



# Chapter 3

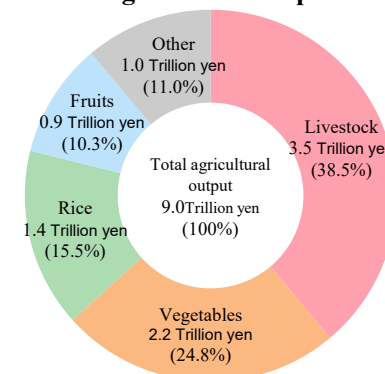
## Sustainable Development of Agriculture

## Chapter 3 Sustainable Development of Agriculture

### Total agricultural output in 2022 increased by 1.8% from the previous year to 9 trillion yen

- Total agricultural output in 2022 rose by 1.8% compared to the previous year, to 9 trillion yen. This was due to an increase in the prices of rice and vegetable crops, as well as livestock such as pigs and chickens. Looking at agricultural output by sector, livestock made up the largest proportion at 3.5 trillion yen.
- By prefecture, Hokkaido topped the list with 1.3 trillion yen, followed by Kagoshima with 500 billion yen and Ibaraki with 400 billion yen.
- Agricultural production income in 2022 fell by 7.3% compared to the previous year, to 3.1 trillion yen, due to an increase in prices of agricultural production materials.

Total agricultural output 2022



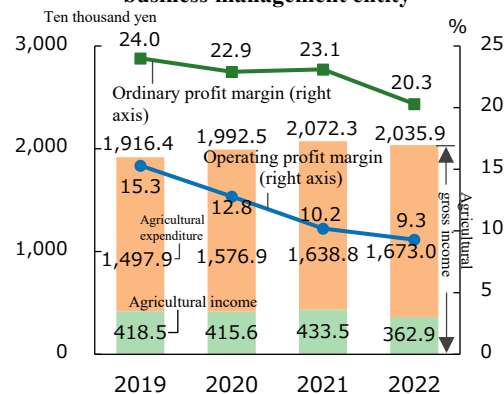
Source: MAFF, "2022 Statistics of Agricultural Income Produced"

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

### In 2022, agricultural income per business management entity decreased by 710,000 yen from the previous year to 3.63 million yen

- In 2022, the agricultural gross income per business management entity was 20,359 thousand yen, down 364,000 yen from the previous year. Agricultural expenditure increased by 342,000 yen from the previous year to 16.73 million yen.
- Agricultural income, which is calculated by subtracting agricultural expenditure from agricultural gross income, decreased by 706,000 yen from the previous year to 3,629 thousand yen due to increases in fertilizer and manure costs, feed costs, power and utility costs, and other expenditures. The ordinary profit margin decreased by 2.8 points from the previous year to 20.3%.
- The levels of operating profit margin vary by industry. In some industries, as with agriculture, there has been a downward trend.

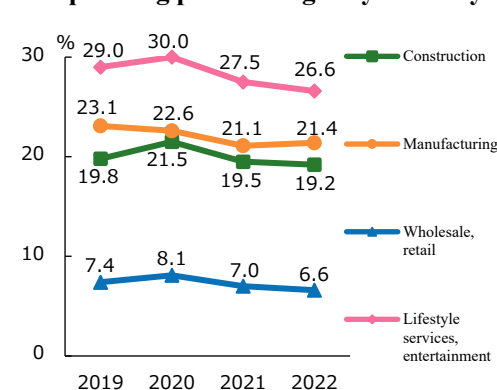
Agriculture income and expenditure per business management entity



Source: MAFF, "Management Statistics by Type of Agriculture"

Note: "Business management entity" refers to individual management entity whose main source of income is agriculture and have personnel below 65 years of age engaged in self-employed agriculture for 60 days or more in a year.

Operating profit margin by industry



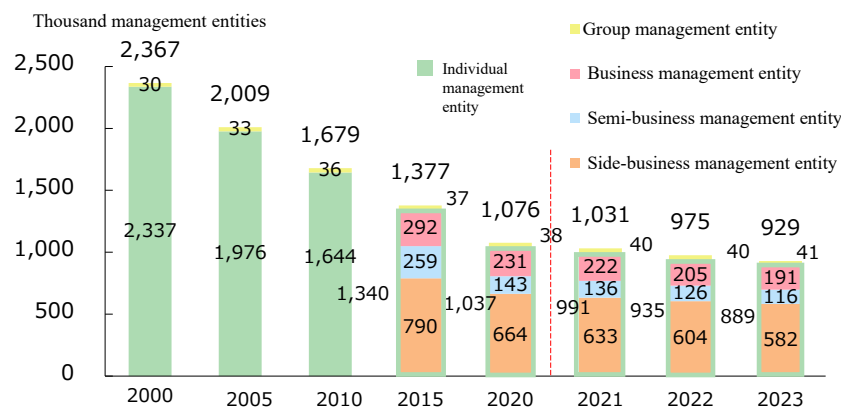
Source: Prepared by MAFF based on the Ministry of Internal Affairs and Communications' "Sole Proprietorship Economic Survey"

Note: Operating profit margin per sole proprietorship

## The number of agriculture management entities is on a downward trend, and the average age of core persons mainly engaged in farming increased to 68.7 years old

- The number of agricultural management entities is on a downward trend, and in 2023, it decreased by 4.7% from the previous year to 929,000. Individually managed entities, which account for 95.6% of the total, decreased by 5.0%, while group management entities, which account for 4.4%, increased by 1.5%. The number of agricultural corporations in 2023 increased by 2.5% from the previous year to 33,000.
- The number of core persons mainly engaged in farming has halved in the last 20 years, falling from 2.4 million in 2000 to 1.164 million in 2023. Their population is aging, with 823,000 people aged 65 or older, accounting for about 70% of the total, and the average age is 68.7 years old.
- Since 2000, the number of agriculture management entities in prefectures, classified by farm size, has been decreasing steadily for farms of less than 5 ha, while the number of agriculture management entities of 10 ha or more has increased.

### Number of agriculture management entities



Source: MAFF, "Census of Agriculture and Forestry," "Survey on Movement of Agricultural Structure"

Notes: 1) Figures as of February 1 of each year; figures as of December 1 of the year before for Okinawa Prefecture in 2000 and 2005.

2) Figures are the total number of commercial farm households for individual management entity in 2000, and the total number of agricultural holdings other than farm households and agricultural service enterprises for group managed entities. Figures for 2005 and after are the number of agriculture management entities.

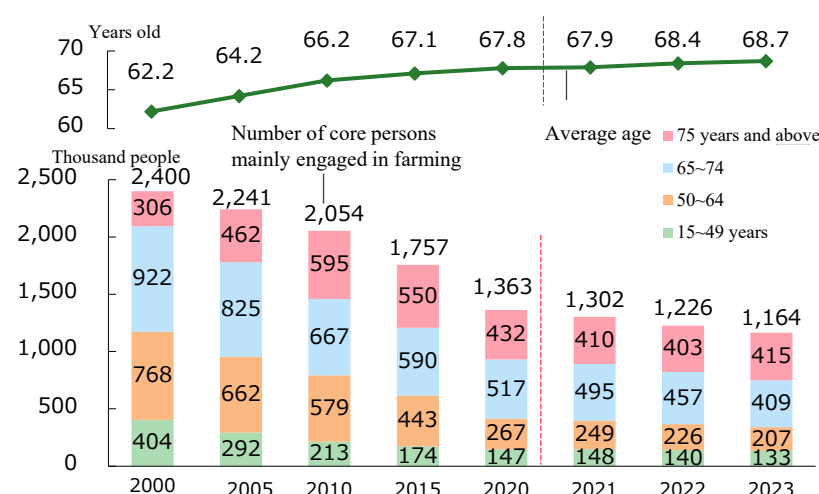
3) Business management entity: Individually managed entities whose main source of income is agriculture, and have household members below 65 years of age (engaged in self-employed agriculture for 60 days or more in a year).

Semi-business management entity: Individually managed entities whose main source of income is non-agricultural income, and have household members below 65 years of age (as above).

Side-business management entity: Individually managed entities without household members below 65 years of age (as above).

4) Figures for 2021, 2022, and 2023 are based on the results of the Survey on Movement of Agricultural Structure, and are estimated figures obtained from the sample survey.

### Number of core persons mainly engaged in farming and their average age



Source: Prepared based on MAFF's "2000 World Agricultural and Forestry Census," "2005 Agricultural and Forestry Census," "2010 World Agricultural and Forestry Census" (aggregate calculation after reclassification), "2015 Agricultural and Forestry Census" (aggregate calculation after reclassification), "2020 Agricultural and Forestry Census," and "Survey on Movement of Agricultural Structure."

Notes: 1) Figures as of February 1 of each year; figures as of December 1 of the year before for Okinawa Prefecture in 2000 and 2005.

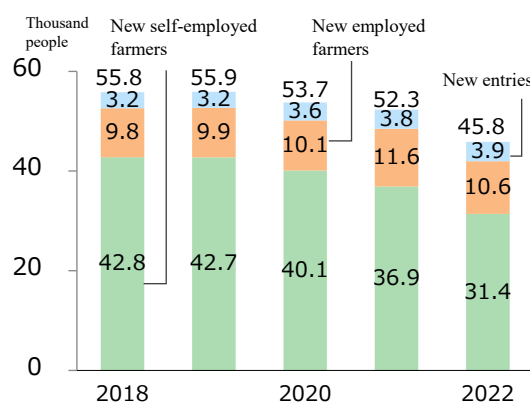
2) Figures for the number of core persons mainly engaged in farming and their average age in 2000 and 2005 are figures for the number of commercial farm households.

3) Figures for 2021, 2022, and 2023 are based on the results of the Survey on Movement of Agricultural Structure, and are estimated figures obtained from the sample survey.

## The number of newcomers in agriculture fell by 12.3% compared to the previous year. Support is provided to ensure the smooth securing of agricultural workforce for the future

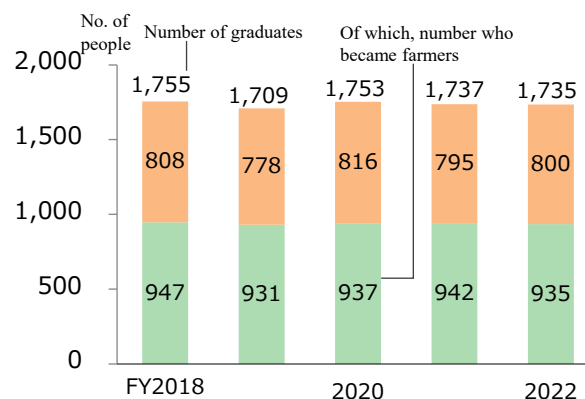
- The number of newcomers in agriculture in 2022 fell by 12.3% compared to the previous year, to 46,000. This attributes to a drop in the number of farmers entering from other industries, due to the impact of recovery in employment that had declined as a result of the COVID-19 pandemic. Looking at the data by the type of involvement in farming, the number of new self-employed farmers was 31,400, making up 70% of the total.
- To smoothly secure the agricultural workforce for the future, support is provided toward initial investment and capital funds before and after starting farming toward establishing a management base as soon as possible.
- The number of graduates from agricultural academies and colleges was 1,735 in FY2022; of these, 53.9% became farmers in the agricultural sector. The employment rate for farmers was 34.1%.
- To communicate the appeal of agriculture to the younger generation, and to nurture human resources who will choose to be employed in the agricultural sector in the future, support is provided not only to strengthen the educational curriculum in areas including smart agriculture and organic agriculture, but also for activities such as visiting classes conducted by leading farmers in the region.

Number of newcomers in agriculture



Source: MAFF, "Survey of Newcomers in Agriculture"  
 Note: Figures of newcomers in agriculture are for February 1 of the year in question to January 31 of the following year.

Number of graduates from agricultural academies and colleges



Source: Prepared by MAFF

- Notes: 1) The number of graduates refers to the number who have graduated from training courses.  
 2) Those employed in the agricultural sector include not only employed farmers and self-employed farmers, but also those who are undergoing continuous training on farms. It does not include those who started farming after working another job.

Case of newcomers in agriculture

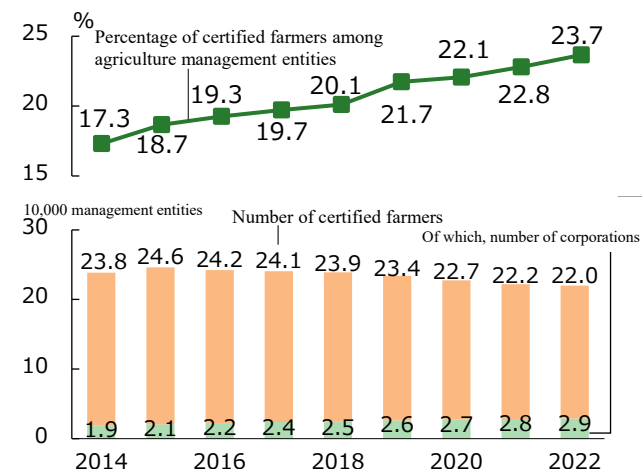


Mr. and Mrs. Hosaka, who moved to Kawaminami Town from outside the prefecture, received training support from the relevant organizations for newcomers in agriculture, and achieved sales of over 10 million yen in the first year of farming with a 20-a scale pepper cultivation (Miyazaki Prefecture).  
 Source: Masataka Hosaka

## Need to nurture and secure the agriculture workforce to enable the sustainable development of Japan's agricultural industry as a growth industry

- It is necessary to nurture and secure an agriculture workforce that aims to realize the efficient and stable management of agriculture, in order to achieve the sustainable development of Japan's agricultural industry as a growth industry.
- The percentage of certified farmers among all agriculture management entities increased by 0.8 percentage points from the previous fiscal year to 23.7% in FY2022.
- The number of community-based farm organizations in 2023 fell by 137 organizations to 14,227 organizations. The number of incorporated community-based farm organizations is increasing year by year.
- It is important to work toward improving business management by farmers. Prefectural governments provide training opportunities to farmers, such as farming management schools where they can learn systematically about management while engaging in farming operations.
- The number of insured persons of farmers' pension has been on the decrease. In the fiscal year 2022, it has decreased by 614 people to 44,576 people compared to the previous year. On the other hand, the number of persons entitled to receive benefits has been on the increase. In the fiscal year 2022, it has risen by 1,861 to 55,376 compared to the previous year.

Number of certified farmers

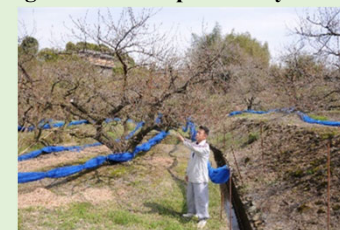


Source: Prepared based on MAFF, "Certification Status of Certified Farmers," "Census of Agriculture and Forestry," and "Survey on Movement of Agricultural Structure."  
 Note: 1) The number of certified farmers are figures as of the end of each fiscal year.  
 2) Specified agricultural corporations include corporations deemed as certified farmers.

## Continuation and strengthening of efforts to improve farmers' incomes

- Organizations in the agricultural cooperative system are implementing self-improvement measures proactively to improve the income of farmers, such as by facilitating the advantageous sale of agricultural products and reducing the prices of production materials.
- The National Federation of Agricultural Cooperative Associations (ZEN-NOH) provides support toward the development of food and agriculture value chains through business partnerships with companies from other industries, through means such as rationalizing logistics, increasing the added value of domestic agricultural and livestock products, and increasing consumption through diverse sales channels.

### Case of increasing income through organizations in the agricultural cooperative system

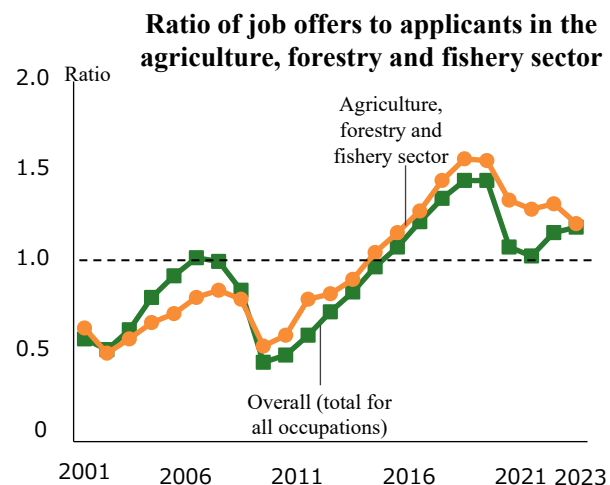


The Kinan Agricultural Co-operatives has increased the agricultural income of its members by strengthening sales of pickled plums and processed plum products, and expanding exports of fresh fruit and vegetables as well as processed products (Wakayama Prefecture).

Source: Kinan Agricultural Co-operatives

## Importance of securing labor in production sites, including foreign human resources

- The labor shortage remains in the agriculture, forestry, and fishery sector, with the ratio of job offers to applicants exceeding 1.0 since 2014.
- With an increasing number of people leaving the agricultural sector, many of the management entities that take over agricultural land, etc. find it difficult to expand agricultural operations if they cannot secure employed labor. As the issue of continuously securing the necessary employed labor in the agricultural sector will become an issue in the future, it is important to take measures regarding employed labor in the agricultural sector from the perspective of food security.
- In order to resolve the labor shortage in agriculture, MAFF comprehensively supports the establishment of a system for accepting, attracting and retaining, and training human resources from Japan and overseas.
- The total number of foreign human resources in the agricultural sector in 2023 increased by about 8,000 from the previous year to 51,000. MAFF supports the creation of an environment in which foreign human resources can work comfortably.
- In February 2024, the Ministerial Council on Acceptance and Inclusion of Foreign Human Resources decided to progressively dissolve the current technical intern training program in line with the actual situation, and to establish an “Employment for Skill Development” Program with the aim of securing and developing human resources in areas experiencing labor shortages, from the perspective of realizing a society of coexistence where people can live safely and securely, advancing the careers of foreign nationals, and preventing and correcting human rights violations.



Source: Prepared by MAFF based on the Ministry of Health, Labour and Welfare's "Employment Referrals for General Workers"

Note: The ratio of job offers to applicants is the figure for full-time workers, including part-timers.



Participants in "91 Nogyo" are diverse individuals who are involved in ways that correspond to their respective lifestyles.

Source: National Federation of Agricultural Cooperative Associations (ZEN-NOH)

### Case of foreign human resources



Kobo Saien has made use of Specified Skilled Worker System to expand production of spinach and other crops while securing labor. Specified Skilled Worker also participate in community activities and build good relationships (Hiroshima Prefecture).

Source: Kobo Saien



**The number of female core persons mainly engaged in farming has decreased compared to the previous year. Management entities in which women are continuously involved in management are large in scale and have made progress in diversifying operations. Promoting an environment where women farmers can work and live comfortably**

- The number of female core persons mainly engaged in farming in 2023 was 452,000, down 5.9% from the previous year. They make up about 40% of the total and are important business farmers.
- Management entities in which women are continuously involved in management are large in scale and have made progress in diversifying operations.
- The percentage of female members in agricultural committees in FY2022 increased by 0.2 percentage points from the previous fiscal year to 12.6%. The percentage of female executive officers in agricultural cooperatives in FY2023 increased by 1.0 percentage points from the previous fiscal year to 10.6%.
- According to a survey by the Ministry of Internal Affairs and Communications, in 2021, the total time spent on housework and childcare by female persons engaged in agricultural, forestry, and fishery per day (overall weekly average) was 2 hours and 57 minutes, longer than the 26 minutes spent by men.
- It is essential to create an environment in which men and women can share housework, childcare, 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 childcare and farm work in their communities.
- The Nougyou-Joshi Project is marking 10 years since its establishment, and is engaged in diverse activities. While there had been 37 members during its establishment in 2013, membership now exceeds 1,000, and it has grown into a nationwide women's network that transcends regions and generations.

**Status of management entities by the type of female participation in management**

	Continued	Started	Stopped	Not participating
Area of operating cultivated land (hectares per management entity)	3.2	2.5	2.5	1.8
Increase/Decrease rate (2015 - 2020)	2.1%	2.7%	0.0%	-0.2%
Sale value of agricultural products (ten thousand yen per management entity)	706	486	581	322
Increase/Decrease rate (2015 - 2020)	14.9%	17.3%	13.9%	14.4%
Percentage of initiatives in agricultural production-related projects	27.1%	22.6%	20.1%	17.1%
Percentage point increase/decrease (2015 - 2020)	1.2	3.2	-0.6	0.7
Percentage of management entities with successors for agricultural management	28.8%	26.9%	24.0%	20.7%

Source: PRIMAFF, "The Turbulent Structure of Japanese Agriculture and Rural Areas - Comprehensive Analysis of the 2020 Census of Agriculture" (published in December 2023)

Note: 1) Management entities with female participation in management in both 2015 and 2020 were categorized as "continued," those with participation only in 2020 as "started," those with participation only in 2015 as "stopped," and those without participation in both years as "not participating."

2) Figures for 2020.

### Case of women empowerment

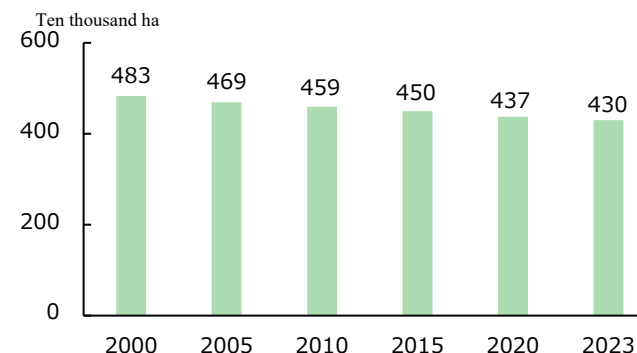


Under the leadership of women managers, News Corporations Inc. is implementing organizational design that allows staff to growth and workstyle reform that suits the life plans of every staff member, and promoting the creation of a workplace that is the choice of local women and young people (Ehime Prefecture).  
Source: News Corporations Inc.

## Agricultural land area has been on a downward trend. Farmland accumulation rate for business farmers increased by 0.6 percentage points from the previous fiscal year

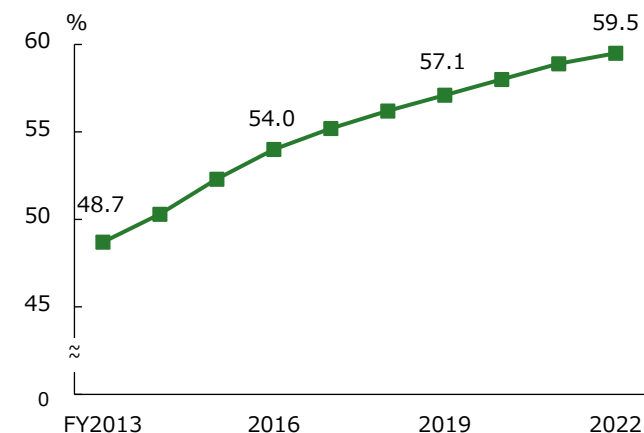
- The agricultural land area in 2023 decreased by 28,000 ha from the previous year to 4.30 million ha. The aggregate planted area of crop also declined, with the 2022 utilization rate of cultivated land at 91.3%.
- As of the end of March 2022 there were 520,000 ha of unregistered inheritance farmland.
- The amount of agricultural land acquired by Japanese corporations in which foreign corporations have voting rights in 2022 was 0.1 ha.
- The total area of agricultural land transferred has remained stable in recent years. In 2021, it decreased by 6.7% compared to the previous year to 299,000 ha.
- Farmland Banks lease farmland dispersed and dislocated within the area and reallocate it to business farmers in a cohesive manner, thereby consolidating and intensifying farmland.
- In FY 2022 farmland accumulation ratio for business farmers rose by 0.6 percentage points from the previous year to 59.5%.
- In cases where farmland banks consolidate dispersed agricultural land for lease, MAFF implements support measures such as infrastructure development that does not impose a cost burden on farmers, offering institutional accumulation cooperation grants for regional efforts to consolidate agricultural land, and reducing fixed property taxes for land providers.

Agricultural land area



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

Business farmers' share of total farmland



Source: Prepared by MAFF



## Promoting the consolidation and expansion of farmland parcels, the conversion of paddy fields into upland fields and multipurpose paddy fields, and greater efficiency and sophistication in the maintenance and management of agricultural irrigation facilities

- For agricultural transformation to a Growth Industry, The improvement of the agricultural production base is implemented. As of the end of March 2022, 11.9% of paddy fields had been expanded into large partitions of 50a or more, 47.3% had been upgraded to multipurpose paddy fields, and irrigation facilities had covered 25.2% of upland fields.
- In order to encourage greater 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. Efforts are also promoted to improve infrastructure that contributes to the introduction of smart agricultural technologies such as information and communications technology and the consolidation and expansion of farmland parcels, as well as achieving labor-saving, conserving energy, consolidation and reorganization of agricultural irrigation facilities.
- As of the end of March 2022, the number of facilities that have exceeded their standard durable years was 57.5% for core facilities and the extensions was 45.9% for core water channels. Efforts are made to promote greater efficiency and sophistication in the maintenance and management of agricultural irrigation facilities, as well as the extension of their service life.

### Case of expansion of farmland parcels



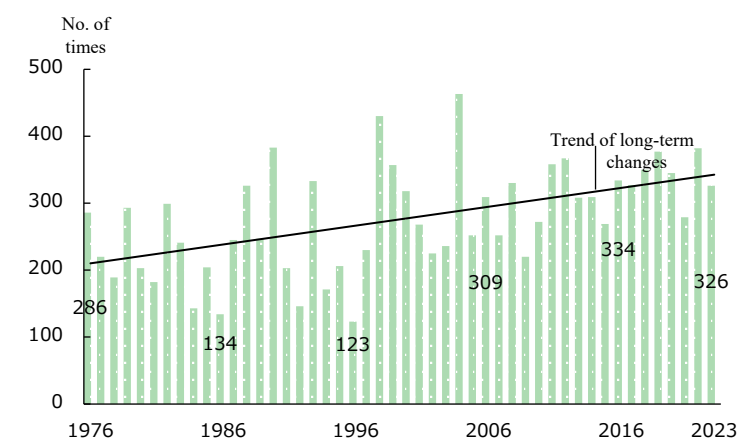
In the Suehiro district of Kazuno City, efforts are made to improve profitability by expanding the production of high-profit crops while also improving infrastructure and introducing smart agriculture (Akita Prefecture).

Source: Akita Prefecture

## Promoting disaster prevention and mitigation measures to enhance the resilience of agriculture and rural areas

- In recent years, the number of heavy rains with precipitation exceeding 50 mm per hour has been increasing and intensifying flood damage. In addition, the area expected to be affected by a Nankai Trough earthquake includes 30% of the nation's core irrigation facilities.
- In addition to efforts on River Basin Disaster Resilience and Sustainability by All implemented in response to the increasing frequency and intensity of natural disasters, efforts are made to demonstrate the stable functions of agricultural irrigation facilities, and to implement countermeasures to address deteriorated facilities, heavy rains and earthquakes, and disaster prevention and mitigation for agricultural reservoirs.

### Yearly occurrence of precipitation of 50 mm per hour or more

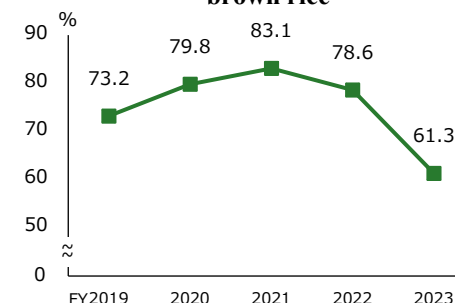


Source: Prepared by MAFF based on materials from the Japan Meteorological Agency

## Promoting the shift to varieties that are tolerant to high temperatures to address the decrease in the ratio of first-grade rice due to the impact of high temperatures, etc.

- The ratio of first-grade rice for the 2023 crop was 61.3%, lower than a typical year, due to the occurrence of white immature grains in Hokuriku and other areas.
- The decline in the yields and income from agricultural products, due to the impact of high temperatures and other factors, is addressed through agricultural mutual relief and revenue insurance for those covered by agricultural insurance. In the case of rice crop mutual relief, when widespread impact is observed due to problems caused by high temperatures, special provisions are applied to NOSAI Niigata (Agricultural Mutual Relief Association of Niigata Prefecture), which conducts damage assessments that take such impact into consideration.
- In addition to encouraging farmers to take up agricultural insurance coverage, support is provided with a view to shifting to cultivation systems that are adapted to high-temperature environments, such as by introducing machinery and conducting demonstrations toward the adoption of cultivation techniques and varieties that are tolerant of high temperatures and suited to the actual situation in the region and the type of crop.

Percentage of first-grade rice in lowland non-glutinous brown rice



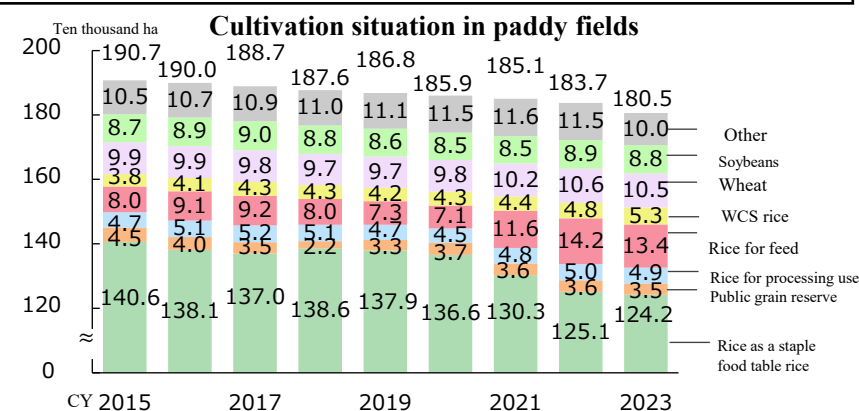
Source: Prepared by MAFF

Note: 1) Figures for each harvest year before the 2022 harvest are the final confirmed values as of the end of October the following year.

2) Figures for the 2023 harvest are figures as of the end of December of the current year.

## Realizing crop diversion tailored to demand even in CY 2023 rice production

- To promote production and sale that is tailored to demand, efforts are made to promote stable transactions through prior contracts or multiple-year contracts that are signed between production areas/producers and users, and to share information about inventory and prices.
- In addition to supporting crop diversion, support is provided to producers that are engaged in the low-cost production of rice for new market development, for processing use, and for rice for flour, the establishment of highly profitable crops through farmland conversion, and other efforts in connection with users.
- Grants paid directly for the use of paddy fields is a measure aimed at supporting crop diversion from rice as a staple food table rice, for which demand is falling, to wheat and soybeans, for which there is strong domestic demand. Grant eligibility is based on the premise of using paddy fields with flood mitigation function.
- To expand demand for rice flour, etc., support is provided for new product development and other relevant measures.



Source: Prepared by MAFF

Note: 1) The area of cultivation for rice as a staple food table rice is based on MAFF "Statistics on Cultivated Area and Planted Area."

2) "Other" refers to the area of cultivation for rice for flour, rice for new market development, feed and forage crops, buckwheat, and rape seed.

3) Areas of cultivation for rice for processing use, rice for feed, WCS rice, rice for flour, and rice for new market development are certified areas in project plans.

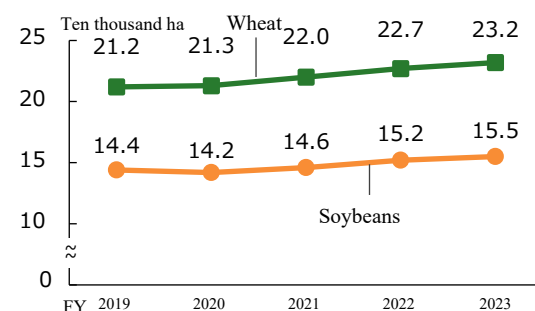
4) Areas of cultivation for wheat, soybeans, feed and forage crops, buckwheat, and rape seed are areas surveyed by the Regional Agricultural Administration Office, etc., through inquiries to the Prefectural Agriculture Revitalization Council, etc. (only for core crops).

5) Areas of cultivation for public grain reserves are areas identified by the Regional Agriculture Revitalization Council.

## Promoting the conversion of upland field crops such as wheat and soybeans, which have growing domestic demand, to primary crops, and strengthening production systems for horticultural crops

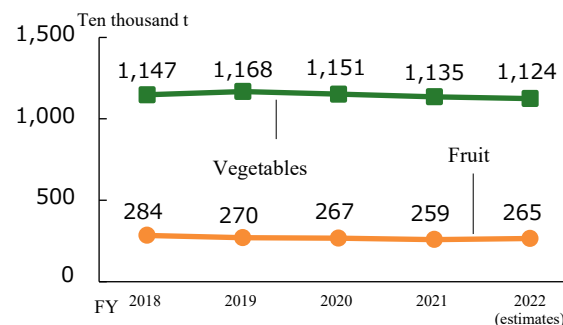
- Efforts are being promoted to boost production systems at production areas and enhance the efficiency of production by supporting the development of crop aggregation and introduction of farming technologies.
- To promote the conversion of upland field crops such as wheat and soybeans, which have growing domestic demand, to primary crops, support is provided for initiatives toward converting paddy fields to upland fields and developing production areas for upland field crops.
- To further strengthen production systems for processed/commercial-use vegetables and promote the switch from imported vegetables to domestic products, support is provided for the introduction of integrated mechanization systems in new horticultural production areas, as well as the development of new production and distribution systems and adoption of crop stabilization techniques.
- To strengthen the production base for high-quality fruits, efforts including the switch to labor-saving orchard system, introduction of tree training systems for saving labor, improving labor productivity through the new planting/replanting of superior crops and varieties, and securing farmers and labor force are made.
- In response to the import suspension of pear and apple pollen from China due to the confirmation of an outbreak and spread of fire blight in China, emergency support is provided through efforts in production areas for the stable production and supply of pollen, switching to domestically produced pollen, etc.
- In the production of sweet potatoes in CY2023, measures were taken to suppress the occurrence of *Diaporthe destruens* (sweet potato foot rot).

Area of wheat and soybeans crops



Source: "Crop Statistics" prepared by MAFF

Vegetable and fruit production volume



Source: "Food Balance Sheet" prepared by MAFF



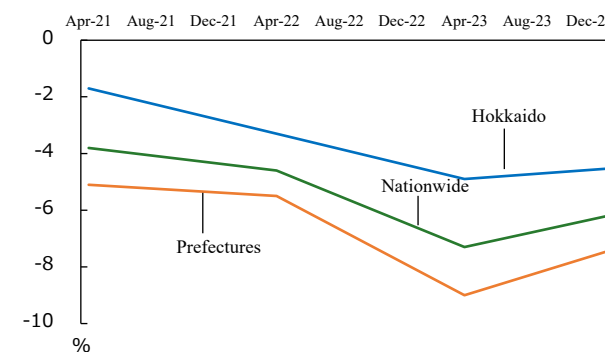
A farmer cultivating citrus fruits

\*Photo: MAFF Web magazine "aff," January 2023 issue

## Supporting efforts to improve dairy farming

- Dairy farming is in a difficult situation due to rising production costs of feed, and other factors.
- MAFF is working to mitigate the impact of persistently high feed prices on producers in dairy farming, such as through compound feed prices stabilization system and financial support.
- Between FY2022 and 2023, producers' associations worked to control raw milk production and increase milk prices, while at the same time promote reducing the inventory of skim milk powder and expanding consumption.
- Partially due to the effects of these initiatives, the number of farming households contracted by designated milk producer organization remained at a high level even as the rate of decline slowed gradually from August 2023.
- The Council for Developing an Environment for Fair Price Formation in Livestock and Dairy Farming has been established. It conducts reviews on improving the environment to pass production costs onto prices with the understanding and support of the public at all levels, and published an interim report in June 2023.

**Rate of change in the number of farming households contracted by designated milk producer organizations (year-on-year comparison)**



Source: Prepared by MAFF based on the Japan Dairy Council's "Number of Contracted Households" (published in March 2024).

## Promoting efforts to improve the profitability of livestock farming

- Conditions in livestock and dairy farming are severe, with a decrease in farmer numbers as well as an aging farming population, and persistently high feed prices. In addition to addressing these issues, it is important to strengthen the production base in order to expand exports and meet domestic demand for livestock products.
- MAFF provides support for the adoption of machinery and development of the facilities needed to improve the profitability of livestock in the region.
- Since May 2022, in light of the significant drop in the prices of Japanese Black cattle, MAFF supports breeding operations through management stabilization measures and to update the quality of young breeding cows.
- In the face of weakening demand for Wagyu beef due to the rising cost of living, MAFF provided urgent support to develop new demand, expand domestic consumption, promote understanding and stimulate consumption among foreign tourists.
- To raise the level of animal welfare to the international standards, the Technical Guidelines for Management of Farm Animals, based on the World Organisation for Animal Health (WOAH) Codes, were published in July 2023.

### Case of labor-saving in cattle production for beef



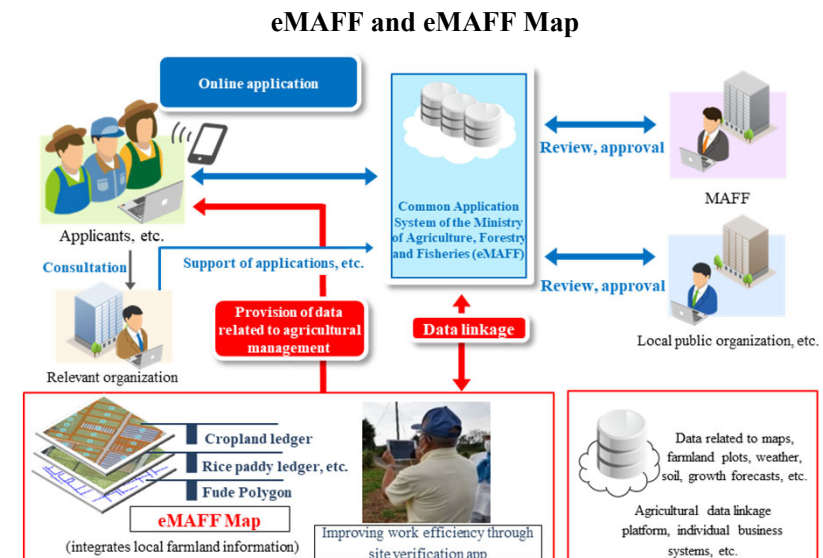
Ie Village is developing a large-scale integrated livestock facility that combines the functions of a calf entrustment facility and a breeding cow entrustment facility, and promoting the reduction of the burden on beef cattle producers (Okinawa Prefecture).

Source: Ie Village, Okinawa Prefecture

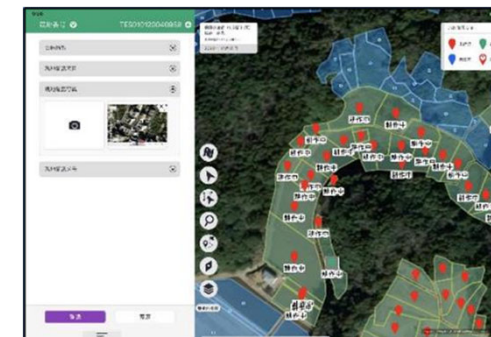


## Promoting the acceleration of digital transformation in agriculture

- The Experts' Meeting for the Revision of The Conception and Projects for DX of Agriculture has engaged in discussions on the future direction and progress of digitalization in the agricultural and food-related industries, and compiled "The Conception and Projects for DX of Agriculture 2.0" in February 2024 as a navigator for relevant parties in the agricultural and food-related industries as well as tech companies to realize DX in these industries.
- With regard to the Common Application System of MAFF (eMAFF), more than 3,300 administrative procedures under the jurisdiction of MAFF had been opened to be processed online by the end of FY2022. In addition, MAFF has been making full-fledged efforts, including assistance of municipalities in establishing schemes necessary for online examination of applications and promotion of online application while campaigning to increase awareness of eMAFF among local governments as well as farmers, forestry workers and fishermen.
- Use of the Common Geographic Information System of MAFF (eMAFF Map) has been promoted for the integration of data essential for agriculture from various systems related to farmland by using digital map technology, in order to radically streamline administrative operations relevant to farmland. The eMAFF Agricultural Land Navigator and the Site Verification App for eMAFF Map came into operation in FY2022.
- In order to make the data held well-managed and easier to use, and to promote data-driven administrative activities, MAFF formulated the Data Management, Data Utilization Basic Policy of MAFF in October 2023 and has been making efforts to expand open data provided and to improve ease of use.



Source: Prepared by MAFF

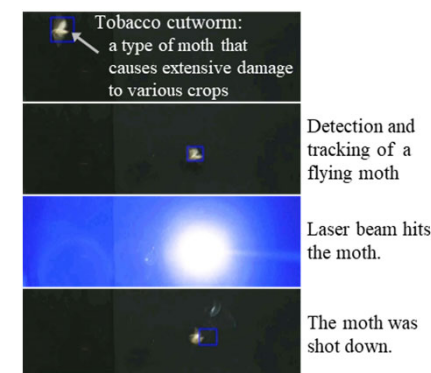


Example of the utilization of the site verification app  
Source: Prepared by MAFF

## Promoting innovation creation and technological development

- MAFF provides seamless support, from conceptualization to commercialization, for research and development conducted by start-ups and small- and medium-sized enterprises aiming to commercialize new technologies and services in the agriculture, forestry, fishery and food sectors.
- Goals are set for social issues that are difficult to address but expected to have a major impact if realized, and efforts are made in cooperation with the relevant ministries and agencies to implement challenging "moonshot" research and development projects aimed at achieving those goals.
- “Field for Knowledge Integration and Innovation (FKII)” is a council to promote open innovation in the agriculture, forestry, fishery and food sectors. In the council, to create innovation, efforts are made to promote research and development from the fundamental stages to practical application, and the social implementation and commercialization of the research result.
- The government leads the promotion of the realization of the MIDORI strategy, acceleration of the development of varieties that are suited to smart agricultural technologies, and research and development that takes into consideration the needs of agriculture, forestry and fishery operators.

### Physical pest control technology that uses laser beam



Source: Prepared by MAFF

## Promoting the protection and utilization of intellectual property toward expanding exports and improving income and regional vitality. New GI registration for 19 products

- In Japan, the awareness of the value of intellectual property in the agricultural sector and knowledge about the protection and utilization of such intellectual property is inadequate leading to missed profits that could potentially be gained. With a view to shifting to agriculture that also targets at overseas markets, it is important to appropriately protect and utilize intellectual property that is a source of the strengths of Japan's agricultural sector.
- Efforts are made to promote initiatives by breeders' rights management organizations to handle overseas registration applications and licenses on behalf of the holder of a breeder's right, and to provide advice and support in addition to responding to infringements such as by issuing warnings and injunctions.
- Based on Geographical Indication (GI) protection system, 19 products were newly registered for GI in Japan in FY2023, making a total of 145 registered products in Japan to date.

### Main GI products registered in Japan in FY2023



Arakawa Peach  
(Wakayama Prefecture)



Japanese Aomori Black Garlic  
(Aomori Prefecture)



Gushichan Piman  
(Okinawa Prefecture)



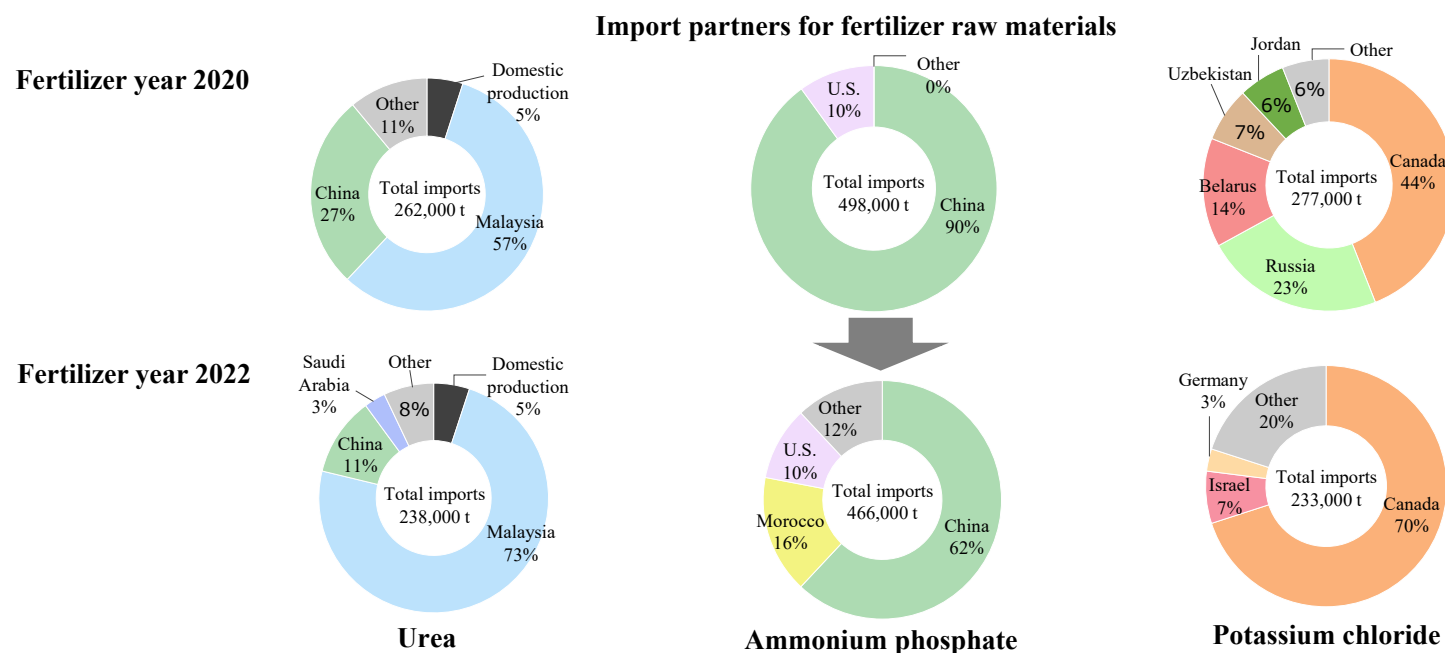
Ishiri/Ishiru (fish sauce)  
(Ishikawa Prefecture)

Source: Prepared by MAFF



## Promoting the stable procurement of fertilizer raw materials and the domestic production of fertilizers with a view to shift away from excessive reliance on the import of fertilizer raw materials

- The main raw materials used to produce fertilizers are unevenly distributed in specific regions. To shift away from excessive reliance on the import of fertilizer raw materials, the use of fertilizer such as compost and sewage sludge resources for domestic production of fertilizer is promoted. In addition, fertilizer is designated as a specified critical product under the Economic Security Promotion Act, and support is provided for the stockpiling of fertilizer raw materials by businesses working to ensure a stable supply of fertilizer.



Source: Prepared by MAFF

Note: Fertilizer year refers to the period from July of the current year to June of the following year. Total imports do not include domestic production volume.

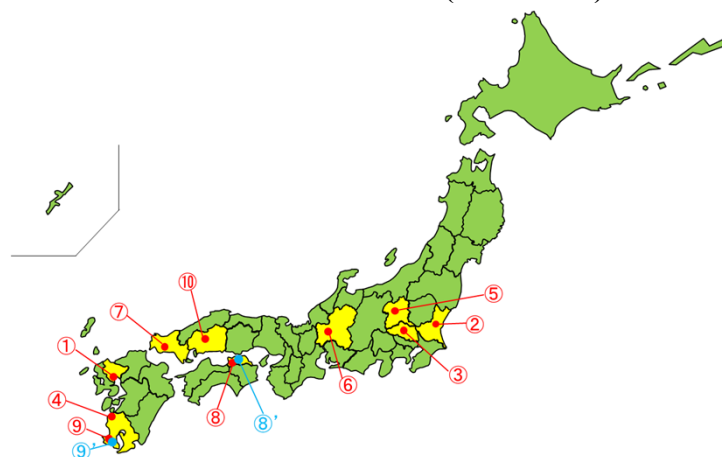
## Responding to persistently high compound feed prices and promoting the expansion of production and use of domestic feed

- The compound feed price stabilization system is a measure to mitigate the effect of compound feed prices increase on livestock farming. New measures were implemented in response to persistently high compound feed prices that have been rising over the long term.
- To expand the production and use of domestic feed, support is provided in various ways, such as collaboration between cultivation and livestock farming, expanding the scale of feed production organizations, community-wide efforts in hilly and mountainous areas, strengthening the supply capacity of domestic breeds at the National Livestock Breeding Center, building a wide-area distribution system, and improving facilities necessary for increasing feed production.

## Promoting the strengthening of biosecurity to prevent the outbreak and spread of highly pathogenic avian influenza and classical swine fever

- There were 84 cases of highly pathogenic avian influenza in 26 prefectures during the 2022 season, the highest number recorded to date, resulting in the culling of approximately 17.71 million birds. The impact has rippled out to soaring shell egg prices and shortage of supplies.
- In the 2023 season, the outbreak of highly pathogenic avian influenza was confirmed in Saga Prefecture in November 2023. Since then, 10 cases have been confirmed in nine prefectures as of the end of March 2024, and about 793,000 birds have been culled.
- In addition to strengthening measures to prevent the outbreak and spread of such diseases, subdivision of epidemiological unit of farms is also promoted.
- Since a case of classical swine fever (CSF) was confirmed in Japan in 2018 for the first time in 26 years, 90 outbreaks have been confirmed on farms of pigs or wild boars in 20 prefectures as of March 2024. In FY2023, CSF case was confirmed in the Kyushu region for the first time since 2018, which is a major pig farming and production area.
- To prevent the spread of CSF, concerted effort was made by the national government, local government, producers' associations, and farmers to strengthen biosecurity in farms, and to promote vaccinations, capturing and testing wild boars, among other measures.
- Alongside advancing efforts to strengthen border measures to address the heightened risk of introduction and spread of transboundary animal diseases such as African swine fever, measures are taken to develop a quarantine system, such as dealing with carcass management to prevent infection of wild boars. Measures are also taken to prevent the introduction and spread of plant pests.

Status of HPAI outbreak (2023 season)



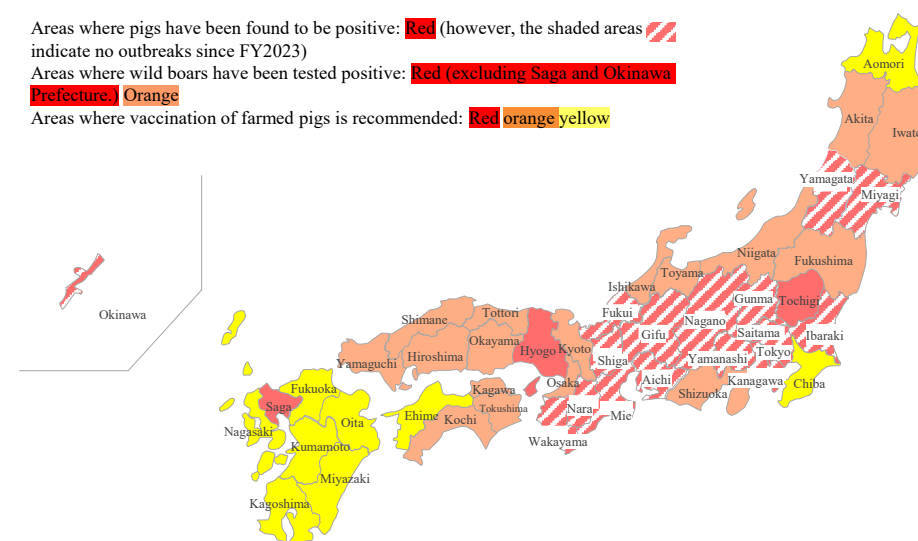
Source: Prepared by MAFF

Notes: 1) Status of outbreak as of the end of March 2024.

2) The numbers show the order of outbreaks. Red numbers show the number of affected poultry farms (premise/establishment) in the 2023 season. The blue numbers indicate the farms where the poultry was determined to be suspected animals and killed based on the poultry's movement from the affected farms of the red numbers.

Status of CSF outbreak

Areas where pigs have been found to be positive: **Red** (however, the shaded areas indicate no outbreaks since FY2023)  
 Areas where wild boars have been tested positive: **Red (excluding Saga and Okinawa)**  
**Prefecture: Orange**  
 Areas where vaccination of farmed pigs is recommended: **Red orange yellow**



Source: Prepared by MAFF

Note: Status of outbreak as of the end of March 2024.