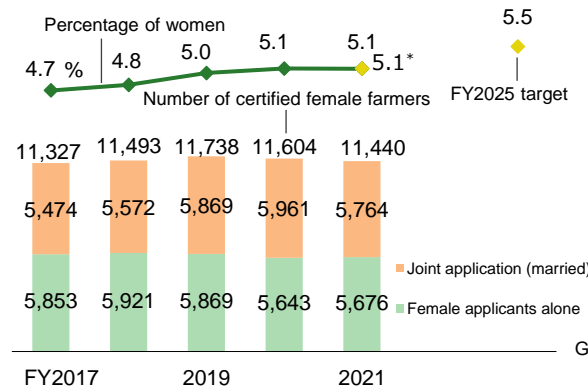


The Kaifu Next-Generation Horticultural Area Creation Promotion Council is promoting community-wide efforts to develop newcomers based on the "Cucumber Town Plan," which aims to expand production areas by recruiting newcomers through migration (Tokushima Prefecture).
Source: Kaifu Agricultural Co-operatives

Promoting the creation of a working and living environment for female farmers

- The number of female core persons mainly engaged in farming in 2022 was 480,000, down 6.3% from the previous year. They make up about 40% of the total and are important business farmers.
- In FY 2021, there were 11,000 certified female farmers. They make up 5.1% of total certified farmers.
- It is essential to create an environment in which men and women can share housework, child care, nursing care, and agriculture work. MAFF has supported initiatives such as the development of female farmers who can be leaders in their communities, the group activities of local female farmers, and support activities for child care and farm work in their communities.
- Efforts by female farmers are being further developed, such as the "Nougyou-Joshi Project" (Campaign for women farmers to be more active in agricultural business by cooperation with various industries to tap women farmers' knowledge and experience). Besides, there are cases of women who are active in AFFrinnovation, as well as forming female farmers' groups in local communities to promote the sales of agricultural products.

Percentage of certified female farmers



Source: Compiled based on MAFF "Approval Status of Plan for Improving Agricultural Management by Type of Farming"

Notes: 1) Figures are as of the end of each fiscal year.

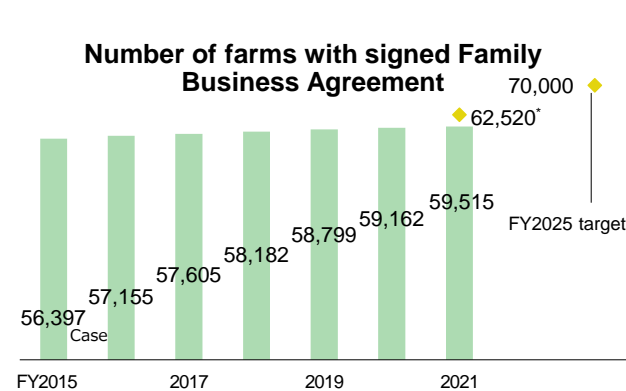
2) The asterisk indicates the FY2022 target for performance at the end of FY2021 in measured index of policy evaluation.



Grand Prize Winners of the "Nogyo-joshi Award 2022"

Diverse management entities such as small, medium, and family management play an important role in maintaining local communities. Efforts to secure diverse human resources, including the elderly and the disabled person, have also expanded

- In 2022, 96% of agriculture management entities were individual management entities, and 52% of agriculture management entities manage under 1.0 ha of farmland. At the production site, small, medium, family, and other diverse management entities cooperate in each production area to conduct agricultural production and joint sales, playing an important role in maintaining local communities.
- As of the end of FY 2021, the number of “family business agreements”, which determine individual roles and working conditions among family members, was 60,000.
- With the aging and declining population in rural areas, it is important to secure a workforce at production sites, including foreign workers. The total number of foreign workers in the agricultural field in 2022 was 44,000, an increase of about 5,000 from the previous year.
- Efforts to secure and utilize diverse human resources, including the elderly and disabled persons, have expanded.
- In 2020, the number of agricultural cooperatives practicing “purchase and sales” system reached about 70% of the total, and efforts to focus on sales operations have expanded. In addition, some agricultural cooperatives are developing and selling low-cost fertilizers and providing contracted drone-based pest control services.

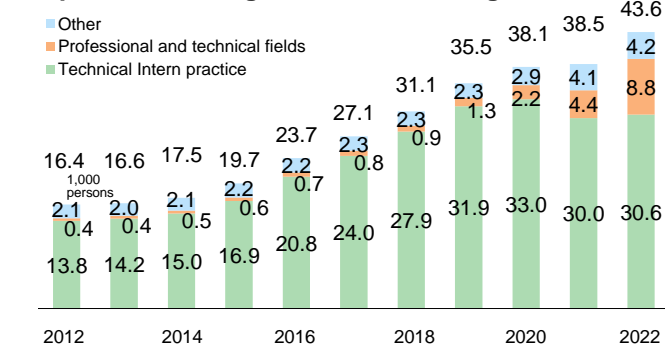


Source: Compiled based on MAFF “Survey of Actual Condition on Family Business Agreements”

Notes: 1) Figures are as of the end of each fiscal year.

2) The asterisk indicates the FY2022 target for performance at the end of FY2021 in measured index of policy evaluation.

Acceptance of foreign workers in the agricultural sector



Source: Compiled by MAFF based on the Ministry of Health, Labour and Welfare “Notification of ‘Employment Status of Foreigners’”

Notes: 1) The figures are as of the end of October in each year.

2) Figures for “professional and technical fields” after 2019 include the number of “specified skilled foreign workers.”

3) Reporting of the “employment status of foreign nationals” is mandatory upon hiring or separation from employment, and there is no obligation to do so when not including separation from employment, such as when transferring from “technical intern practice” to “specified skills”; therefore, the figures are not consistent with those of other surveys.



Kagoshima Prefectural Federation of Economic Agricultural Co-operative Associations promotes contracted labor-saving pest control of sweet potato, etc. (Kagoshima Prefecture)

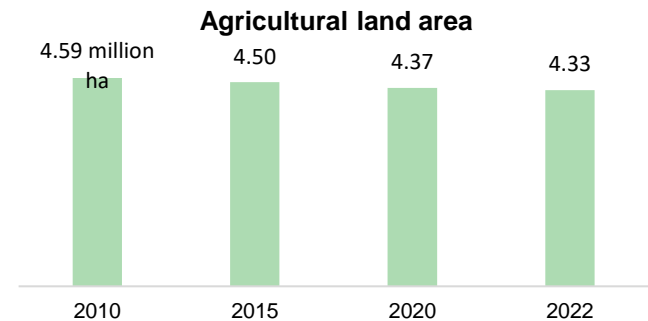
Source: Kagoshima Prefectural Federation of Economic Agricultural Co-operative Associations

Steadily expanding the number of people who join revenue insurance

- The number of management entities that joined revenue insurance in 2022 increased by approximately 20,000 to 79,000 compared to the previous year.

Agricultural land area has been on a downward trend. Farmland accumulation rate for business farmers increased by 0.9 percentage points from the previous fiscal year

- The agricultural land area in 2022 decreased by 24,000 ha from the previous year to 4.33 million ha. Total planted area also continued to decline, with the 2021 utilization rate of cultivated land at 91.4%.
- Newly occurring dilapidated farmland area in FY 2021 was 30,000 ha. The newly reclaimed area was 13,000 ha. The area of reusable dilapidated farmland is 91,000 ha.
- As of the end of March 2022, there were 520,000 ha of unregistered inheritance farmland and 509,000 ha of potentially unregistered inheritance farmland.
- In 2021, there was no acquisition of farmland by a foreign legal person or by a person believed to be a foreign national whose place of residence is abroad. In the same year, with respect to a foreign legal person or a person believed to be a foreign national whose place of residence is overseas, the acquired farmland by a Japanese legal person in which the foreign legal person has voting rights or a Japanese corporation in which the foreign person is an officer, was 5.3 ha by 3 corporations.
- Cropland intermediary management institutions (Farmland Banks) lease farmland dispersed and dislocated within the area and reallocates it to business farmers in a cohesive manner, thereby consolidating and intensifying farmland.
- In FY 2021, farmland accumulation ratio for business farmers rose by 0.9 percentage points from the previous year to 58.9%. It needs to accelerate the efforts to achieve target of 80% in FY 2023.



Source: MAFF "Statistics on Cultivated Area and Planted Area"

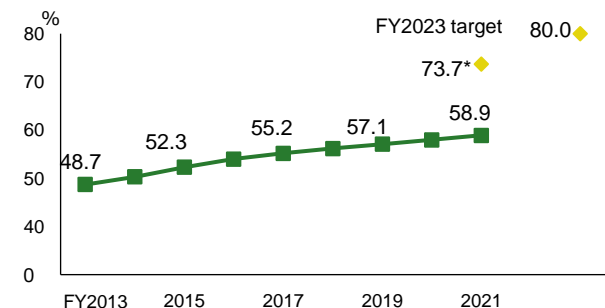
Status of generation and elimination of dilapidated farmland in FY2021

(Unit: 10,000 ha)

Newly generated area		Newly reclaimed area		Reusable dilapidated farmland	
Arable land zone		Arable land zone		Arable land zone	
3.0	1.5	1.3	0.8	9.1	5.4

Source: Prepared by MAFF

Business farmers' share of total farmland



Source: Prepared by MAFF

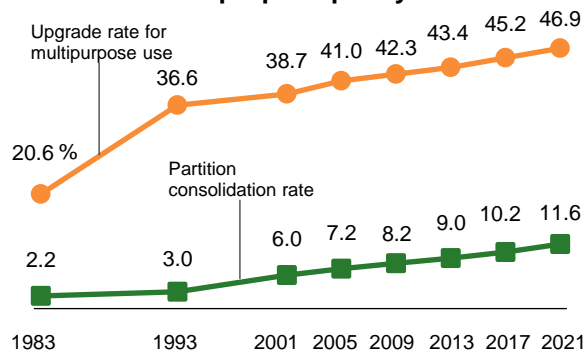
Note: 1) The figures include those other than farmland banks.

2) The asterisk* indicates the FY2021 target for measured index of policy evaluation.

Promoting consolidation and expansion of farmland parcels, conversion of paddy fields into upland fields and multipurpose paddy fields, life extension of agricultural irrigation facilities, measures against heavy rains and earthquakes in reservoirs

- For agricultural transformation to a Growth Industry, the development of the agricultural production base has been implemented, such as consolidation and expansion of farmland parcels, conversion of paddy fields into upland fields and multipurpose paddy fields. As of the end of March 2021, 12% of paddy fields had been consolidated into large partitions of 50a or more, and 47% had been upgraded to multipurpose paddy fields by installing culvert drainage, etc. Irrigation facilities had covered 25% of upland fields.
- In order to facilitate the implementation of smart agriculture, the development of agricultural production bases has been promoted such as consolidation and expansion of farmland parcels suitable for automated agricultural machinery and the development of ICT water management facilities.
- In order to support the establishment of food security, converting paddy fields into upland fields and multipurpose paddy fields by improving water-drainage, etc., upgrading upland fields by developing irrigation facilities, and improving pastures have been promoted.
- As of the end of March 2021, out of 7,700 core agricultural irrigation facilities such as dams and headworks and 51,831 km of core channels, the percentage of facilities and the length of channels that have exceeded the standard durable years was 56% and 45%, respectively. Sudden accidents such as water leaks in agricultural irrigation facilities due to aging deterioration also remain high. To extend service life and reduce life-cycle costs of facilities, stock management, which implements repairs and renewals in a planned and efficient manner, has been promoted.
- Pursuant to the Act on Special Measures for Construction of Agricultural Reservoirs, as of the end of July 2021, approximately 55,000 locations were designated as Important Agricultural Reservoirs for disaster prevention. Approximately 33,000 of those reservoirs have created hazard maps. The disaster prevention and mitigation measures related to agricultural reservoirs with an appropriate combination of structural and non-structural measures have been promoted.
- Promotion of "River Basin Disaster Resilience and Sustainability by All" management through the use of flood control functions of farmland and irrigation and drainage facilities such as storage of rainwater in "rice paddy dams" and pre-discharge in agricultural dams have been implemented.

Development status of partition consolidation and multipurpose paddy fields



Source: Compiled based on MAFF "Statistics on Cultivated Area and Planted Area" and "Basic Survey on Fundamental Agricultural Data"

- Notes: 1) "The partition consolidation rate" is the percentage of the paddy fields consolidated into large partitions of 50a or more.
 2) The "upgrade rate for multipurpose use" is the percentage of the paddy fields consolidated into large partitions of about 30a or more, whose groundwater levels are 70 cm or more and flooding removal time is 4 hours or less.



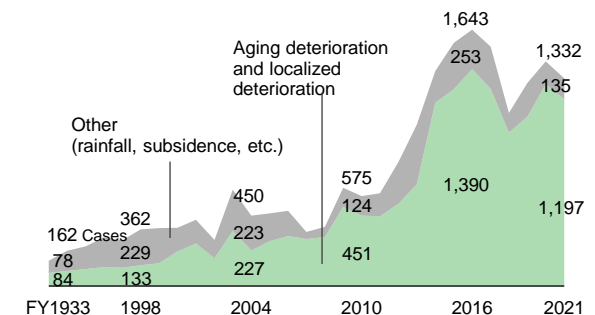
(Before readjustment : 30a to 50a per lot)



(After readjustment : 1.5 to 2.3 ha per lot)

Fields before and after land readjustment (Hokkaido)
 Source: Ministry of Land, Infrastructure, Transport and Tourism

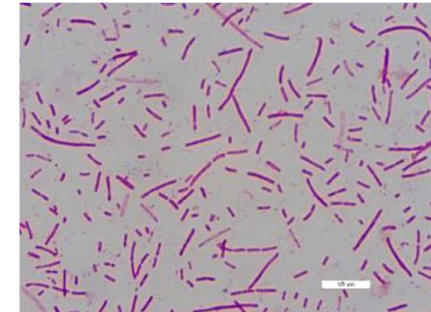
Occurrences of sudden accidents at agricultural irrigation facilities



Source: Prepared by MAFF

Promoting innovation creation and technological development

- Toward the realization of the MIDORI Strategy, the development of technologies that contribute to both productivity potential and sustainability in the agriculture, forestry, fisheries, and food industries has been advanced.
- Flying insect pests were shot down by irradiating them with laser light. This is expected as new pest control technology to help reduce the use of chemical pesticides.
- Elucidation of microbial functions related to curbing methane production and improving productivity in cattle, and evaluation for the effectiveness of candidate materials for curbing methane production have been implemented. In addition, breeding and improvement of cattle that produce less methane and development of technologies to reduce greenhouse gases in the composting process have been promoted.
- In FY 2021, a technical catalog, "The Strategy for Sustainable Food Systems, MIDORI" (Ver. 1.0) on expected technologies to be widely extended in agricultural sites was published. In November 2022, Ver. 2.0 with additional technologies available by 2030 was released.
- In December 2022, the "MIDORI Breeding Policy" was formulated to set forth the direction for the early development of innovative varieties that achieve both high productivity and reduced use of chemical fertilizers, as well as the revitalization of variety development. Based on this policy, the breeding of varieties, such as those resistant to sweet potato foot rot disease and BNI (Biological Nitrification Inhibition)-enabled wheat and maize, which can maintain high productivity even with the application of smaller amounts of nitrogen fertilizer, has been promoted.
- The establishment of a "smart breeding platform" to streamline the development of new varieties, including tools to predict the optimal mating combinations, has been promoted. This has accelerated the development of new varieties by national research institutes, prefectural test sites, universities, and private companies.
- The integration and utilization of "Knowledge" is operated and utilized as a mechanism to promote open innovation by introducing knowledge, technology, and ideas from various fields in the agriculture, forestry, fisheries, and food industries. As of the end of FY 2022, more than 4,500 legal persons and individuals from a wide range of fields, including IT, electronics, and medicine, had joined as members.



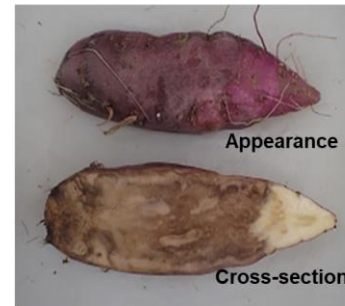
A new bacterial species, "*Prevotella Lacticifex*," isolated from low methane-producing cattle

Source: NARO

Examples of breeding varieties developed under the "MIDORI Breeding Policy"

Varieties to help reduce the use of chemical pesticides

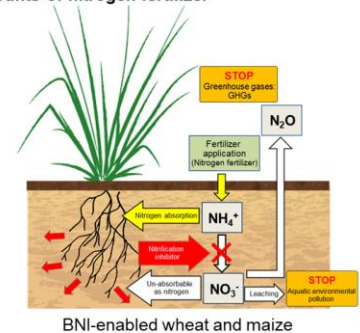
-Promoting development of varieties resistant to sweet potato foot rot disease and reducing use of chemical pesticides



Sweet potato infected with foot rot disease

Varieties to help reducing the use of chemical fertilizers

-Development of BNI (Biological Nitrification Inhibition)-enabled crops maintain high productivity even with the application of smaller amounts of nitrogen fertilizer



Source: Prepared by MAFF
Note: Photo source is NARO

Promoting initiatives to reduce the emissions of greenhouse gases: GHGs from agriculture

- Emissions of greenhouse gases from the agriculture, forestry, and fisheries sectors in Japan in FY2020 were 50.84 million t (CO₂ equivalent).
- Various efforts for this issue have been promoted, such as prolonging midseason drainage in paddy farming and practicing autumn plowing, managing livestock waste in livestock farming, and development and extension of technologies to reduce greenhouse gas emissions from fermentation in the digestive tracts of livestock.
- The J-Credit system, under which the government certifies the amount of greenhouse gas emissions reduction and absorption as credits, allows transactions to attract private funds, enabling the agriculture, forestry, and fishery industry to earn income by selling the credits generated by their reduction and absorption efforts. This system is expected to be further utilized in the future.
- The 27th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change: COP27 was held in Egypt in November 2022. On this occasion, agricultural production technologies developed by Japanese research institutes that contribute to measures for climate change were introduced.

The “Kunming-Montreal Global Biodiversity Framework,” a new global goal on biodiversity by 2030, was adopted. In March 2023, the Biodiversity Strategy of the Ministry of Agriculture, Forestry and Fisheries was revised

- In December 2022, the 15th Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD-COP15) was held and adopted the “Kunming-Montreal Global Biodiversity Framework,” a set of new global targets for biodiversity to be achieved by 2030.
- In the area of agriculture, forestry, and fisheries, targets were set to conserve and manage at least 30% of terrestrial and inland water areas, and of marine and coastal areas (30 by 30), and to reduce the risk of pollution caused by excess nutrients, chemicals, etc. lost to the environment.
- In March 2023, the Ministry of Agriculture, Forestry and Fisheries Biodiversity Strategy was revised to strongly support the agriculture, forestry, and fisheries industry focusing on biodiversity conservation.

Main targets of the Kunming-Montreal Global Biodiversity Framework

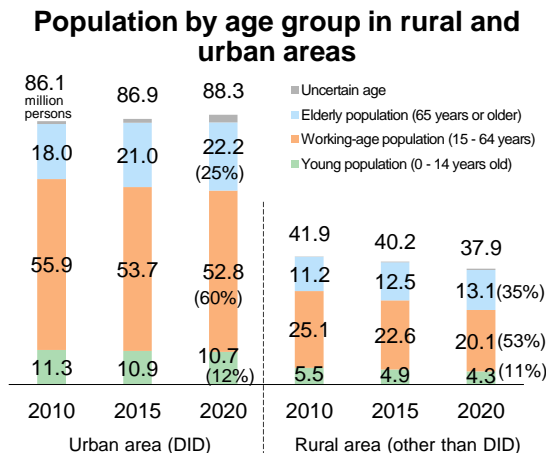
Overview	
Conserved Areas	Ensure that at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, are effectively conserved and managed through protected areas and other effective area-based conservation measures . (OECM) (30 by 30) *OECM: Other Effective area-based Conservation Measures
Wild species	Ensure that the use, harvesting, and trade of wild species is sustainable, safe, and legal, preventing overexploitation.
Pollution	Reduce pollution risks from all sources, including by reducing excess nutrients lost to the environment by at least half, by reducing the overall risk from pesticides and highly hazardous chemicals by at least half.
Agriculture, Forestry, and Fisheries industries	Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security.
Business	Take measures to enable business, and in particular to ensure that large and transnational companies and financial institutions regularly monitor, assess, and transparently disclose their risks, dependencies, and impacts on biodiversity and promote actions to ensure sustainable patterns of production.
Reduction of waste	Ensure that people are enabled to make sustainable consumption choices to reduce the global footprint of consumption, including through halving global food waste, significantly reducing overconsumption.

Source: Prepared by MAFF

Chapter 3 Promotion of Rural Areas

Aging and depopulation are occurring in parallel in rural areas. Promoting rural migration measures by related ministries and agencies

- Aging and depopulation are occurring in parallel in rural areas. Population in 2020 increased by 2% in cities compared to 2015, while rural population decreased by 6%.
- Interest in rural migration, especially among the younger generation, has grown and the value and appeal of rural communities are re-evaluated.
- The recruitment of human resources who can play a key role in supporting rural activities in the future has been promoted through measures to promote rural migration by relevant ministries and agencies.



Source: Compiled by MAFF based on the data of MIC, "National Census"
 Note: In the census, a densely inhabited district (DID) is defined as a city, and the areas other than DID are defined as rural areas.



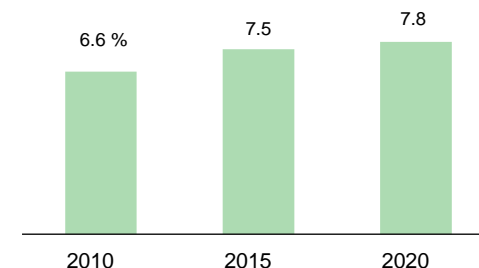
The "Tanabe Mirai Sozokoku" that creates a new flow of people, and the immigrated founder of the school (Wakayama Prefecture)

Source: Tanabe City, Wakayama Prefecture

Rural communities are becoming smaller. Movements to support maintenance of village functions through wide-area cooperation are expanding

- The percentage of rural communities with 9 or fewer households in total increased by 1.2 percentage points to 7.8% in 2020 compared to 2010.
- The survival of rural communities affects the maintenance of agricultural production activities in the area. The maintenance and growth of rural population and maintenance of community functions are important issues.
- The movement to maintain the functions of rural communities through wide-area coordinated efforts has been spreading.

Percentage of rural communities with nine or fewer households

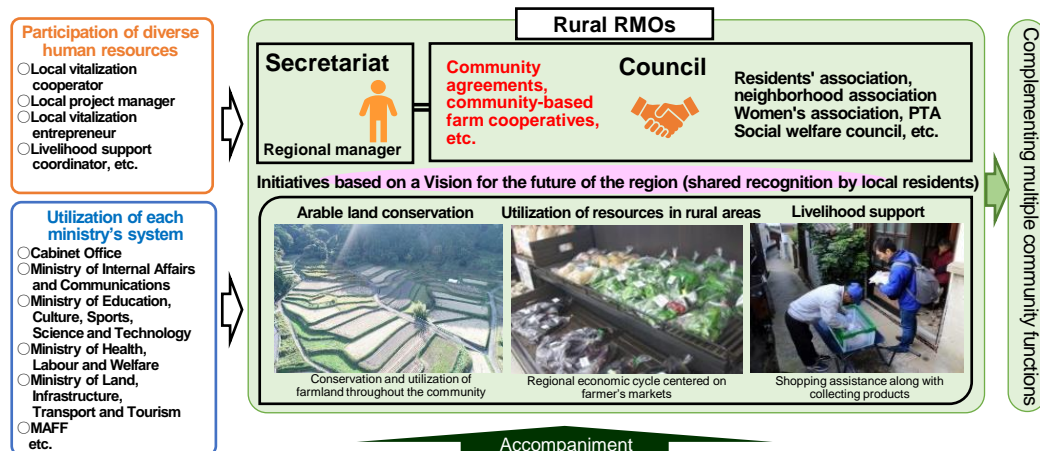


Source: MAFF, "Census of Agriculture and Forestry"

Promoting formation of rural RMO (Region Management Organization)

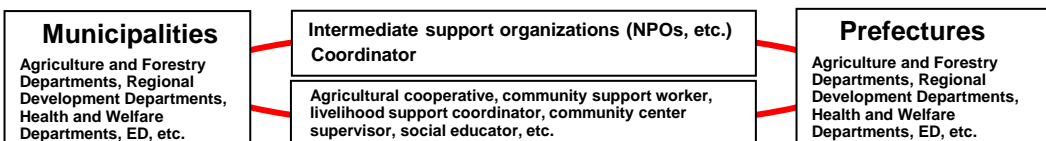
- The formation of rural RMOs (rural community management organizations) has been promoted. This organization complements the functions of multiple communities and provides livelihood support and other initiatives that contribute to the maintenance of local communities, in conjunction with farmland conservation activities and agricultural economic activities.
- In forming rural RMO, it is important to develop an organization into one that supports the livelihood of rural communities by developing economic activities through agricultural promotion using resources in rural areas, based on cooperation between various local entities and agricultural land preservation activity groups which receive “grants for direct payment to farmers in hilly and mountainous areas” and “grants for multifunctional payment”.
- In order to achieve the goal of forming rural RMOs in 100 districts by FY 2026, MAFF will provide support for the organizations aiming to become rural RMOs through planning, demonstration projects, and other initiatives. Also, prefecture-based support teams consisting of local governments, agricultural cooperatives, and NPOs, as well as establishment of a national platform have been supported.

Promotion system for formation of rural RMOs



Prefectural-level support teams

- Forming a cross-departmental support team for regions aiming to establish rural RMOs, and providing accompanying support for them



Case study: establishment of rural RMOs



Drone-based pest control
(Functions relating to agricultural production)



Shopping assistance with mobile shop trucks
(Functions related to livelihood support)

As a rural RMO in Hida district of Yasugi City, Ehida Company began its efforts to contribute to regional agriculture, and developed a wide range of businesses, including industrial promotion, living environment improvement, enhancement of welfare, and promotion of migration (Shimane Prefecture)
Source: Ehida Company Corporation

Implementing a Japanese agricultural direct payment system and promoting agriculture in hilly and mountainous areas and urban agriculture

- In order to maintain and exercise the multifunctional roles in agriculture and rural areas, the Japanese agricultural direct payment system has been implemented based on the “Act on Promotion of the Multifunctionality of Agriculture.” The system consists of three components: a multifunctional payment system, a direct payment system to farmers in hilly and mountainous areas, and a system of direct payments for environmentally friendly agriculture.
- In FY 2021, the area of certified agricultural land under a multifunctional payment system increased by 20,000 ha from the previous year to approximately 2.31 million ha.
- In FY 2021, the agreed area under the grants for direct payment to farmers in hilly and mountainous areas increased by 11,000 ha from the previous year to 653,000 ha. In order to maintain rural communities' functions in weakening hilly and mountainous areas, etc., drawing up of rural communities' strategies will be promoted.
- Amid a consistent decline in agricultural land in urbanization promotion areas, agricultural land area in productive green zones in 2021 was 12,000 ha, the same as the previous year.
- In 2017, the specified productive green spaces system was introduced to extend the deadline for purchase offers of productive green zones at the owner's will. As of the end of December 2022, 89% of the productive green zones stipulated in city planning in 1992 under the Productive Green Space Act were designated as specified productive green zones.
- In FY 2021, the leased area of farmland certified under the Urban Farmland Leasing Act increased by 25.9 ha from the previous year to 77.5 ha.

Examples of multifunctional payment systems

Farmland maintenance payment



Dredging up mud of channels



Mowing the slope

Resource improvement payment

Joint activities to improve the quality of resources in rural areas



Partial repair of farm roads



Extermination of alien species

Activities to extend the service life of facilities



Repair of channel walls



Renewal of concrete channels

Promoting the securing of livelihood infrastructure in rural areas

- The creation of information and communication environments such as optical fiber and wireless base stations has been promoted for the use of ICT, etc. in agriculture and rural areas.
- Efforts such as appropriate conservation measures for aging rural community sewerage facilities and farm roads have been supported.

Promoting efforts to create and expand the agricultural related population and deepen their relationships. "Half-farmer, half-X" approach has been spreading

- According to a 2021 public opinion survey conducted by the Cabinet Office, about 70% of respondents said they are interested in cooperating with agricultural and rural communities. In order to create and expand "Agricultural related population" and deepen the relationships, various support has been provided for agricultural experiences, exchanges between urban and rural areas, and experiences of life in rural areas, according to the stage of development of their involvement and interest.
- The "exchange project for children experiencing farming and rural lives" has been promoted to support experience of agricultural, forestry, and fishery activities.
- The "Half-farmer, half-X" approach, which combines agriculture with other work jobs by moving from the city to rural areas, has been spreading. The measures to increase the number of people practicing half-farmer, half-X approach, such as utilizing the system of the Act on the Promotion of Specific Regional Development in Rapidly Declining Population Areas, have been promoted in collaboration with relevant ministries and agencies.
- The number of members of the "regional revitalization cooperation corps" in FY 2022 was 6,447, an increase of 432 from the previous year.



Efforts to create and expand the related population based on the ownership system (Ibaraki Prefecture)
Source: Ibaraki Food and Agriculture Brand Building Council

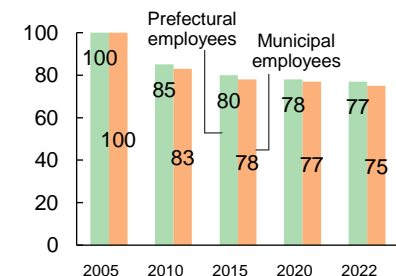


Efforts to dispatch multi-workers to production sites during the busy season (Kagoshima Prefecture)
Source: Erabu Island Business Cooperative

In local governments, the number of employees in the agriculture, forestry, and fisheries department is decreasing

- In local governments, the number of employees in the agriculture, forestry, and fisheries departments is decreasing. As it becomes difficult to meet the diverse needs of agricultural sites, it is important to take measures that suit the characteristics of each region while making effective use of limited administrative resources.
- The gap between regions that can take advantage of various regional development measures and create new movements, and those that cannot do so is widening, and the so-called "gap between rural areas" has become apparent. MAFF is promoting the initiative for "Rural area producers training course" to develop human resources that support community development, and the utilization of "Rural Areas Development Hotline" that serves as a consultation point for community development.

Number of employees in the agriculture, forestry, and fisheries department of local government (Index number with 2005 as 100)



Source: Compiled by MAFF based on the Ministry of Internal Affairs and Communications' "Survey Results on Capacity Management of Local Governments"

Promoting “Support for Innovations from Rural Areas” such as countryside stay and agriculture-welfare collaborations

- The “Support for Innovations from Rural Areas” has been promoted by developing the existing AFFrinnovation efforts, utilizing diverse resources related to agriculture, forestry, and fishery products and these industries, and collaborating with other fields to create new businesses and added value. Soft measures support, hard measures support, and accompanying support such as dispatching of experts have been implemented, while promoting cooperation among diverse entities including agriculture, forestry, and fishery workers and local businesses.
- Total annual sales of related business of agricultural production including processing and direct sales by farmers engaged in AFFrinnovation in FY2021 increased by 33.7 billion yen from the previous year to 2,066.6 billion yen.
- The total number of guests staying in the countryside in FY 2021 was 4.48 million, an increase of 580,000 compared to the previous year. By the end of FY 2022, 621 countryside-stay regions had been adopted nationwide. Initiatives to stimulate demand for countryside stay have been developed as a safe and secure travel destination.
- Efforts to promote employment of people with disabilities in the agricultural sector, called agriculture-welfare collaborations, have been promoted in various parts of the country as an advantageous approach for both agricultural and welfare sectors.
- In FY 2021, the number of entities engaged in agriculture-welfare collaborations increased by approximately 20% compared to the previous year, to 5,509. The development of professional human resources who can support agriculture-welfare collaborations at the sites, as well as dissemination and awareness-raising of the agriculture-welfare collaborations nationwide have been promoted.

Case study: innovation from rural areas

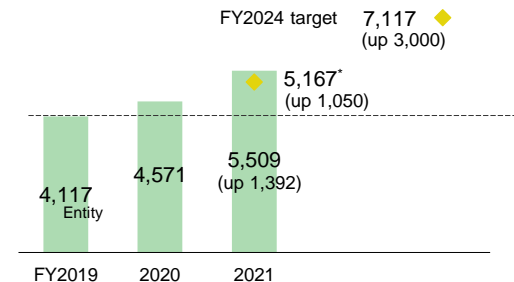


“Forest” x “Sports” x “Venture Company” approach
(Forest and survival games) (Nagano Prefecture)
Source: Forestry Corporation



“Agricultural products” x “Processed sales, tourism” x “farmers, local businesses” approach (craft beer and cherry smoked meat produced and sold) Development of stay-type tourism content in collaboration with tourism businesses) (Chiba Prefecture)
Source: Kyonan Corporation

Number of entities involved in agriculture-welfare collaborations



Source: Prepared by MAFF

Note: The asterisk indicates the FY2021 target for measured index of policy evaluation.

Promoting the use of biomass and the introduction of renewable energy

- In September 2022, the new Basic Plan for Promoting Biomass Utilization was decided on by the Cabinet. Promote the comprehensive use of biomass not only in rural areas but also in urban areas.
- The Plan has promoted the cultivation of energy crops on farmlands and the prevention of occurrence of devastated farmland.
- By FY 2022, 101 municipalities had been selected as Biomass Industrial Cities.
- By FY 2021, the number of municipalities that had prepared basic plans based on the Act on Promoting the Generation of Electricity from Renewable Energy Sources Harmonized with Sound Development of Agriculture, Forestry and Fisheries, increased to 81, and the number of certified plans for facilities improvement increased to 100.

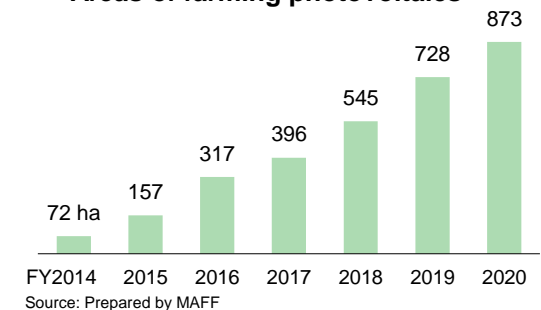


Initiatives for local consumption of locally produced energy through biogas plant operation (Hokkaido)
Source: Shikaoi-cho, Hokkaido

While farming photovoltaics efforts are expanding, there have been cases in which problems have occurred in farming on the farmland under the photovoltaic panels

- The area of the farming photovoltaics projects that generate electricity while continuing to farm have been increasing year by year, with 873 ha in FY 2020, an increase of 145 ha from the previous year.
- On the other hand, of the 2,535 ongoing initiatives as of the end of FY 2020, 458 or 18%, are in a situation where farmland is not properly managed, causing hindrance to farming. The agricultural committee or farmland diversion authority provides guidance to improve farming conditions for initiatives that have been hindered due to the business operators, but as a result of not following the improvement guidance, there have been cases where the relicensing of farmland conversion, which is necessary for the business continuation, has not been granted.

Areas of farming photovoltaics

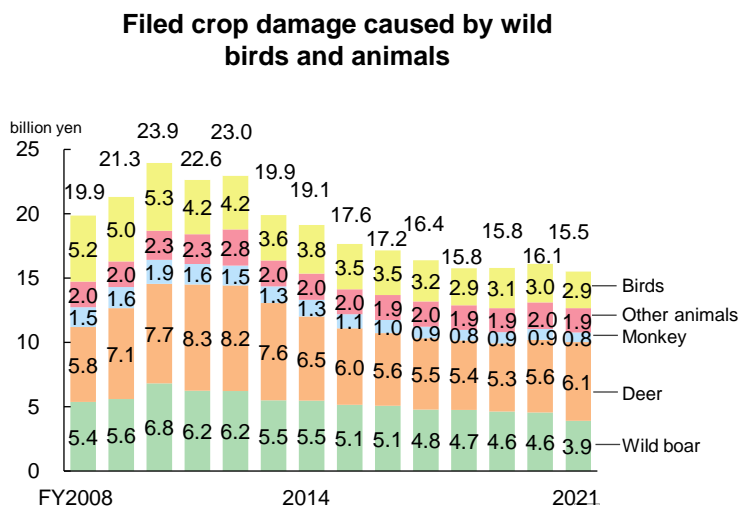


Case study: the lower farmland is not properly managed, weeds are thriving and causing hindrance to farming

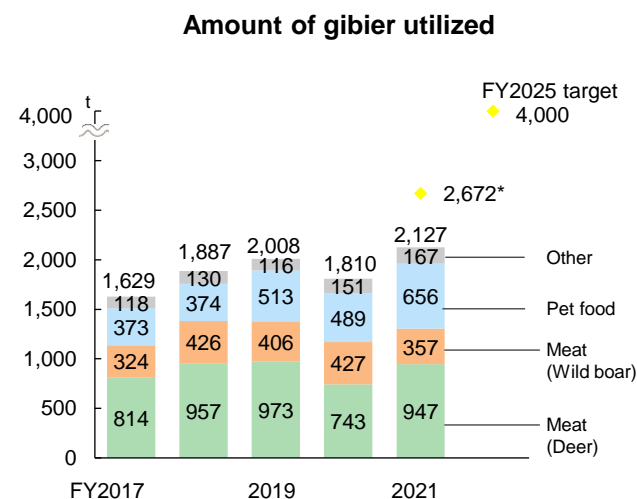
Promoting initiatives such as prevention of wildlife damage and utilization of gibier*

- In FY 2021, damage to field crops by wildlife decreased by 600 million yen from the previous year to 15.5 billion yen, due to a decrease in damage caused by wild boars.
- Under the Revised Act on special countermeasures for the prevention of damage due to wildlife, initiatives for wide-area trapping, utilization of ICT, versatile use of hide and skin, etc. have been supported.
- Utilizing wildlife which has been considered harmful wildlife to turn them into resources in rural areas as gibier, has been expanded. The amount of gibier used in FY 2021 increased by 18% from the previous year to 2,127 t.
- Under the domestic gibier certification system to provide safer gibier and ensure security of consumers, the number of certified domestic gibier facilities at the end of FY 2022 was 30, including 4 newly certified facilities.

*Gibier is meat from wildlife which is hunted according to the hunting regulations or captured to prevent damage to agriculture or ecosystems.



Source: Prepared by MAFF



Source: Prepared based on MAFF "Fact-finding Survey on Wildlife Resources Utilization"
 Note: The asterisk* indicates the FY2021 target for measured index of policy evaluation.

Two sites as Globally Important Agricultural Heritage Systems and two sites as Japanese Nationally Important Agricultural Heritage Systems were newly designated

- In July 2022, 2 sites were newly designated as Globally Important Agricultural Heritage Systems: Kyoutou Region in Yamanashi and the Lake Biwa region in Shiga. In January 2023, 2 sites were newly designated as Japanese Nationally Important Agricultural Heritage Systems: Tabashine mountain-base areas in Iwate, and Hiki Hills in Saitama.
- The number of designated rice terraces under the Act on Vitalization of Tanada Region increased to 711 in FY 2022. In accordance with the Act, cross-ministries and agencies have comprehensively provided support for regional revitalization efforts focused on rice terraces by the Designated Tanada Promotion Association.
- In FY 2021, the Minister of Agriculture, Forestry and Fisheries recognized 271 outstanding rice terraces as "TSUNAGU TANADA heritage – passing hometown pride to the future."
- According to a 2021 public opinion survey conducted by the Cabinet Office, the awareness of “multifunctional roles of agriculture” was less than 30%. Dissemination and awareness-raising has been promoted by distributing pamphlets that explain the multifunctional roles of agriculture in an easy-to-understand manner.



(Kyoutou Region in Yamanashi)



(Lake Biwa region in Shiga)



Rice terrace in the Mikohara District selected as one of the "TSUNAGU TANADA heritage" (Ishikawa Prefecture)
Source: Ishikawa

2022 Globally Important Agricultural Heritage Systems

Chapter 4 Restoration/Reconstruction from Natural Disasters, Disaster Prevention/Reduction, and Strengthening National Resilience

Substantial progress has been made in rehabilitating infrastructure in tsunami-affected farmland and other areas through restoration projects

- Agriculture-related damage from the Great East Japan Earthquake was 964.3 billion yen, among 2,443.5 billion yen of damage to agriculture, forestry, and fisheries in total.
- Of the 19,660 ha of farmland for recovery from the earthquake and tsunami disaster, 18,840 ha of farmland were able to restart farming as of the end of March 2023.
- In the three prefectures of Iwate, Miyagi, and Fukushima, efforts have been made for the expansion of farmland parcels in conjunction with the restoration of farmland from the earthquake and tsunami.

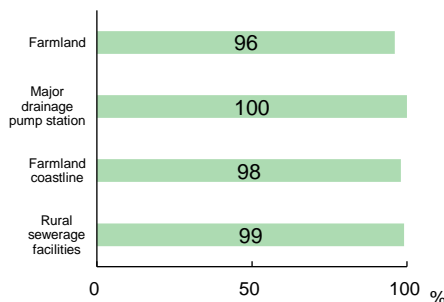


Large-scale elevated cultivation introduced to revive strawberry production (Miyagi Prefecture)
Source: Watari-cho, Miyagi

There are still issues to be addressed in areas affected by the nuclear disaster, such as restarting farming and dispelling reputational damages

- The total area of farmland for restarting farming in the 12 municipalities affected by the nuclear disaster increased by 793 ha from the previous fiscal year to 7,370 ha at the end of FY 2021. On the other hand, there is a delay in restarting farming in municipalities with difficult-to-return zones.
- In 2021, the total agricultural output of Fukushima Prefecture had recovered to about 80% of pre-earthquake levels, while the agricultural output of the 12 municipalities affected by the nuclear disaster had recovered only to about 40%.
- Support for the development of facilities that serve as a base for production areas has been provided, aiming to create production areas where production and processing can be integrated to increase added value.
- The percentage of people who are hesitant to buy Fukushima products because of radioactive materials has been on a downward trend and was 5.8% in 2023.
- Comprehensive brand unique to Fukushima, strengthening the competitiveness of production areas, and promoting domestic and international sales.

Status of restoration of farmland and agricultural facilities

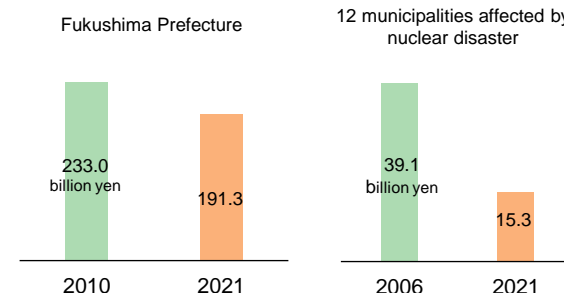


Source: Prepared by MAFF

Notes: 1) Figures are as of the end of FY 2022.

- 2) Farmland indicates the ratio to the 19,660 ha of farmland to be restored excluding that which has been converted to public lands (including prospects) (completed except for 820 ha in Fukushima Prefecture)
- 3) Major drainage pump stations are for 96 sites that need to be restored.
- 4) Farmland coastlines are for 122 areas in need of restoration (completed except for 3 areas in Fukushima)
- 5) Rural sewerage facilities are for affected 401 sites (including facilities under restoration).

Agricultural output of 12 municipalities affected by nuclear power disaster compared with pre-disaster levels

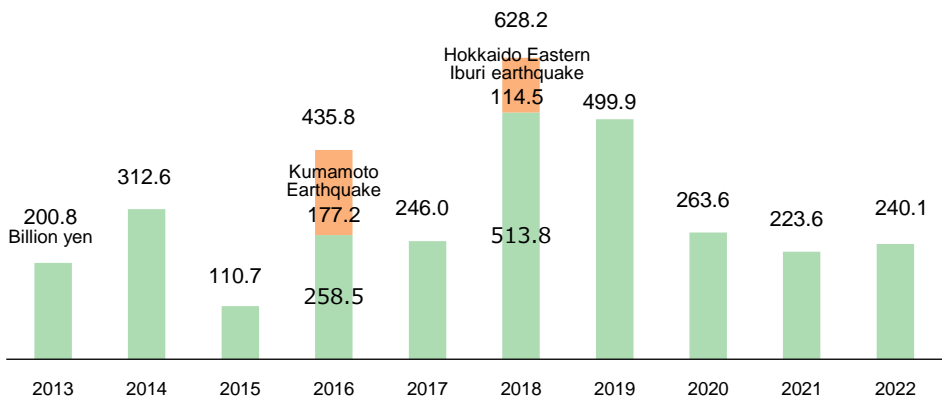


Sources: Compiled based on the data of MAFF, "Statistics of Agricultural Income Produced" and "2021 Agricultural Output by Municipality (Estimation)" (Results of estimation of agricultural output by municipality using the results of the Census of Agriculture and Forestry)"

Damage to agriculture, forestry, and fisheries caused by major natural disasters in 2022 was 240.1 billion yen

- In recent years, large-scale natural disasters have occurred in various parts of Japan almost every year. The disaster caused extensive damage to field crops, farmland, and agricultural facilities in our country's agriculture, forestry, and fisheries industries.
- Restoration and reconstruction has been promoted from the 2019 East Japan Typhoon, heavy rains in July 2020, and heavy rains from July to August 2021.

The amount of damage caused by natural disasters in agriculture, forestry, and fisheries in the past 10 years



Source: Prepared by MAFF
Note: Damage figures for 2022 are as of the end of March 2023.

- In 2022, widespread damage occurred due to the 2022 earthquake off the coast of Fukushima Prefecture, heavy rain from July 14, 2022, heavy rain from August 3, 2022, and the Typhoon Nos. 14 and 15 in 2022. The total amount of damage to agriculture, forestry, and fisheries in 2022 was 240.1 billion yen at the end of March 2023.
- With respect to the damage caused by major natural disasters such as the heavy rains that began on August 3, 2022, the designation as a disaster of extreme severity reduced the burden on local governments and disaster-affected farmers for disaster restoration projects on farmland and agricultural facilities.



Flooding of land under permanent crops due to "heavy rain from August 3, 2022" (Aomori Prefecture)

Promoting measures based on the "Five-Year Acceleration Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience"

- Based on the “Fundamental Plan for National Resilience” decided on by the Cabinet in 2014 (revised in 2018), disaster prevention and mitigation measures have been promoted by combining structural measures such as extending the service life of agricultural irrigation facilities and promoting comprehensive measures for irrigation ponds including consolidation, with non-structural measures such as creating hazard maps and educating local residents.
- In the field of agriculture and rural areas, based on the “Five-Year Acceleration Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience” decided on by the Cabinet in 2020, initiatives have been promoted, such as “flood control measures (improvement of agricultural irrigation facilities, enhancement of the storage function of paddy fields, improvement of seashore),” "disaster prevention and mitigation measures related to important agricultural reservoirs for disaster prevention," “measures against aging agricultural irrigation facilities, heavy rain, and earthquakes,” "disaster prevention and mitigation measures for wholesale markets," and "measures for continuing business of horticultural products."

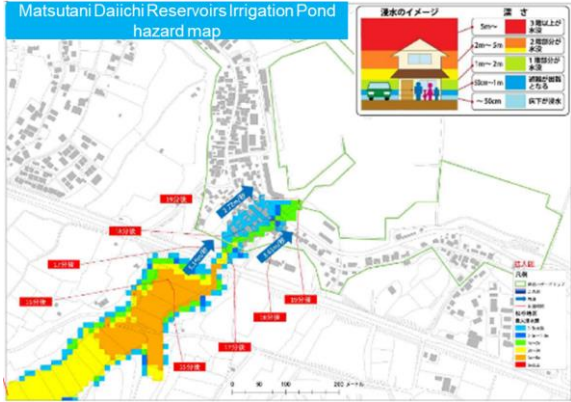


(Before measures)



(After measures)

Important agricultural reservoirs for disaster prevention before and after countermeasure works (Tottori Prefecture)
Source: Kotoura Town, Tottori Prefecture

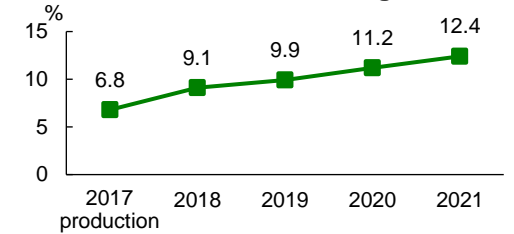


Agricultural reservoirs hazard map (Tottori Prefecture)
Source: Kotoura Town, Tottori Prefecture

Promoting the development and introduction of new adaptation technologies to address the impacts of climate change

- Agricultural production is generally sensitive to climate change, and the effects of growth and quality deterioration are seen in each item. To this end, monitoring of the impacts of global warming, compilation of global warming impact survey reports, and dissemination of information have been conducted. In addition, efforts have been implemented to work for the extension and instruction of the adaptation measures to production sites, and demonstration of the introduction of new adaptation technologies, through the introduction of adaptation technologies to avoid and mitigate the effects of high temperatures and high-temperature-resistant varieties.
- In paddy rice, the crop acreage percentage of high-temperature-tolerant varieties has been increasing year by year and was 12.4% in 2021.
- The purchase of agricultural insurance has been promoted to help farmers themselves prepare for damage by natural disasters. Focus is placed on promoting enrollment in horticultural facility mutual aid and revenue insurance schemes. In FY 2021, the horticultural facility mutual aid enrollment rate was 69.9%, up 4.3 percentage points from the previous year. At the same time, extension of agricultural BCP (Business Continuity Plan) has been promoted.
- In a survey released in March 2023, about 40% of respondents said that they “do not stockpile food.” Efforts to establish household food stockpiles in preparation for disasters have been promoted.

Percentage of high-temperature-tolerant varieties to rice acreage



Source: MAFF, “2021 Global Warming Impact Study Report” (released in September 2022)
Note: High-temperature-tolerant varieties are those that do not suffer a drop in brown rice quality or yield even at high temperatures.

Case study: agricultural BCP utilization



Kanaizuka Engei took the opportunity of encountering damage caused by heavy snow to create an agricultural version of the BCP, which is used to raise awareness of disaster prevention and improve management on a daily basis (Saitama Prefecture)
Source: Kanaizuka Engei

Summary

- Policy priorities, fiscal measures, tax measures, monetary measures

I. Measures to maintain and improve Japan's food self-sufficiency ratio and potential

- Initiatives to maintain and improve Japan's food self-sufficiency ratio and potential
- Measures to realize the production targets for each major item

II Measures for securing a stable supply of food

- Exploration of demand through the creation of new values
- Strategic exploration of global market
- Deepening of the connection between consumers and food and agriculture
- Ensuring food safety and consumer trust taking international activities into consideration
- Establishing comprehensive food security in anticipation of food supply risks
- Response to a new international environment such as TPP, and strategic international negotiations

III. Measures for sustainable development of agriculture

- Development and securing of business farmers for realizing a strong and sustainable agricultural structure
- Active participation of diverse human resources and entities that support agricultural sites
- Accumulation and concentration of agricultural land for business farmers and securing farmland
- Promotion of initiatives towards stabilization of agricultural management
- Development of agricultural production base that contributes to the transformation of agriculture into a growth industry and strengthening national resilience
- Strengthening of the production bases in response to changes in the demand structure, etc., and streamlining of distribution/processing structure
- Promotion of innovations at agricultural production/distribution sites by utilizing ICT, etc.
- Promotion of the Strategy for Sustainable Food Systems, MIDORI(Measures for Achievement of Decarbonization and Resilience with Innovation)
- Promotion of environmental policy, including responses to climate change

IV. Measures for promotion of rural areas

- Securing income and employment opportunities by utilizing resources in rural areas
- Improvement of conditions necessary for people to continue to live in rural areas including hilly and mountainous areas
- Creation of new movements and vitality to support rural areas
- Development of a collaborative system of related ministries and agencies to continuously promote measures in line with the above three items

V. Measures for restoration/reconstruction from the Great East Japan Earthquake and large-scale natural disasters

- Restoration/Reconstruction from Great East Japan Earthquake
- Preparedness for large-scale natural disasters
- Restoration from large-scale natural disasters

VI. Measures for groups

VII Measures for forming a national consensus through the expansion of national movements on food and agriculture

VIII Response to new infectious diseases including COVID-19

IX. Matters necessary for comprehensively and systematically promoting measures for food, agriculture, and rural areas

- Unless otherwise noted, this report is based on information available as of the end of March 2023.
- The figures in the tables and charts are rounded off and may not exactly reflect the actual totals.
- The targets in this report are those in the measurement indicator of policy evaluation in accordance with the basic plans for food, agriculture, and rural areas.
- The maps in this report do not necessarily indicate Japan's territories comprehensively.