

First Basic Plan for Food, Agriculture, and Rural Areas based on the Revised Basic Act (References)

May 2025

Ministry of Agriculture, Forestry and Fisheries

Structure of the New Basic Plan for Food, Agriculture, and Rural Areas

Introduction

- Arranging **issues** related to food security
- The Basic Plan **specifies the direction of measures** based on the principles of the revised Basic Act
- Setting **five years** for the plan period to **promote the structural transformation of agriculture intensively in the first five years**

Part 1. Basic Policy on Measures for Food, Agriculture, and Rural Areas

- Basic policies for each of the following themes: “**food supply in Japan,**” “**promotion of exports (enhancing the “earning power in the global market” by expanding exports, etc.)**” “**food security for every citizen and sustainable food systems,**” “**establishing environmentally harmonized food systems and fulfillment of multifunctionality,**” and “**. Promoting the development of rural areas**”

Part 2. Trends in Food Security

- Analyzing and organizing **trends in global food supply and demand, trade, etc.**, as well as **risks** and other factors that may affect them, which are closely linked to food security in Japan

Part 3: Targets for Ensuring Food Security, Including Food Self-Sufficiency

- **Targets** related to food self-sufficiency ratio, farmland area, number of business farmers, improvement of productivity, securing of production materials, stabilization of imports, securing of stockpiles, volume of exports, etc.
- Establishing **KPIs** and verifying them in addition to grasping the status of achievement of targets
- **Consistently reviewing measures through the PDCA cycle**

Part 4. Measures to be Implemented Comprehensively and Systematically for Food, Agriculture, and Rural Areas

I. Food supply in Japan

- **Domestic food supply**
(review of paddy field policy, land-extensive crops, feed crops, vegetables, fruit trees, fats and oils, livestock products, fishery products, flowers, and regional specialty crops)
- **Ensuring food self-sufficiency**
(transformation of agricultural structure by product, transformation to sustainable agricultural structure, securing of production base, productivity improvement, production materials)
- **Increase in added value**
(new business creation, intellectual property, and exports utilizing varieties and agricultural products)
- **Agricultural work safety, GAP, HACCP, and animal and plant quarantine**
- **Securing food supply in times of emergency** ○ **Stabilization of imports, international strategy**

II. Promotion of exports (enhancing the “earning power in the global market” by expanding exports, etc.)

- **Promotion of exports of agricultural, forestry, and fishery products and foods**
- **Overseas expansion of the food industry** ○ **Global expansion of plant varieties**
- **Expansion of food-related consumption by inbound tourist**

III. Food security for every citizen and sustainable food systems

- **Ensuring food access** ○ **Food industry** ○ **Formation of reasonable prices of food**
- **Ensuring food safety and consumer confidence**

IV. Establishing environmentally harmonized food systems and fulfillment of multifunctionality

- **Reducing the environmental burden of agricultural production activities and food industry/consumption**
- **Fulfillment of multifunctionality**

V. Promoting the Development of rural areas

- **Creating opportunities for diverse human resources to engage in rural areas**
- **Income improvement and creation of employment in rural areas (economic aspect)**
- **Improvement of conditions for people to continue living in rural areas (lifestyle aspect)**
- **Maintenance of joint regional activities** ○ **Development of hilly and mountainous areas**
- **Measures against damage by wildlife, development of urban agriculture, and dissemination of the appeal of rural areas**

VI. Fostering public understanding

- **Promotion of shokuiku (food and nutrition education)**
- **Protection/succession of food culture**
- **Fostering public understanding through the food industry**
- **Consumer behavior change**

VII. Responses to natural disasters

- **Restoration and reconstruction from the Great East Japan Earthquake, and the 2024 Noto Peninsula Earthquake and torrential rains**
- **Preparedness for natural disasters**
- **Restoration and reconstruction from natural disasters**

Part 5. Matters Necessary for Comprehensively and Systematically Promoting Measures for Food, Agriculture, and Rural Areas

- **Promotion of DX** ○ **Continuous understanding and utilization of statistical data** ○ **Cooperation among stakeholders in food systems**
- **Participation of a wide range of stakeholders and cooperation among relevant ministries and agencies** ○ **Implementation of measures in line with local conditions**
- **System for promoting effective and sustainable measures** ○ **Efficient and focused implementation of fiscal measures**

Future prospects based on the New Basic Plan for Food, Agriculture, and Rural Areas

- **Food, agriculture, and rural areas** in Japan are facing various challenges along with the **turbulent international situation**, such as frequent **abnormal weather events** and heightened **geopolitical risks**, and **changes in the domestic situation**, such as the **decrease and aging of the domestic population and farmers**.
- Under these circumstances, in order to realize **food security in normal times**, the **first five-year** initiatives based on this Basic Plan will be **extremely important**, and it is therefore **necessary to drastically change the agricultural structure** during this period.
- For this reason, the Basic Plan **analyzes the current situation** by item, **clarifies the issues**, and organizes **specific measures** to solve them.
In addition, with a view to **achieving the targets** set forth in the Basic Plan, it is planned to **set KPIs (Key Performance Indicators)** indicating the effectiveness of measures, **investigate and announce the status of achievement of the targets every year**, **verify KPIs** at the same time, and **consistently review measures** through **the PDCA cycle**.
- In order to **ensure the effectiveness** of the Basic Plan, it is **necessary to accurately grasp and analyze the actual conditions and needs** of each region and sector, and to **promote measures** through **the participation, mutual cooperation, and collaboration of a wide range of stakeholders and organizations related to the food systems**.

1. Situation surrounding the food supply

Stable food supply

- A stable supply of food to the people is maintained based on increase of domestic agricultural production, and at the same time secure stable imports and stockpiles of food.
- In recent years, there have been increasing **risks of destabilizing the global food supply and demand**, including an increase in food demand caused by the increase in the world population and the frequent occurrence of abnormal weather conditions, such as droughts and high temperatures accompanying climate change.
- In particular, Japan, which depends on specific countries and regions overseas for much of its food and production materials, is likely to be affected even more severely. In the event of a domestic food shortage, the lives of the people and the national economy will be greatly hindered. Therefore, in April 2025, the government established a **basic policy** for comprehensively and integrally implementing measures in times of emergency based on the “**Act on Countermeasures for Difficult Food Supply Situations**,” which was enacted in June 2024.

Increasing risks to global food security

Increased food demand, including an increase in the world population

Until now, the situation has been **handled through the following measures**:

- **Increase in yield**
- **Increase in harvested area** (development of forests, etc.)

However, **there is a limit to measures addressing a further increase.**

Meanwhile,

Diversification of factors that destabilize supply, and worsening impacts

Frequent occurrence of abnormal weather and severe damage

Global crop failure due to drought, high temperature, etc.

Increased risk of invasion and spread of livestock infectious diseases and plant pests

Impact of African swine fever, avian influenza, etc. on production and imports

Increased risk of outbreak of new infections

Impact of infectious diseases on logistics and supply chains in Japan and overseas

Heightened geopolitical risks

Restrictions and regulations on food and fertilizer trade resulting from political situations

Increased demand of grains, etc. for livestock and non-food products

Increasing demand for livestock and biofuels in emerging and developing countries

Intensified import competition

Risk of losing bids in times of tight supply and demand

(1) Initiatives in normal times

(i) Increase the domestic agricultural production

- Ensuring food self-sufficiency potential (securing business farmers, farmland accumulation and consolidation, etc.).
- Improvement of productivity (development and maintenance of agricultural production infrastructure, and development and extension of advanced technologies).
- Enhancement of added value, promotion of exports, etc.

(ii) Ensure stable imports

- Promotion of investment in supply chains that Japanese business operators are sourcing from import partner countries.
- Intergovernmental dialogue.
- Information sharing between the public and private sectors domestically, etc.

(iii) Promote comprehensive stockpiling

- Comprehensive identification of stockpiles in Japan by the public and private sectors, etc.

(2) Initiatives in the event of an emergency

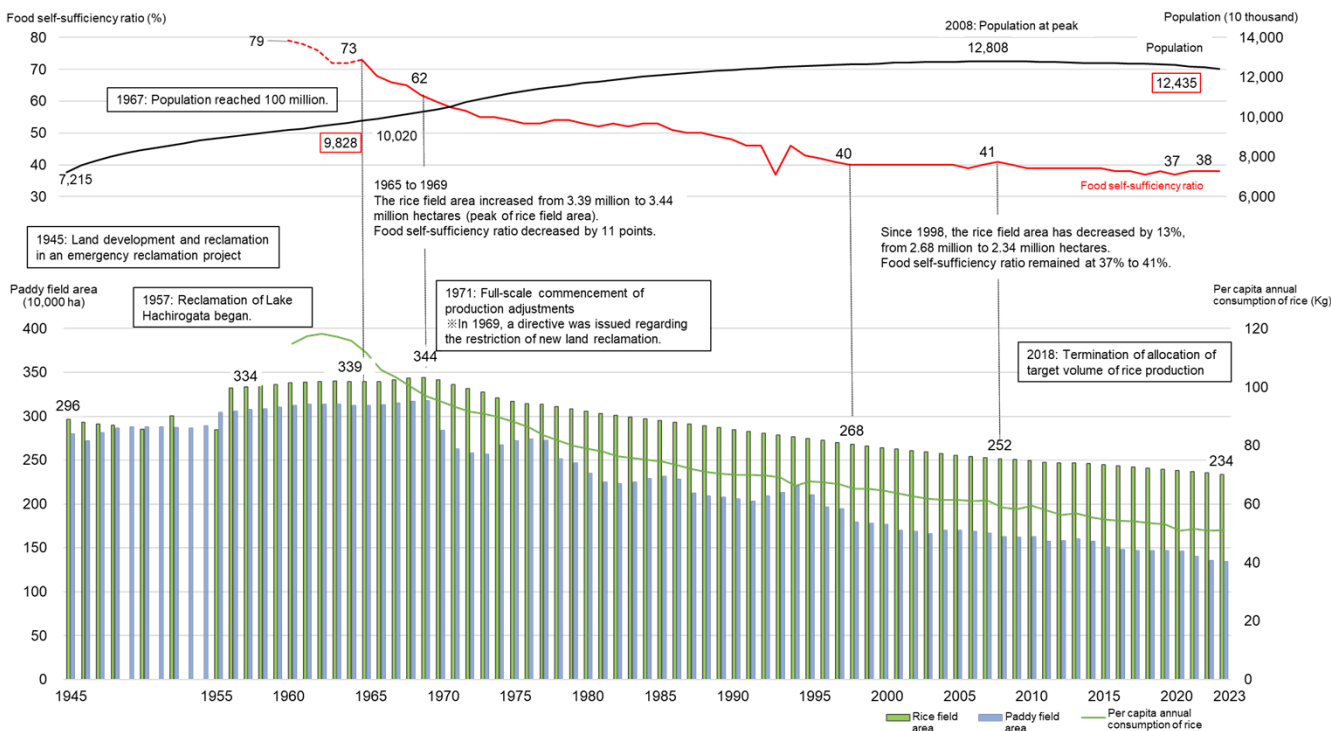
Measures to secure supply based on the Act on Countermeasures for Difficult Food Supply Situations

- Implementing comprehensive measures with the government in an integrated manner under the government response headquarters.
- Taking necessary measures in accordance with the seriousness corresponding to the severity of the situation to prevent the situation from increasing severity.
- Respecting the voluntary business activities and judgments of business operators, and taking measures such as coordinating the shipment or sale and promotion of imports only when it is difficult to resolve the situation.

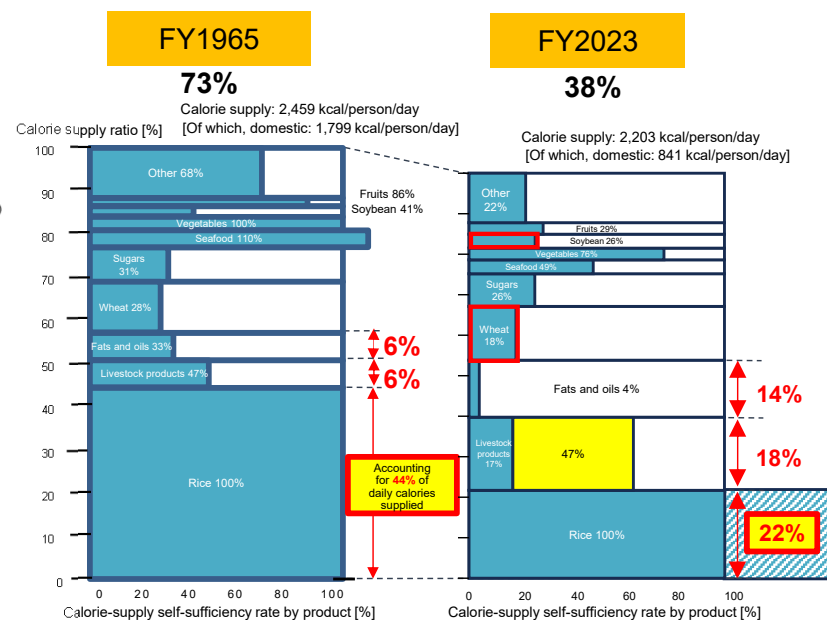
People, agricultural land, and food self-sufficiency ratio (1)

- In FY1965, 60 years ago, the food self-sufficiency ratio (calorie basis) was 73%, and the population at that time was about 98 million. After that, the farmland area decreased while the population increased, resulting in a decrease in the food self-sufficiency ratio, but after the population growth slowed down in the early Heisei era, the food self-sufficiency ratio remained around 40%.
- The ratio of rice to calories supplied per capita per day, which constitutes the food self-sufficiency ratio (calorie basis), decreased by half from FY1965, while the ratios of wheat and soybeans have not changed much during this period. For this reason, to improve the food self-sufficiency ratio, it is important to increase the rate of self-sufficiency of wheat and soybeans by switching to domestically produced products.

Long-term changes in population, rice field area, and food self-sufficiency ratio (from 1945) as well as status of rice supply and demand (from 1960)



Changes in food consumption structure and food self-sufficiency ratio (calorie basis)



Source: Population, rice /paddy field area, and food self-sufficiency ratio are based on Ministry of Internal Affairs and Communications "Population Estimates", MAFF "Food Balance Sheet" and "Statistics on Cultivated Area and Planted Area."

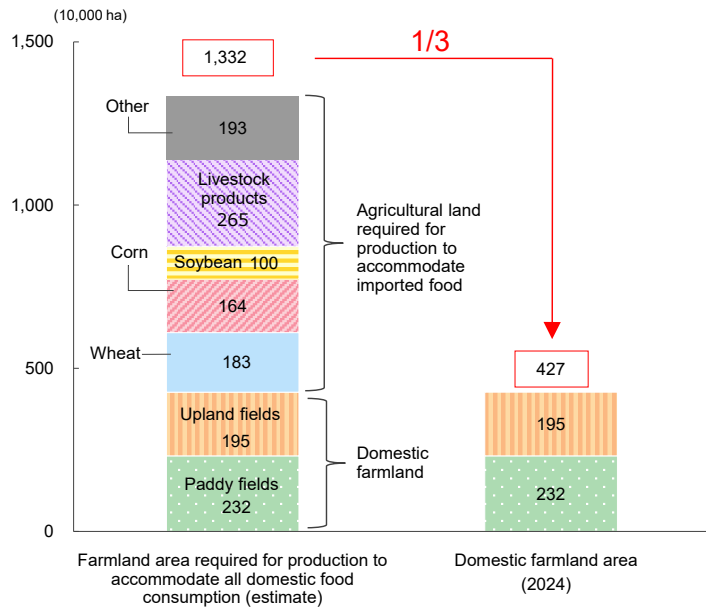
Note:1) Regarding the food self-sufficiency ratio, the rate that includes feed self-sufficiency has been calculated since 1965 and does not connect with the period from 1960 to 1964.

2) Rice field area, statistics from 1956 onward are based on sample surveys and thus differ from earlier survey methods, resulting in non-continuous values. Furthermore, no surveys or estimates were conducted in 1949, 1951, 1953, or 1954.

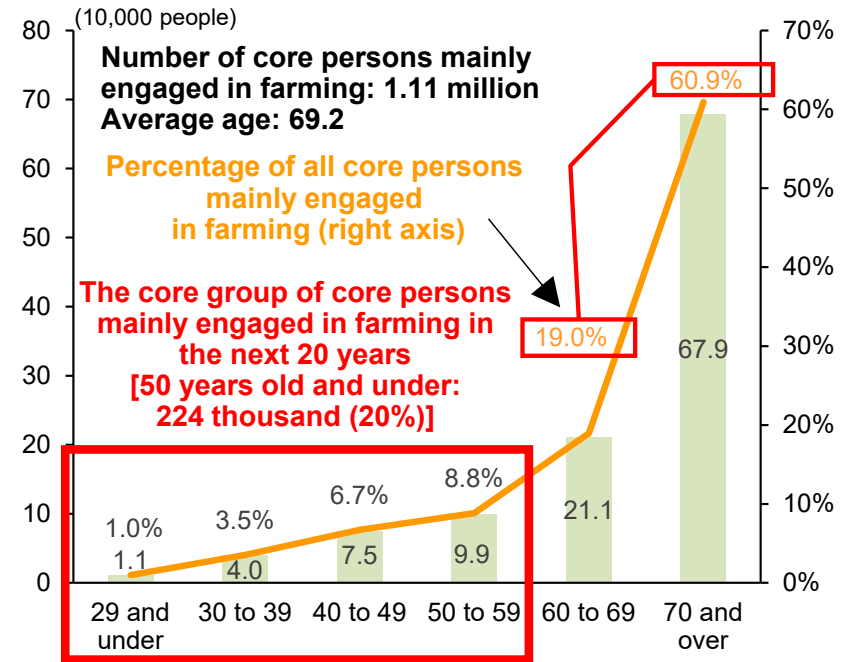
People, agricultural land, and food self-sufficiency ratio (2)

- In Japan, **agricultural land** accounts for only **1/3 of the area needed** to cover the total domestic demand.
- In addition, as the average age of **core persons mainly engaged in farming** is **69.2 years old**, a rapid decline is expected due to the retirement of the elderly.

○ Farmland area required to produce all food consumed domestically (estimate)



○ Age structure and the number of core persons mainly engaged in farming (2024)



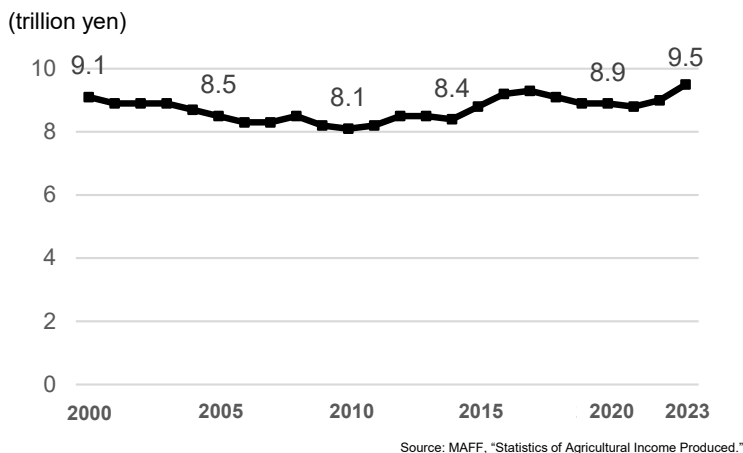
Source: Prepared based on MAFF, "Food Balance Sheet" and "Statistics on Cultivated Area and Planted Area."
 Note: 1) Based on the premise of one crop per year, the farmland area by each imported item is the figure from 2020 to 2022.
 2) "Other" includes rapeseed, barley, etc.
 3) Livestock products are calculated by converting the quantity of pasture, corn, etc. necessary for the production of imported livestock products into areas by using the yield per unit area of a relevant importing country.

Source: MAFF, "Survey on Movement of Agricultural Structure."
 Note: "Core persons mainly engaged in farming" refer to household members aged 15 or above who are mainly engaged in self-employed farming as their regular (not including employees).

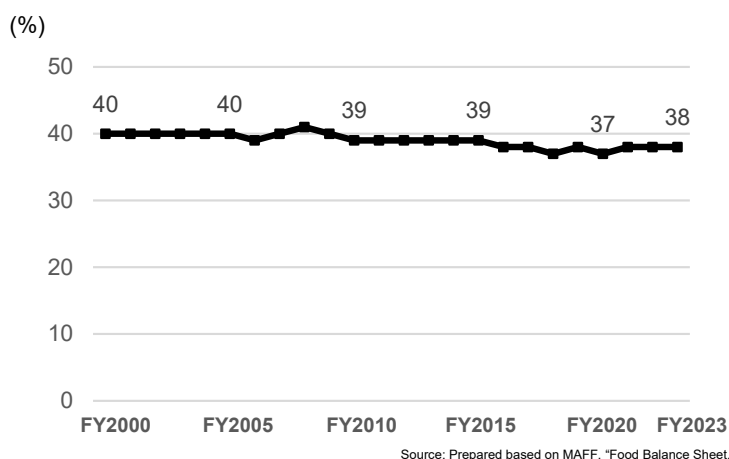
People, agricultural land, and food self-sufficiency ratio (3)

- The **total agricultural output** in Japan has **remained at around 9 trillion yen** in recent years, and its **food self-sufficiency ratio** has been almost **flat**. In addition, the **farmland area decreased by about 12%** from 4.83 million (2000) to 4.27 million hectares (2024).
- Meanwhile, the **number of agriculture management entities halved** in 20 years. Under these circumstances, the numbers of **group management entities including corporations** are **increasing**.
These business farmers including corporations are expanding their operation scale as **successors of farmland of retired farmers**, contributing to local agricultural production and farmland maintenance.

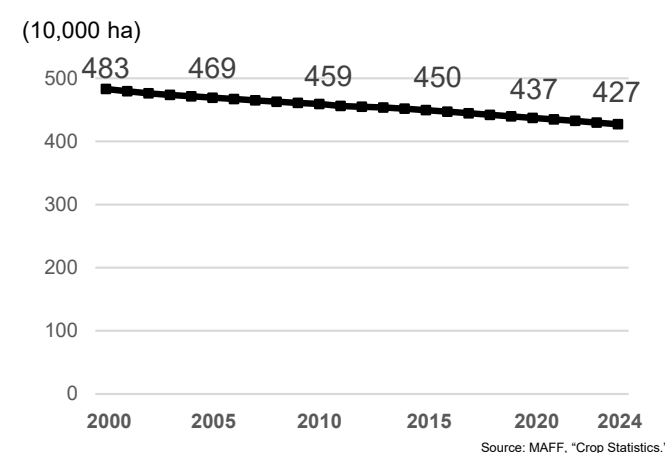
Changes in total agricultural output, etc.



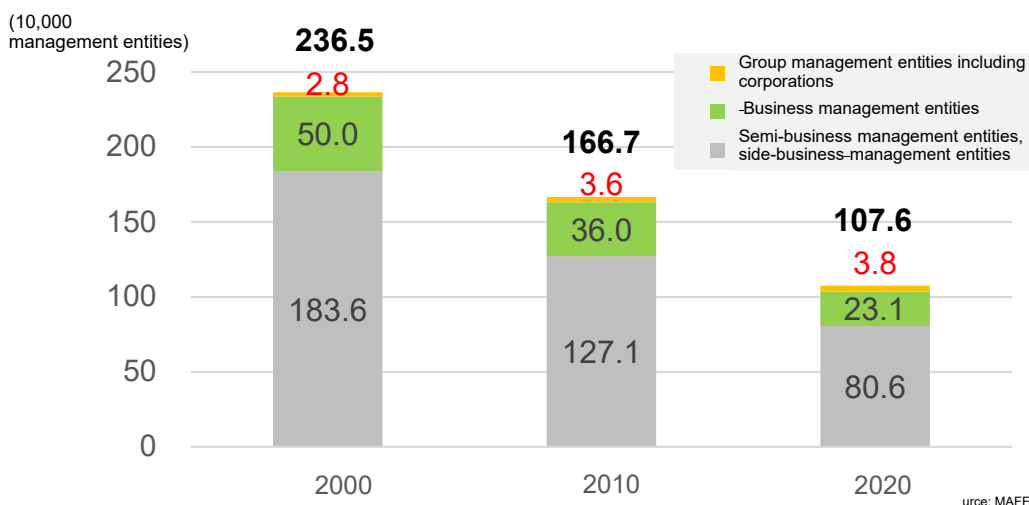
Changes in food self-sufficiency ratio



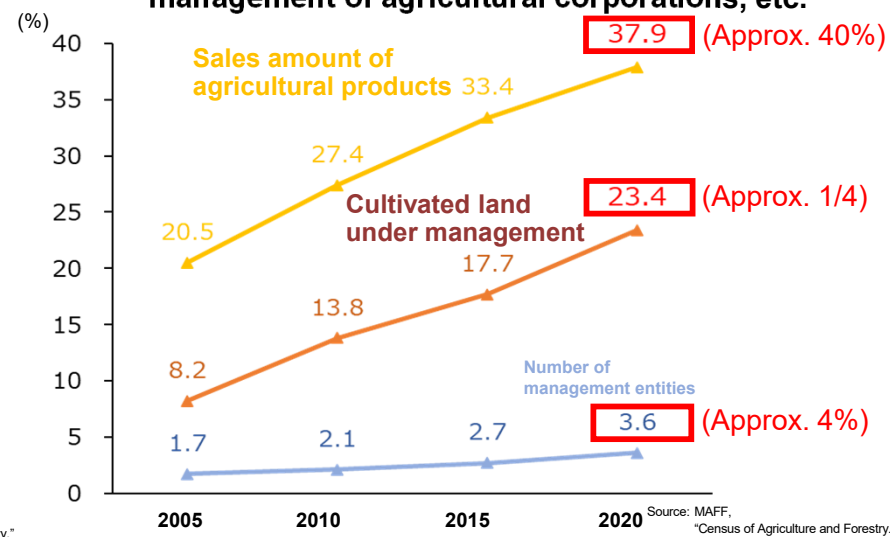
Changes in farmland area



Trends in the number of agriculture management entities



Share of sales amount and cultivated land under management of agricultural corporations, etc.



Issues related to stable food supply

- With the number of agriculture management entities expected to halve in 10 years, there is a **risk that a lot of farmland will be unused if there is no expansion of operation scale.**
- For this reason, in order to maintain the production volume, it is extremely important to **take measures to expand the operation scale by drastically improving productivity.**
- In terms of the share of agricultural production by business and side-business management entities, the proportion of **semi-business and side-business management entities, the majority of which are aged 60 and over**, is high for **rice and fruit trees**. With the decrease in the number of agriculture management entities for all items, this is expected to have a **large impact in the future**, especially for rice and fruit trees. As the actual situation and issues vary with each item, it is necessary to respond accordingly.

○ Trends in the number of agriculture management entities and operating area (estimate for main crop farming)

- The number of agriculture management entities is expected to halve between 2020 and 2030.
- In the absence of an expansion in the operation size, about 30% of farmland will be unused as compared to 2020.

	2020	2030 (trend)
Total number of management entities	1.08 million	540,000
Of which,		
Group management entities including corporations	40,000	50,000
Business management entities	230,000	110,000
Semi-business management entities, side-business management entities	810,000	380,000

Source: Calculated by the MAFF based on the "Census of Agriculture and Forestry," "Survey on Movement of Agricultural Structure," and various statistics on areas.

(Business management entities)
The individual management entity whose main income is from farming (at least 50% of the household income is agricultural income) with one or more household member younger than 65 who were engaged in farming operated by the household for at least 60 days during the one-year period prior to the survey date.

(Semi-business management entities)
The individual management entity whose main income is from non-farming sources (less than 50% of the household income is agricultural income) with one or more household member younger than 65 who were engaged in farming operated by the household for at least 60 days during the one-year period prior to the survey date.

(Side-business management entities)
The individual management entity with no household members younger than 65 who were engaged in farming operated by the household for at least 60 days during the one-year period prior to the survey date.

(Reference) Estimation method for the prospect of the number of management entities.

Group management entities including corporations

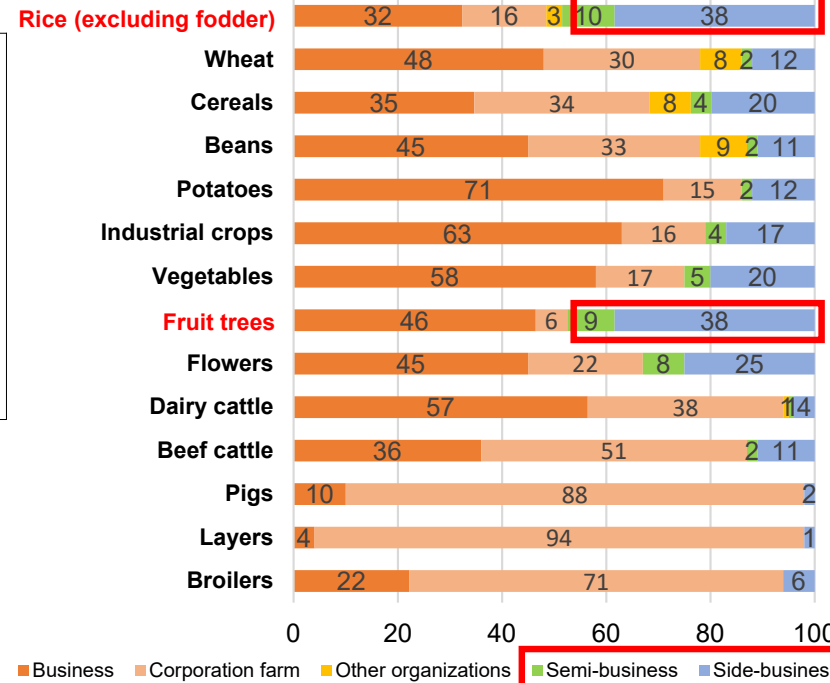
Estimated based on the rate of increase from the values of the 2005 to 2020 Census of Agriculture and Forestry.

Business management entities, semi-business management entities, side-business management entities

Estimated based on the recent rate of decline of business management entities (annual rate of decline of 7.4% between 2021 and 2023) and the movement of core persons mainly engaged in farming.

○ Share of agricultural production by business and side-business management entities (2020)

(based on planted area and number of animals raised)



Share of business farmers (main business + groups)		Planted area
2020	Comparison with 2000	2020
52%	+15%	1.29 million ha
86%	+16%	270,000 ha
76%	+15%	60,000 ha
87%	+17%	170,000 ha
86%	Same levels	80,000 ha
79%		120,000 ha
75%		260,000 ha
52%		130,000 ha
67%		20,000 ha
95%		-
87%		-
98%		-
99%		-
93%		-

- Percentage of core persons mainly engaged in farming aged 60 and over in semi-business management entities (mainly earning non-agricultural income with at least one family member under the age of 65 working for 60 days or more a year): **72.2%**
- Percentage of core persons mainly engaged in farming aged 60 and over in side-business management entities (no family member under the age of 65 working for 60 days or more a year): **98.6%**

Source: MAFF, "Census of Agriculture and Forestry."

Note: In terms of figures for market share by business farm, semi-business farm, etc., the sum of the items may not be equal to 100% due to rounding, or may not correspond with "market share of business farm + groups" in the right column of the graph. The market share by business farm and side-business farm in 2000 is the figure for commercial farm households and includes a single-household corporation (a farm household that is incorporated).

Decrease in the number of agriculture management entities and status of new farmers (land-extensive crops), which vary by item

- As for the number of land-extensive crops, **the number of management entities will decrease by half to 270,000 in 2030**. Estimates without taking into account the expansion of the operation scale suggest that **farmland use will decrease by about 700,000 hectares**.
- In addition to the fact that new farmers have few profit opportunities as they grow only one crop per year, their profits per area are low, and it is **necessary to manage a considerable scale (at least 15 to 20 hectares)** to raise a certain level of income. Therefore, **new entries from outside are slow**.

Land-extensive crops (rice, wheat, soybeans, etc.)

○ Trends in the number of agriculture management entities and operating area

○ Number of management entities (10 thousand management entities)

	2020	2030 (estimate)
Group management entities including corporations	1.6	2.1
Business management entities	8.2	3.6
Semi-business management entities, side-business management entities	50	22
Total	60	27

The number of management entities halved

○ Operating area (10,000 ha)

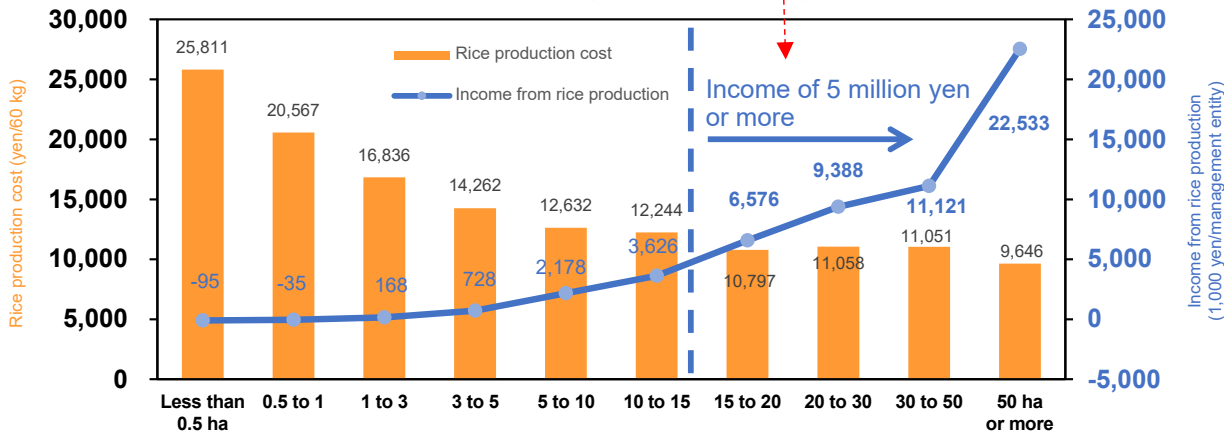
	2020	2030 (estimate)
Group management entities including corporations	52	66
Business management entities	84	40
Semi-business management entities, side-business management entities	80	36
Total	216	142

Risk of reducing the use of approximately 700,000 hectares of farmland

(Reference) As for the operating area in 2030 (estimate), calculated by multiplying the "number of management entities in 2030" by the "operating area per management entity in 2020," based on the assumption that the operation size will not expand through 2030.

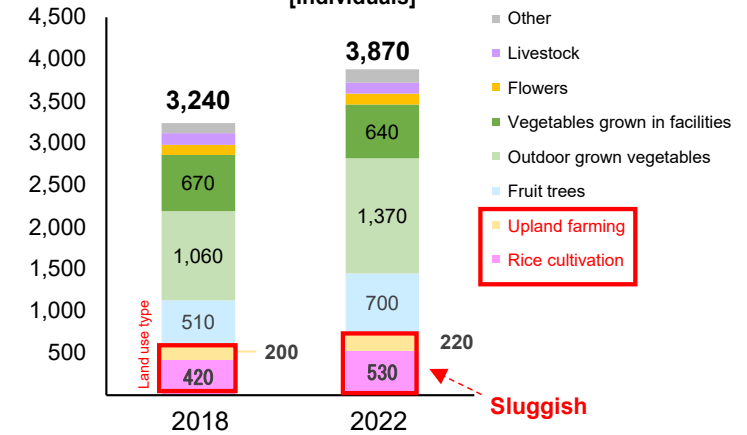
○ Rice production cost and income (individual management entities)

15 to 20 hectares are needed to raise agricultural income by 5 million yen through individual management



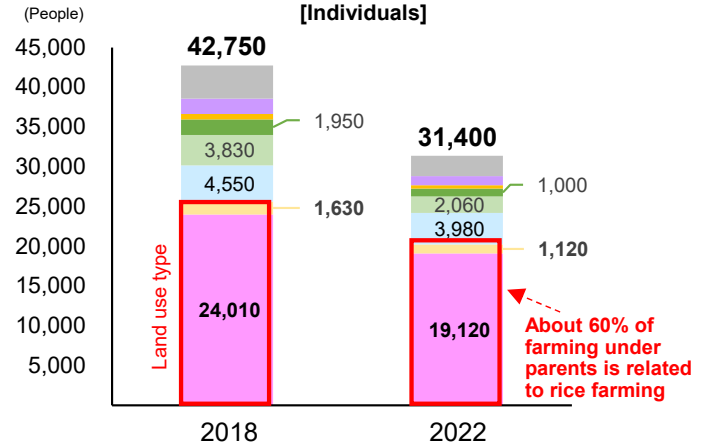
○ Status of new farmers

○ Those who procured land and funds independently [Individuals]



Sluggish

○ New self-employed farmers (farming under parents) [Individuals]



About 60% of farming under parents is related to rice farming

Source: MAFF, "Production Cost Statistics of Agricultural Products (produce in 2022)" (reclassified).

Note: Figures are for individual management entities, excluding those with 50 hectares or more of cultivated land under management and with a ratio of "rent and charge" to production cost counted in capital interest/land rent (all count in production cost) per 10 acres of 50% or more.

Reference: Rice production cost = Production cost counted in capital interest/land rent (all count in production cost)
 Income from rice production = Income per 10 a × income from planted area of paddy rice per management entity = Gross income - (total production cost - (labor cost of family members + equity capital interest + rent for owned land))

* Gross income includes subsidies for farming income stabilization measures.

Source: MAFF, "Survey on Newcomers in Agriculture" (new entries) for those who procured land and funds independently.

As for new self-employed farmers, reclassified using the "Survey on Newcomers in Agriculture" using the MAFF, "2015 Census of Agriculture and Forestry" and "2020 Census of Agriculture and Forestry."

Note 1): Figures for new self-employed farmers are compiled by sector with the highest sales value, and for new entries, compiled by major sector at the time of entry.

Note 2): Due to rounding, some totals may not correspond with the sum of the separate figures.

Decrease in the number of agriculture management entities and status of new farmers (fruit trees), which vary by item

- In the case of fruit trees, the number of management entities will **decrease or remain unchanged for all management entities in 2030**. Estimates without taking into account the expansion of the operation scale suggest that **the operating area may be reduced by half**.
- **The number of new farmers is small** because of the long, unprofitable period and the need for financial resources to overcome it. In addition to **seasonal peak labor periods, sloping land and other poor geographical conditions** make it difficult to expand the scale and improve productivity under the current conditions. In addition, the development and extension of **smart agricultural technologies** have been slow.

Fruit trees

○ Trends in the number of agriculture management entities and operating area

○ Number of management entities (10 thousand management entities)

○ Operating area (10,000 ha)

	2020	2030 (estimate)
Group management entities including corporations	0.2	0.2
Business management entities	3.9	1.9
Semi-business management entities, side-business management entities	8.8	4.3
Total	13	6.5

Decrease or remain unchanged for all management entity types

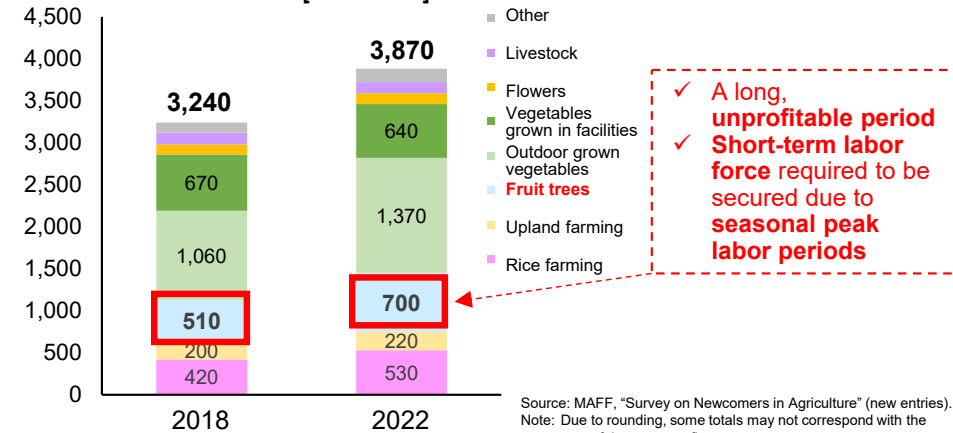
	2020	2030 (estimate)
Group management entities including corporations	1.2	1.5
Business management entities	9.3	4.7
Semi-business management entities, side-business management entities	10	4.9
Total	20	11

Decrease of just under 50%

(Reference) As for the operating area in 2030 (estimate), calculated by multiplying the "number of management entities in 2030" by the "operating area per management entity in 2020," based on the assumption that the operation size will not expand through 2030.

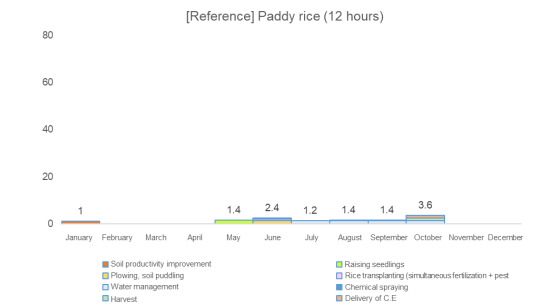
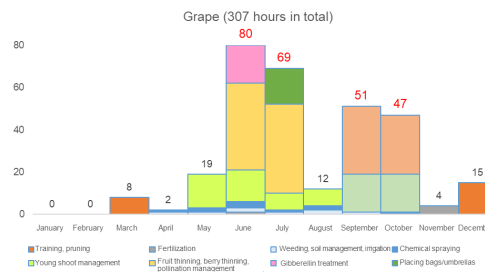
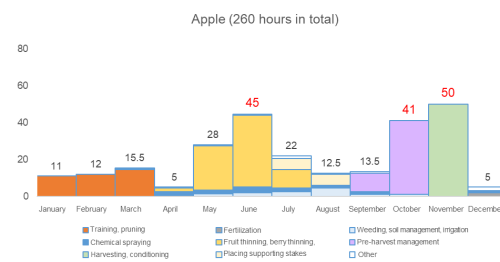
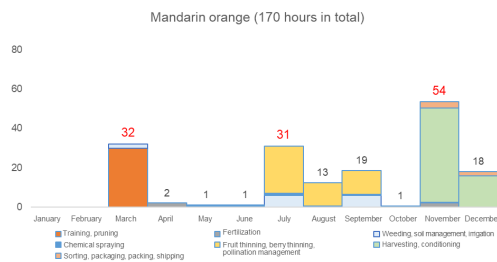
○ Status of new farmers

Those who procured land and funds independently [Individuals]



Source: MAFF, "Survey on Newcomers in Agriculture" (new entries). Note: Due to rounding, some totals may not correspond with the sum of the separate figures.

○ Changes in annual working hours by item (working hours per 10 a)



Source: Organized by the Fruits and Japanese Tea Division, Crop Production Bureau, MAFF, based on surveys in each production area.

2. Food supply in Japan

Food self-sufficiency ratio

- The **food self-sufficiency ratio** is an indicator of the ratio of domestic food production to domestic consumption. It is calculated using **domestic production** as the numerator and **domestic consumption** as the denominator.
- The Basic Plan sets a **new food self-sufficiency ratio “on a calorie intake basis,”** which is an indicator of how much of the calorie intake necessary for citizens’ daily lives in normal times is supplied by domestic products.

○ Food self-sufficiency ratio target (FY2023 to FY2030)

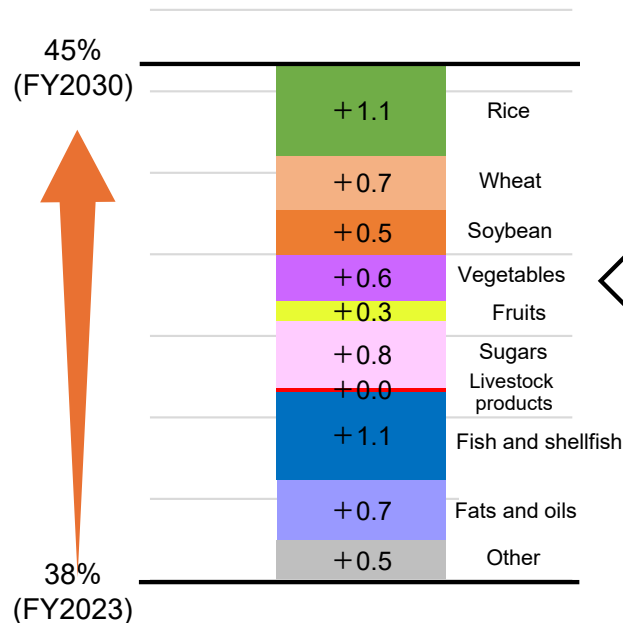
- Food self-sufficiency ratio on a calorie supply basis = $\frac{\text{Domestic calorie supply}}{\text{Calories for domestic consumption}}$: 38% → 45%
- Food self-sufficiency ratio on a production value basis = $\frac{\text{Domestic production value of food}}{\text{Food supply value for domestic consumption}}$: 61% → 69%
- Food self-sufficiency ratio on a calorie intake basis = $\frac{\text{Domestic calorie supply}}{\text{Calorie intake required for daily lives of citizens in normal times (1,850 kcal)}}$: 45% → 53%

Supplies for domestic consumption in the target year are set in prospect of consumption and distribution measures for each item. As for the domestic production volume in the target year, the feasible production volume is set in prospect of export volume in line with the demand as well as measures taken to address issues of each item.

Calculated the food self-sufficiency ratio on a calorie intake basis by using the denominator as “the calorie intake necessary for daily lives in normal times (1,850 kcal*).”

* The value of 1,850 kcal was set by referring to the following: (1) the basal metabolic rate of Japanese adult males is between 1,300 kcal and 1,600 kcal, and said value should be higher than this; and (2) the lowest average daily calorie intake per person (National Health and Nutrition Survey (the Ministry of Health, Labour and Welfare)) in normal times is 1,849 kcal (2010).

○ Contribution of each item to the target of food self-sufficiency ratio on a calorie supply basis



- In this Basic Plan, measures to be taken are arranged for issues on the consumption, production, import, processing, and distribution by each item, with a view to achieving the goal of the food self-sufficiency ratio.
- Based on this, for each item, KPIs are set for feasible supplies for domestic consumption, production volume, export volume, yield per unit area, and planted area.

Improvement of productivity

- With the number of agriculture management entities expected to halve in 10 years, a **drastic improve of productivity** is needed to maintain the production volume.
- For this reason, the following initiatives will be promoted:
 - **Further evolving the regional plans**, and facilitating **farmland consolidation** and **production area creation** by adding the perspective of “to whom to consolidate farmland” and “which products are to be made for each production area.”
 - Ensuring good farming conditions through **infrastructure development**, such as **the expansion of farmland partitions**
 - Supporting the activities of **service providers** to promote the **development and introduction of smart agricultural technologies** and the introduction of technologies through shared use of machines, etc.
 - **Developing and adopting cultivars** conducive to **high yield** and **high temperature tolerance**.

By promoting the above initiatives, it is necessary to **reduce production costs**, thereby **improving labor productivity** (output per management entity) and **land productivity** (output per unit area).

Review of paddy field policy, etc.

○ Review of paddy field policy

The **paddy field policy** will be **fundamentally** reviewed from **FY2027** in the following directions.

Grants paid directly for the use of paddy fields, which provides support for paddy fields, will be converted to support for the productivity improvement of each crop as follows. To this end, **“a requirement for filling the field with water once every 5 years” does not apply** from FY2027 onward.

*As a response in 2025 and 2026 to the current Grants paid directly for the use of paddy fields, if initiatives are taken to avoid replant failure in rice paddies where rice can be planted, they will be eligible for the subsidy even if water is not filled therein.

With regard to rice, strongly promoting the measures to increase productivity, such as an **increase in domestic and overseas demand, expansion of farmland partitions, utilization of smart technologies, and cultivar improvement**. Providing support for **rice for developing new markets and rice for flour**, etc. with the aim of expanding rice demand, including exports.

In order to **improve the productivity of domestic feed, reviewing the production system that focuses on rice for feed, and promoting the production of whole crop maize and so on**.

As for **wheat, soybean, and feed and forage crops, considering reviewing support for those working to improve productivity, regardless of whether they are paddy fields or upland fields**, in line with the cost-effectiveness of improving food self-sufficiency.

Providing **support for organic products and reduced use of agricultural chemicals and fertilizers (including rice as a staple food)**.

With the **rapid decrease of farmers, reviewing and strengthening the existing support system for farmland intensification, etc.** so that business farmers can **take on more farmland of retired farmers** while improving productivity in order to realize regional plans.

With regard to **the subsidy for production areas**, upon **survey and verification** of the actual conditions at the site, **considering the review** of the system to **promote the formation of production areas** in accordance with local conditions, **regardless of whether they are rice paddies or upland fields**, including **disadvantaged regions such as hilly and mountainous areas**.

Expanding the support for the direct payment system to farmers in hilly and mountainous areas in consideration of the actual conditions of disadvantaged regions. **Strengthening the structure of organizations** subject to the **multifunctional payment system**.

As for the budget, **utilizing the financial resources** obtained through the review of **current paddy field utilization** and the rearrangement of existing measures associated with the review. In this way, **the necessary budget for structural transformation** will be **firmly secured**.

○ Expansion of rice exports

In order to further develop demand for rice and rice processed products overseas, it is necessary to respond to the quality, quantity, and price demanded by overseas markets. However, the **average production cost** by domestic farms is **about 16,000 yen/60 kg** at present, compared to the **profitable line of production cost of rice for export (about 9,500 yen/60 kg** (according to interviews with exporters)), thereby making the **reduction of rice production costs the biggest issue**.

For this reason, **export production areas capable of producing at low cost** will be **newly cultivated**, and the following **initiatives for productivity improvement** will be strongly promoted:

Eliminating scattered farm households through farmland accumulation and consolidation (expansion of planted area of **management entities with an operation size of 15 hectares or more** that are undertaking exports).

Expanding farmland partitions (developing new farmland of a production complex, with a size of 1 hectare or larger).

Improving cultivars, and expanding the planting of high-yielding cultivars.

Utilizing smart agricultural technologies by taking advantage of the expansion of farmland partitions (**increase in the use of smart agricultural technologies and machinery to 50% or more** in the total cultivated land under management).

Forming 30 export production areas to work on large-scale exports through the above initiatives (**realizing that exports from these production areas account for more than half of total exports**).

Along with this, promoting the **expansion of planting of organic rice**, for which overseas needs are high, while striving to **expand overseas demand** by surveying overseas needs and strongly promoting the following initiatives:

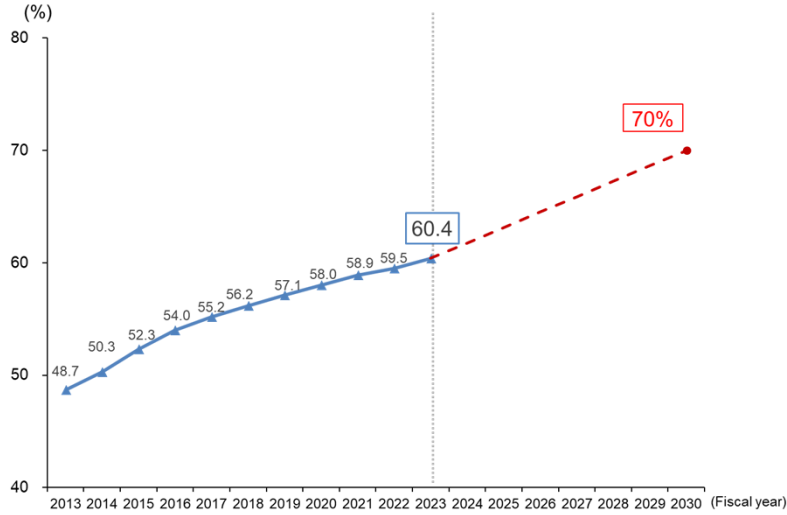
Facilitating the **promotion of Japanese food and establishment of commercial distribution**, the **establishment of a model supply chain** that consistently links Japan and overseas, the **advancement to overseas by Japanese food service enterprises (rice ball shops, Japanese restaurants, etc.)**, and the **formation of a virtuous cycle between inbound tourism and export**, thereby **expanding the use of Japanese rice**. Moreover, with regard to **packaged rice**, aiming to **expand exports by maximizing the appeal of its characteristic** as a simple and convenient way to eat Japanese rice.

By **mobilizing all of these measures**, it aims to **achieve exports of 353,000 tons** (in raw ingredient rice equivalent) as **“rice, packaged rice, rice flour, and rice flour products,”** which are priority export items.

Farmland accumulation and consolidation based on regional plans

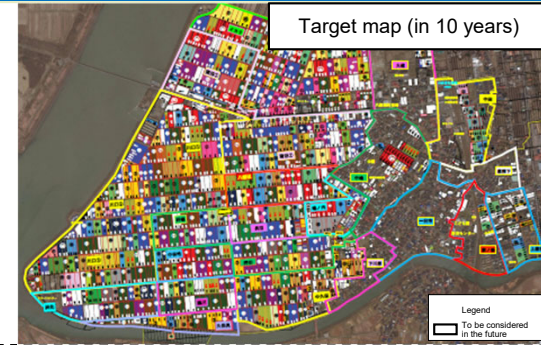
- The **rate of farmland accumulation to business farmers** has increased to **60% at present**, and with the aim to increase it to **70% by 2030**, the farmland accumulation and consolidation will be promoted in order to achieve **(80% of) an agricultural structure in which business farmers bear a significant share of agricultural production in the long term**.
- Many of the regional plans that have been formulated need to be reviewed because **(1) there are many farmlands for which future successors cannot be found, and (2) the current map is used as it is**.
- For this purpose, in cooperation with relevant organizations such as municipalities, agricultural committees, and Farmland Banks, **push-type support will be provided to initiatives for continuous refinement and realization of regional plans** in municipalities, under the leadership of the national government.

○ Rate of farmland accumulation to business farmers



○ Examples of regional plans requiring further refinement

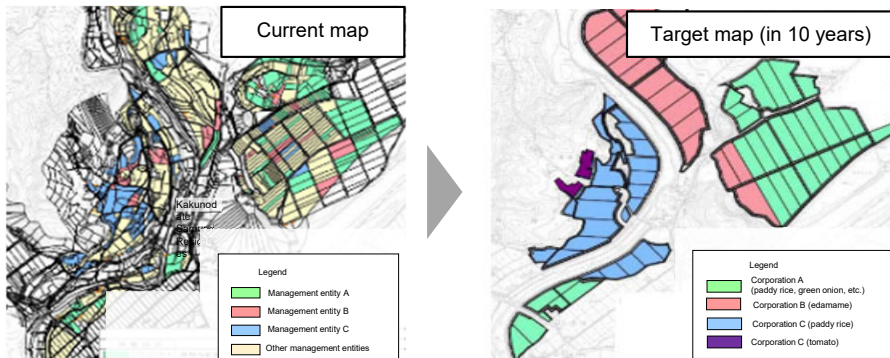
Case 1: Target map almost the same as the current map (Y town, B prefecture)



- Agricultural land area within the district: 268 ha
- Mainly cultivation area for paddy rice
- As a result of the failure to reach an agreement within the region on the conversion of farmland to production complexes in 10 years, 59 farm households were assigned to 268 hectares of farmland (at present, a certain number of farmers over 70 years old are also assigned).
- Since the average area of a complex is 0.6 hectares, there is room for further discussion regarding the future development of production complexes.

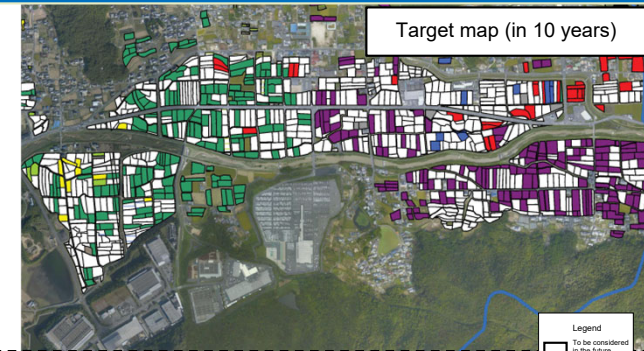
○ Example of consolidation through regional plans

Forming a production complex for each crop by taking advantage of infrastructure development (X City, A Prefecture)



- Agricultural land area within the district: 49.6 ha
- Mainly cultivation area for paddy rice
- By taking advantage of infrastructure development,
 - (1) **Newly establishing three corporations to consolidate farmland**
 - (2) **Establishing a production complex for each crop**

Case 2: Reaching a point where future successors are clarified (Z City, C Prefecture)

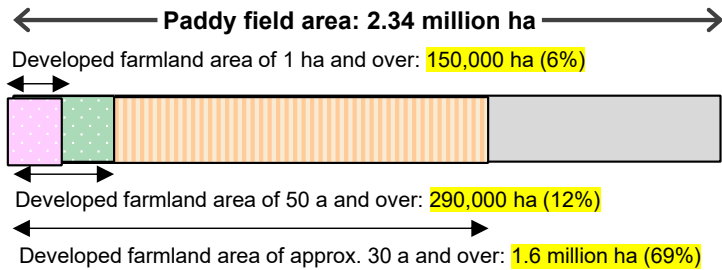


- Agricultural land area within the district: 171 ha
- Mainly cultivation area for paddy rice and vegetables
- As a result of the discussion, **it reached the point where the future successors are clarified** (colored part).
- There are currently cultivators for farmland colored in white (about half of the district), but **it is necessary to continue clarifying who will be the successors of farmland in the future (farmland accumulation)**.

Infrastructure development such as expansion of farmland partitions

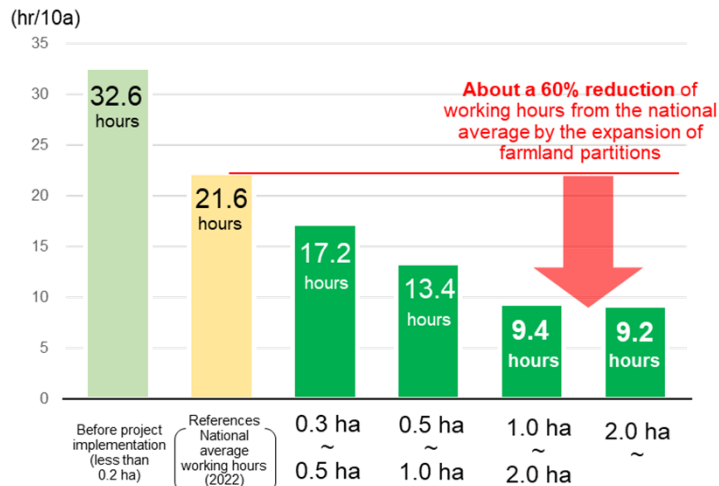
- As the number of farmers decreases, it is important to secure good farming conditions by **introducing to business farmers smart agricultural technologies** and **developing infrastructure** that contributes to **farmland accumulation and consolidation**, in order to **improve productivity** and **reduce production costs**.
- To this end, in cooperation with regional plans, the **development of labor-saving management tasks** will be promoted, such as mowing and water management around farms, and the **development of an information and communications environment** while promoting the **expansion of farmland partitions**.
- In addition, in order to develop production areas capable of producing rice at low cost, **infrastructure development** will be promoted, **such as expansion of farmland partitions to reduce rice production costs of business farmers** by reinforcing cooperation with flagship export production areas.

○ Status of paddy field development (2023)



Source: Prepared based on MAFF, "Statistics on Cultivated Area and Planted Area" and "Basic Survey on Agriculture Infrastructure Information."

○ Working hours for rice cultivation by plot size



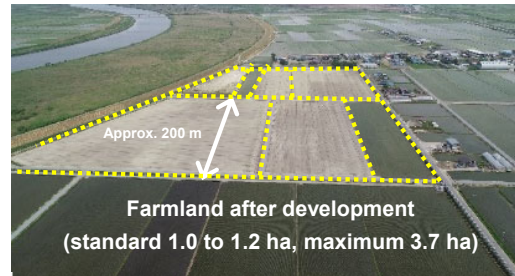
* Compiled based on data before and after the implementation of a subsidized project for farmland development in 85 districts where the project was completed from 2022 to 2024.

* Reference (national average working hours) 21.6 hr/10 a (2022)* is based on "Statistical Survey on Farm Management and Economy."

< Image in 2030 >

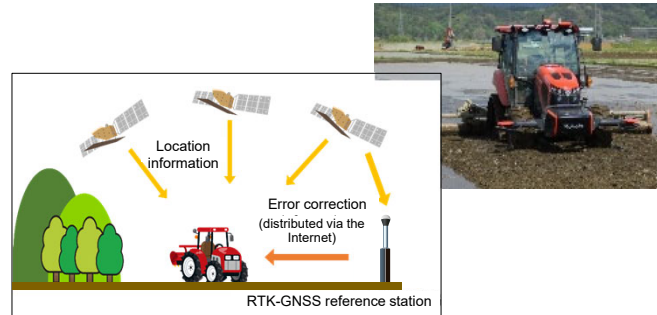
Reduction of labor costs in rice production costs of business farmers by 60% (compared to the current level) by promoting the expansion of farmland partitions and labor-saving improvements in districts implemented with infrastructure development projects.

Expansion of farmland partitions



Expansion of farmland partitions compatible with automatic traveling agricultural machines, etc.

Introduction of large smart agricultural machinery



Installation of an RTK-GNSS reference station to correct satellite positioning data and improve accuracy of automatic traveling

Labor saving of management work around fields



Introduction of remote-controlled mowers in hilly and mountainous areas with many sloping areas (making the slope gentler)

















Installation of automatic water faucets to save labor in water management

Development and introduction of smart agricultural technologies and training of agricultural support service providers

- As the number of farmers is expected to decrease drastically, the issue is **to establish a system to stably supply food even with a small number.**
- For this reason, various initiatives will be promoted: **research and development** by strengthening industry-academia-government collaboration through the use of NARO's facilities for start-ups engaged in research and development based on the Act on Promoting the Utilization of Smart Agricultural Technology, **introduction of new production methods such as reviewing cultivation methods** compatible with smart agricultural technologies, and **support for the activities of agricultural support service providers** to promote the use of smart agricultural technologies.

Development of smart agricultural technologies needed at sites (fruit trees: example of apples)

	Pruning	Flower thinning, pollination, fruit thinning	Growth management	Pest control	Harvest, transport	Sorting	Shipping
Current situation	 Manual work based on the experience of experts	 Manual work based on the experience of experts	 Tree management such as manual mowing and watering by farmers	 Hand spraying by farmers or spraying by riding-type SS	 High-place work by many workers during a limited period of time	 Manual operation in front of the field to improve the efficiency in the joint sorting facilities	 Manual visual sorting
Technologies needed to be developed	 Development of pruning robots	 Development of autonomous fruiting control and pollination drones	 Development of smart tree management system by sensing technology Development of fully autonomous mowers	 Development of automatic SS for automatic spraying of fertilizers and agricultural chemicals Development of spot spraying technology by AI pest diagnosis	 Development of automatic harvesters Development of integrated operation systems, such as automatic management machines	 Sophistication of joint sorting facilities eliminate the need for selection in front of the field	 Development of advanced and rapid automatic fruit selection technology based on appearance and quality

(Photo taken from the website of JA Zen-Noh Aomori)

Support for training and activities of agricultural support service providers

Specialized work order reception type

Reducing the burden on farmers by consigning farm work



- Pest control and top-dressing with drones
- A substitute service of ridge management using remote-controlled mowers

Data analysis type

Proposing solutions by analyzing agricultural data



- Sensing crop growth using drones
- Analyzing production and market data to propose optimal shipping timing

Shift of production methods to maximize the effects of smart agricultural technologies

(Example 1) Robot tractor + Development of step-free farm road



Introduction of robot tractors



Improved work efficiency by developing step-free farm roads that eliminate the need for turnabout

(Example 2) Transport robot + Labor-saving tree forms of fruit trees (example of apples)



Introduction of automated transport robots



Easy machine work by making labor-saving tree forms and arranging them linearly

A research and development-type start-up to undertake the development and service provision of smart agricultural machinery



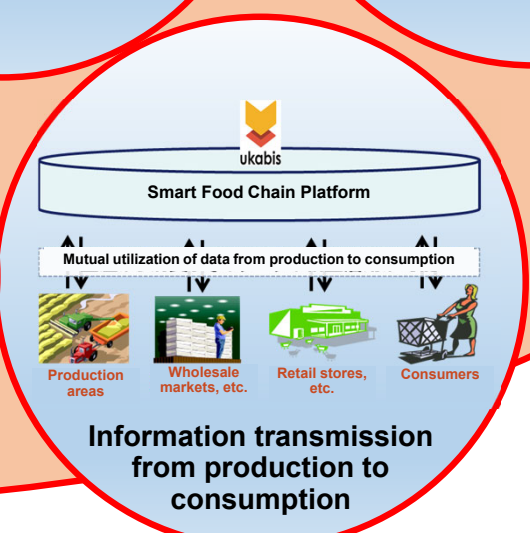
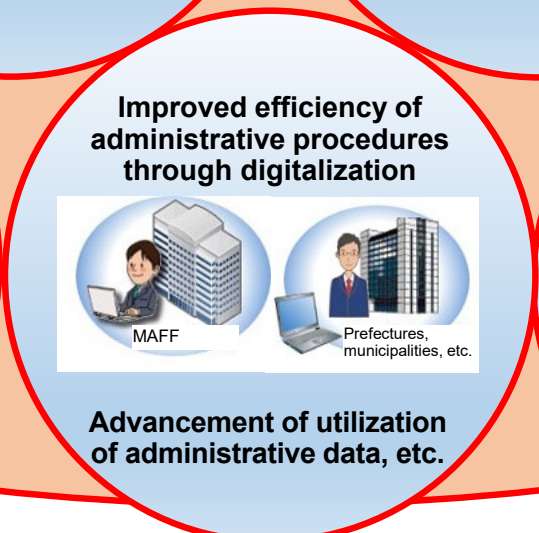
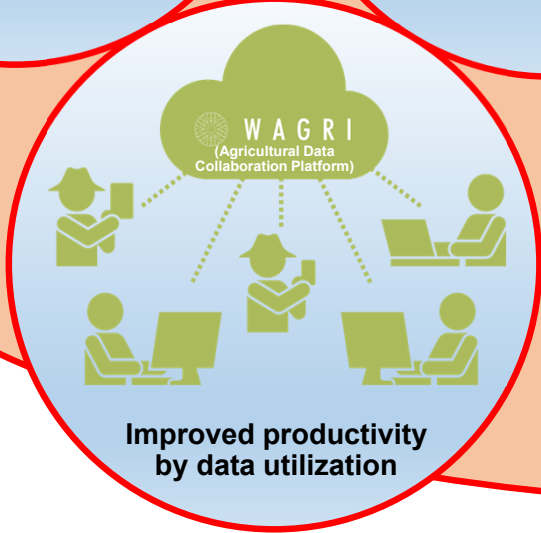
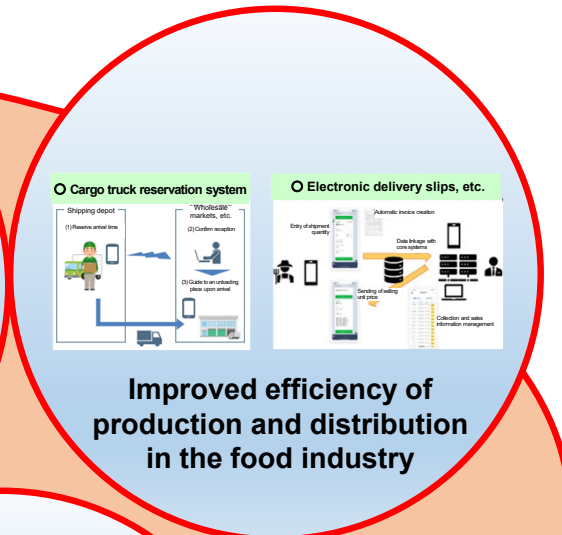
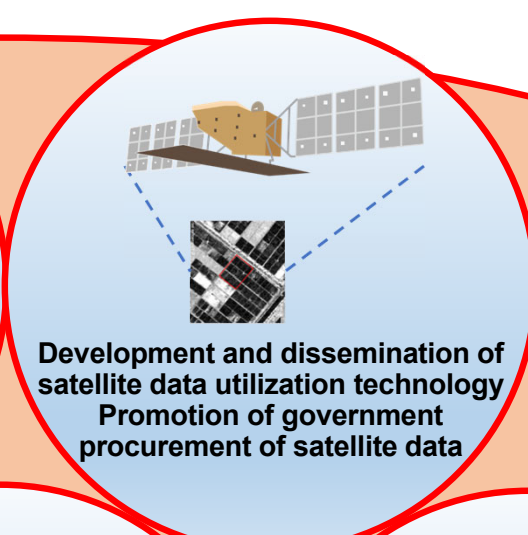
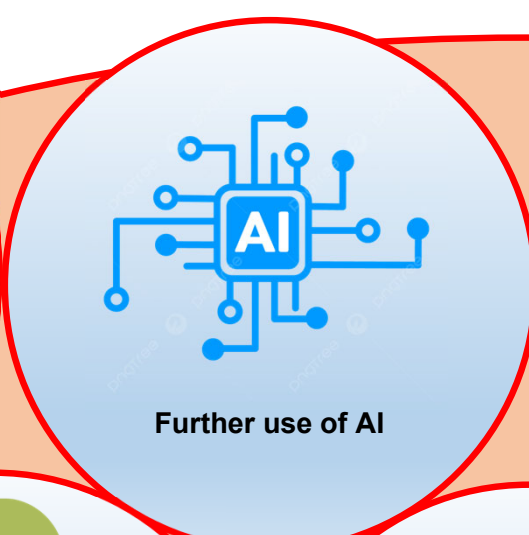
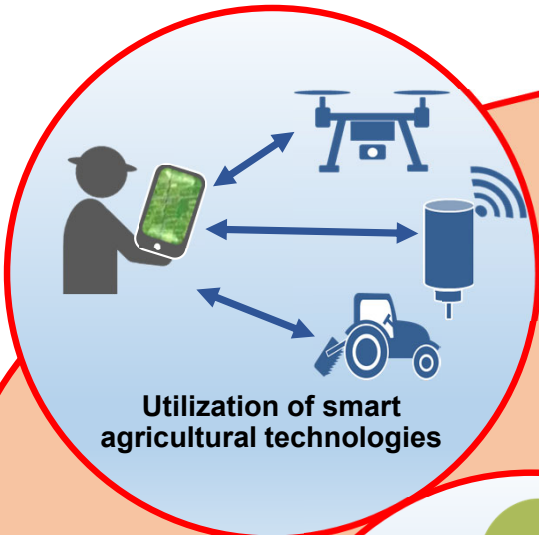
Automatic agricultural chemical spraying robot for green onion

- Development of a agricultural chemical spraying service using automated agricultural chemical spraying robots for green onions developed in-house

Promotion of DX in food systems

- Since the use of data obtained by satellites and various sensors is essential for improving agricultural productivity, data utilization by farmers will be promoted through the use of **WAGRI** (Agricultural Data Collaboration Platform), which has functions for data linkage, sharing, and provision, as well as the use of AI, while an environment for data utilization is developed, including the sharing and unification of agriculture-related data.
- To improve the productivity of food systems as a whole, DX will be promoted in all aspects of food systems, including the use of smart agricultural technologies at production sites, efficiency improvement of production and distribution in the food industry, information transmission from production to consumption, and the use of digital technology in agriculture, forestry, and fisheries administration.

Promoting DX in all aspects of food systems



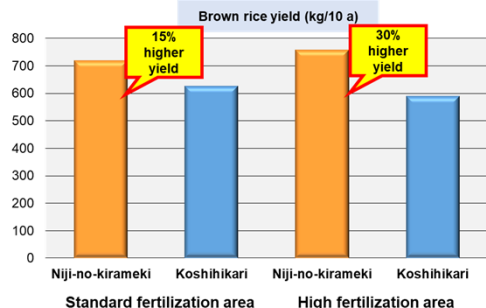
Cultivar development (high-yielding cultivars)

- In order to improve productivity and address climate change, it is necessary to breed and adopt cultivars that shows characteristics such as high-yield, high-temperature-tolerance and so on.
- Although the planted areas of those varieties have been increased by designation as recommended varieties by local governments, further **development and spread of high-yielding cultivars** will be promoted in order to **improve productivity through increase of the yield.**

“Niji-no-kirameki” rice

[Main characteristics]

- Excellent resistance to high temperatures and lodging, and **15% to 30% higher yield than existing popular cultivars.**
- Resistant to leaf stripe disease, relatively resistant to blast disease, and easy to cultivate.



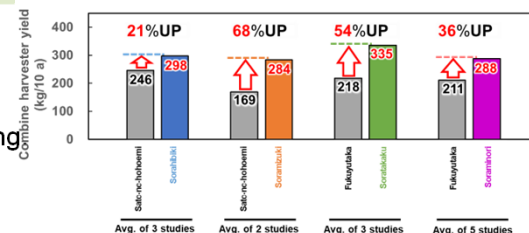
[Future prospects of extension]

- **Planted area of 10,000 ha in FY2024 (estimate).**
- **Adopted by 6 prefectures as a recommended cultivar and by 21 prefectures as a brand cultivar of production areas,** with further expansion expected.
 - Mainly in Ibaraki Prefecture, Tochigi Prefecture, and Gunma Prefecture, promoting extension activities, such as setting up demonstration fields, holding on-site study meetings, and providing technical guidance.
 - **In Ibaraki Prefecture, utilized for export initiatives in the flagship export production areas.**

“Sora Series” soybean

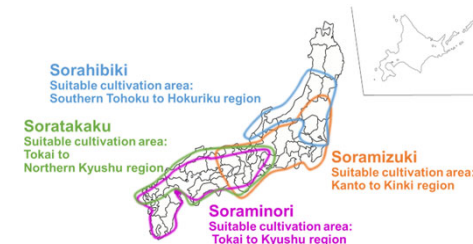
[Main characteristics]

- **21% to 68% higher yield than existing varieties.**
- Pod dehiscence resistance, and a small loss even in combine harvesting
- Resistant to bacterial pustule.
- Has processing suitability for tofu.



[Future prospects of extension]

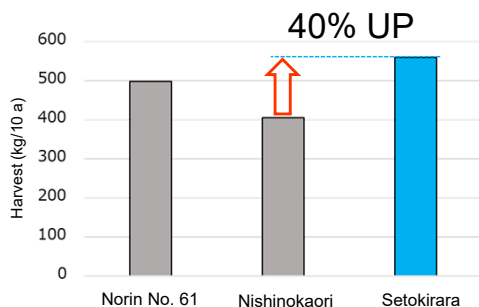
- **Conducting tests (including preliminary tests) to determine recommended cultivars in more than 20 prefectures in 2024.**
- The Sora series, consisting of four cultivars, is suitable for cultivation from southern Tohoku to Kyushu.



“Setokirara” wheat

[Main characteristics]

- **Early maturity, about 40% higher yield than existing cultivars.**
- Easy to manage due to its resistance to pre-harvest sprouting and scab.
- Excellent dough workability, making fluffy and delicious bread.



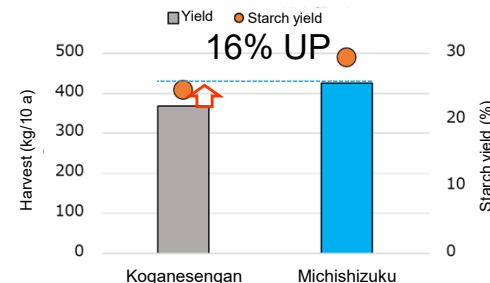
[Future prospects of extension]

- **Planted area of 1,800 ha in FY2023 (estimate).**
- Planting progressing mainly in the Chugoku region, and **Seven-Eleven Japan has conducted a trial sale of bread using Setokirara in Okayama Prefecture.**

“Michishizuku” sweet potato

[Main characteristics]

- **16% higher yield than existing cultivars** and higher starch yield.
- “Moderately resistant” to foot rot.
- Quality of its shochu similar to that of Koganesengan.
- Usable as a raw material for starch.



[Future prospects of extension]

- **Planted area of 1,000 ha in FY2024 (estimate).**
- Planting progressing mainly in the southern Kyushu region, and used for integrated control of foot rot. **Used as a raw material by multiple shochu brewers and starch factories.**

Data are the test results of NARO.

Cultivar development (cultivars addressing climate change)

- In order to improve productivity and address climate change, it is necessary to breed and adopt cultivars that shows characteristics such as high-yield, high-temperature-tolerance and so on.
- With increasing risks of growth disturbance, quality damage, and plant disease and insect pest damage due to climate change, **further cultivar development and rapid extension** will be promoted.

“Niji-no-kirameki” rice

[Main characteristics]

Heat tolerant cultivar-with few chalky grains even at high temperatures.

[Extension status, etc.]

Planted in 10,000 ha mainly in the Kanto region and west (FY2024).



“Niji-no-kirameki” (left) has fewer white immature grains (white-opaque rice grains).

“Natsukogane” wheat

[Main characteristics]

“low” pre-harvest sprouting even under the conditions of high temperature and rainfall.

[Extension status, etc.]

Spread mainly in the Tohoku region.



Low sprouting even in high rainfall.

“Sora Series” soybean

[Main characteristics]

Resistant to bacterial pustule frequently occurring in conditions of high temperature and humidity.

[Extension status, etc.]

Conducting tests (including preliminary tests) to determine recommended cultivars in more than 20 prefectures in 2024.

“Soramizuki” (center) and “Soraminori” (right) are resistant to bacterial pustule .



Fukuyutaka Soramizuki Soraminori
Comparison of bacterial pustule symptoms

“Kachihomare” sugar beet

[Main characteristics]

Multiple resistance to important diseases occurring in conditions of high temperature and humidity.

[Extension status, etc.]

Spread mainly in the Tokachi area.



“Kachihomare” “Strong” “Rivolta” “Medium Strong”

Photo 2: Foliage growth black root rot (2018)

“Kachihomare” (left) is less susceptible to black root rot disease than “Rivolta” (right) even in a severely affected field by black root rot.

“Kinshu” and “Beniminori” apples

[Main characteristics]

Red-skinned apple cultivars with **good fruit coloring** even at high temperatures.

[Extension status, etc.]

Kinshu: To be extended in Iwate Prefecture (saplings available on the market).

Beniminori: To be extended in Iwate and Yamagata Prefectures (saplings available on the market).



“Beniminori” (left) and “Kinshu” (center) are better colored than “Fuji” (right) even at high temperatures.

“Grosz Krone” grape

[Main characteristics]

Purplish black-skinned grape cultivar with **good berry coloring** even at high temperatures.

[Extension status, etc.]

To be extended in warm southwest areas in the Chubu region and west (saplings on the market).



Good coloring even at high temperatures.

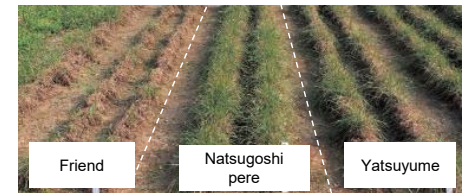
“Natsugoshi pere” and “Makibayuka” feed crops

[Main characteristics]

Forage cultivars with **good summer survival**.

[Extension status]

“Natsugoshi pere” perennial ryegrass : Spread mainly in the Tohoku region.



Natsugoshi pere (center) grows better after the summer than the existing cultivars (Friend (left) and Yatsuyume (right)).

“Makibayuka” orchardgrass : Sales launched in FY2025.

Expected to be extended in cold regions at low elevations to warm regions at medium elevations.



Makibayuka

Akimidori II

Makibayuka (left) has better plant vigor after the summer than Akimidori II (right), an existing cultivar.

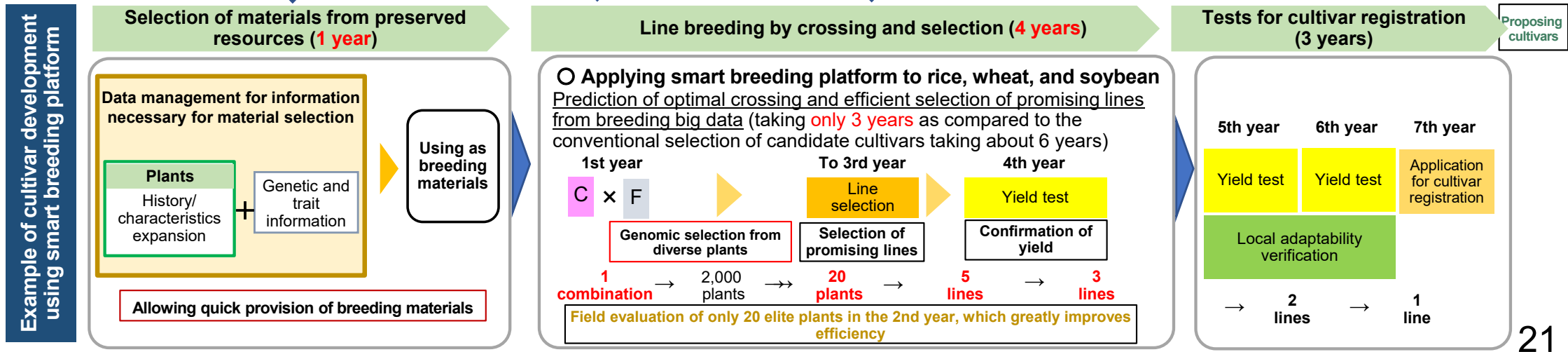
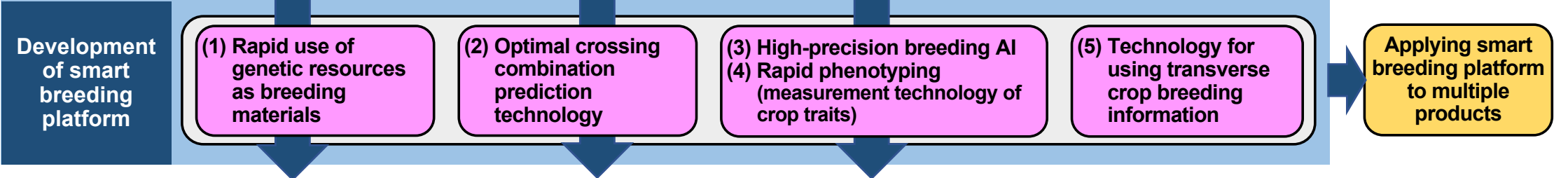
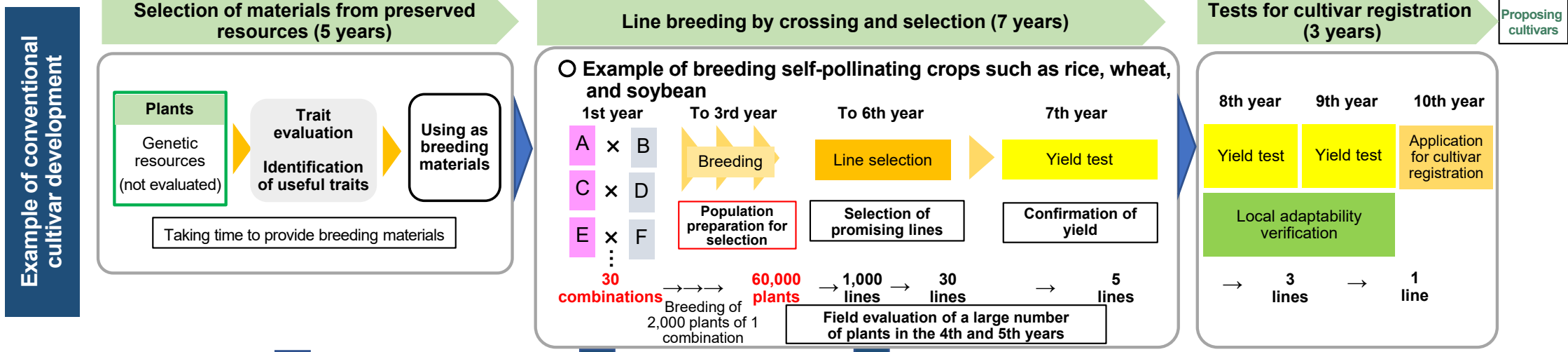
< Image in 2030 >

Thirty five cultivars that contribute to **address climate change and adapt smart agricultural technologies in addition to achieve yield improvement** will be bred and extended promptly by also utilizing advanced technologies, thereby resulting in reducing production costs.

Cultivar development (speeding up of cultivar development with “smart breeding platform”)

○ The “smart breeding platform,” a technology that uses AI and other technologies to improve breeding efficiency, will be reinforced and expanded to rapidly develop innovative new cultivars that contribute to food security.

Ideal image of smart breeding platform



Future vision of the technology system and management model (three crops in two years: paddy rice, wheat, and soybean)

- Presenting the prospects for **labor-saving technological systems for each type of farming business**, which can be realized on the premise of the utilization of smart agricultural technologies, etc. to be developed and extended in the future, together with the **image of management** at that time.
- In order to **reduce the cost of introducing** smart agricultural technologies, clarifying the operations (management work such as pest control, operation and management/production management using data) that can be expected to **use smart agricultural technologies through agricultural support service providers**.

Image in 2020







	Tillage and soil preparation	Raising seedlings, transplanting, sowing	Management (top-dressing, weeding, pest control)	Harvest, transport	Drying, sorting, shipping	Management
Paddy rice	 Tillage and soil preparation by riding-type tractors	 Rice transplanting using riding-type rice planter	 Weeding and pest control using brush cutters, power sprayers, riding-type tending machines, etc.	 Harvest by combine harvesters	[Consignment]  Drying preparation system	Farmland area: 15 ha Working hours: 1,950 hr (2 persons) Gross income: 20.68 million yen Operating costs: 16.67 million yen Income: 4.01 million yen
Wheat		 Sowing using a sowing machine				
Soybean						

Image in 2030












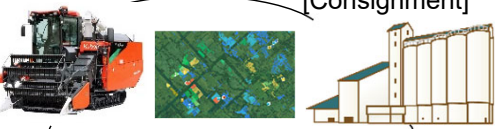


	Tillage and soil preparation	Raising seedlings, transplanting, sowing	Management (top-dressing, weeding, pest control)	Harvest, transport	Drying, sorting, shipping	Management
Paddy rice	 Automatic traveling tractor (manned-unmanned collaborative operations)	 Self-driving rice planter (Note 1)	 Water level sensor and automatic water supply device (Note 3)  Remote-controlled mower (weeding of ridges, etc.) (Note 2), (Note 3)  agricultural chemical and fertilizer spraying drone (Note 2), (Note 3)	 Self-driving combine harvester (Note 1)	[Consignment]  Drying preparation system	Farmland area: 30 ha Working hours: 2,177 hr (2 persons) Gross income: 45.55 million yen Operating costs: 34.57 million yen (*) Income: 10.98 million yen
Wheat		 Sowing using an automated steering system (Note 1)				
Soybean		Management/production management using data (Note 2), (Note 3)				

Image in 2040

	Tillage and soil preparation	Raising seedlings, transplanting, sowing	Management (top-dressing, weeding, pest control)	Harvest, transport	Drying, sorting, shipping	Management
Paddy rice	Not required for paddy rice with non-tillage direct seeding. Not required for wheat and soybeans with non-tillage cultivation.	 Direct seeding using drones	 Drone capable of automatic navigation and automatic loading of agricultural chemicals  Autonomous traveling mower capable of weeding between stocks	 Interlock of combine harvesters, transport trucks, and drying and preparation facilities	[Consignment]  Drying preparation system	Farmland area: 30 ha Working hours: 2,177 hr (2 persons) Gross income: 45.55 million yen Operating costs: 34.57 million yen (*) Income: 10.98 million yen
Wheat		 Automation of no-tillage sowing machine				
Soybean		Management/production management using data				

(Note 1) Work that is expected to use services due to scale expansion, etc., as it corresponds to peak labor periods.

(Note 2) Work that is expected to reduce costs through the use of services, depending on the operation size, operating capacity of machines, etc.

(Note 3) Work that is expected to be utilized efficiently in both flat and hilly/mountainous areas.

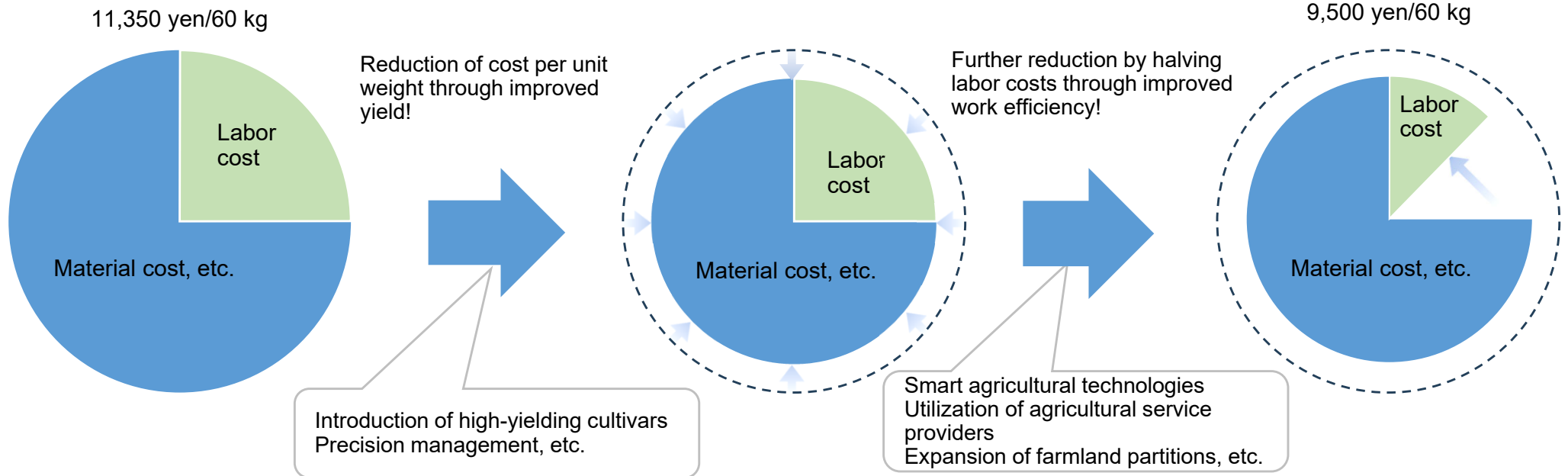
(*) In this calculation, depreciation is calculated on the assumption that farmers will introduce the machinery by themselves.

*Some photos taken from Hokkaido Open Data.
*Photos and illustrations are for illustration only.

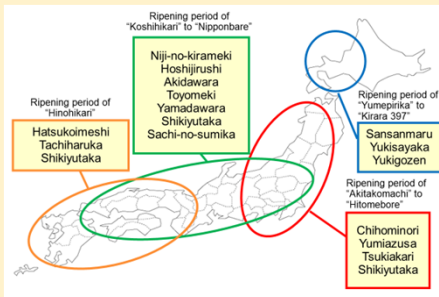
Reduction of production costs (rice)

- It is important to improve the yield, which enables the reduction of total cost, in order to further reduce the production costs in a farm planting 15 hectares or more, where the reduction effect on the production costs has been shown by scale expansion. In particular, **the introduction of high-yielding cultivars is important in order to meet the needs for exports and home-meal replacement/eating-out.**
- In addition, as the operating area per person is expected to increase in the future, by promoting **farmland consolidation and the expansion of farmland partitions** to facilitate the **development of farmland suitable for smart agricultural machinery**, it will **maximize the effects of smart agricultural machinery and significantly reduce working hours.**

[Image of production cost reduction per 60 kg in a paddy rice planting management entity with 15 ha or more]



○ High-yielding cultivars

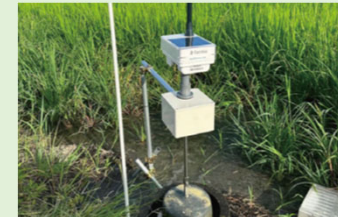


Yield is increased by 10% to 20% compared to conventional cultivars. Since some cultivars are resistant to high temperatures and diseases, simply changing cultivars can greatly improve productivity.

○ Smart agricultural technologies



Labor saving by drones, such as top-dressing



Reduced patrol time with a field water management system

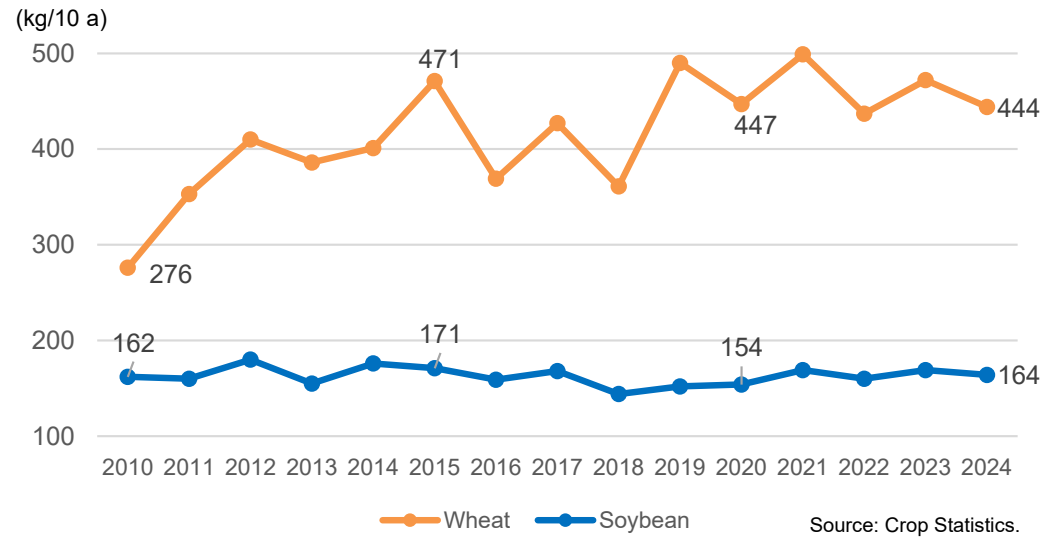
Appropriate water management and farming management work becomes possible without going to a field. A significant reduction in working hours is expected.

*The maps shown do not necessarily represent the territory of Japan comprehensively.

Reduction of production costs (wheat, soybean)

- As for wheat and soybeans, the introduction of basic technologies such as drainage measures, as well as new cultivars, is insufficient, and **the stable quantity and quality demanded by users are not supplied in some regions.**
- Under these circumstances, in order to improve the productivity of wheat and soybeans, **it is important to extend new cultivars developed recently with high yield and disease resistance,** in addition to the **implementation of basic technologies such as drainage measures.**

○ Changes in yields of wheat and soybeans



○ Changes in the implementation status of drainage measures in wheat, barley, and soybean planted in paddy fields

	2002	2023
Mole drain	75,961 ha(25.9%)	82,451 ha(26.6%)
Subsoil breaking	29,938 ha(10.2%)	40,504 ha(13.1%)

Source: Survey by Cereal Crop Division (total area).

○ Main planted varieties of wheat and soybean (2023)

(Wheat)

Cultivar	Cultivation year	Cropping ratio
Kitahonami	2007	39.1%
Yumechikara	2008	9.2%
Shirogane Komugi	1974	7.0%

(Soybean)

Cultivar	Cultivation year	Cropping ratio
Fukuyutaka	1980	17.5%
Yukihomare	2001	10.4%
Sato-no-hohoemi	2008	10.2%

Source: Survey by Cereal Crop Division.

○ Improvement of yield through drainage measures, etc.

- Excess moisture injury occurs in converted paddy fields due to poor drainage caused by plow sole layers and soil physical properties.
- Excess moisture injury is a factor in lowering the yield and quality of wheat and soybeans.



It is important to take drainage countermeasures, such as **drainage countermeasures by infrastructure development**, as well as **mole drain and subsoil breaking**, according to the conditions of each field.



Field with agricultural drainage measures (left) and that without (right)

○ New cultivars expected for extension

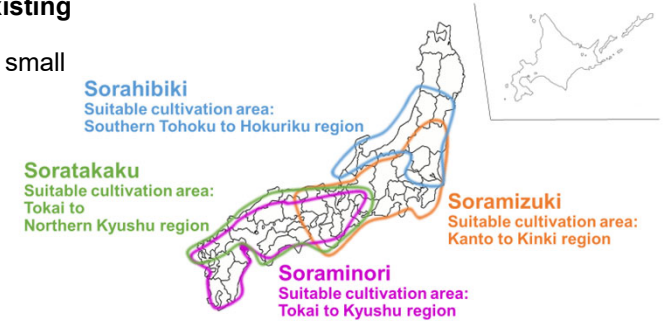
“Sora Series” soybean

[Main characteristics]

- **21% to 68% higher yield than existing cultivars.**
- Pod dehiscence resistance, and a small loss even in combine harvesting.
- Resistant to leaf scorch and has processing suitability for tofu.

[Future prospects of extension]

- **Conducting tests (including preliminary tests) to determine recommended cultivars in more than 20 prefectures in 2024.**



*The maps shown do not necessarily represent the territory of Japan comprehensively.

3. Promotion of exports
(enhancing the “earning power in the global market”
by expanding exports, etc.)

Enhancing the “earning power in the global market” by expanding exports, etc.

- As **food demand** is expected to **decrease along with the declining population** in Japan, the **food supply capacity** will be secured by taking in the **overseas food market** growing in the future, in addition to domestic food supply (size of the global food market: approx. 900 trillion yen (2020) → approx. 1,500 trillion yen (2030) → approx. 1,800 trillion yen (2040)).
- Along with the **acceleration of export expansion**, the **overseas expansion of Japan's food industry** and the **expansion of food-related consumption by inbound tourists** will be collaboratively promoted, and the “earning power in the global market” of the agriculture, forestry, fishery, and food industries **will be enhanced** through exercising synergy between various measures.

Amount of exports of agricultural, forestry, and fishery products and food
[Current] 1.5 trillion yen (2024) → [Target] 5 trillion yen (2030)

Export expansion of agricultural, forestry, and fishery products and food

Driving exports for ingredients used abroad

Stimulating the desire to visit Japan through food experiences at EC websites, supermarkets abroad, etc.

Spreading Japanese food and food culture abroad

Creating fans of Japanese food through “genuine” food experiences

Stimulating the desire to visit Japan through food experiences at Japanese restaurants abroad, etc.

Overseas expansion of the food industry

Expansion of food-related consumption by inbound tourists

Revenues from overseas expansion of the food industry
[Current] 1.6 trillion yen (2022) → [Target] 3 trillion yen (2030)

Enjoying Japanese food closely through “genuine” food experiences

Amount of food-related consumption by inbound tourists
[Current] 2.3 trillion yen (2024) → [Target] 4.5 trillion yen (2030)

Promotion of exports of agricultural, forestry, and fishery products and food

- In promoting the export of agricultural, forestry, and fishery products and foods, it is important to **implement initiatives to expand overseas demand and to improve supply capacity as dual initiatives**, as well as to build a **consistent strategic supply chain** in Japan and overseas, and to promote adding great values by building the Japan brand.

Expansion of overseas demand

Current status/ issues

- Approaches to Japanese commercial distribution in major overseas cities alone will have a limited effect on expanding the demand.
- The risk of excessively relying on specific export destination countries and regions is becoming apparent.

Measures

- ✓ **Developing new markets**, such as major local supermarkets and undeveloped promising areas, in cooperation with certified Authorized Export Promotion Organization, JETRO, JFOODO, and other organizations.

- ✓ Promoting **adding great values** by building the Japan brand.

[Example of initiatives (U.S.)]

Starting to sell Japanese rice for sushi via a large supermarket in the United States that caters to the wealthy, by taking advantage of JETRO's business meeting.



- ✓ **Holding strategic discussions** aimed at lifting the export ban and easing export conditions based on the action plan.

Improvement of supply capacity

Current status/ issues

- It is important to form production areas and bases that respond to the regulations and needs of export destination countries and regions based on the market-oriented concept, and that engage in stable and continuous export activities.

Measures

- ✓ Promoting an increase in the number of agricultural, forestry, and fishery operators and food business operators who are willing to work on exports through the **utilization of exporters' communities** through the GFP (Agricultural, Forest and Fishery Foodstuff Export Project).

- ✓ Supporting the **expansion and development** of production areas (flagship export production areas) **that are continuously engaged in exports** in response to overseas regulations and needs.

[Example of a flagship production area (Miyazaki: Citrus Export Consortium)]

- Exporting Satsuma mandarins to Taiwan in compliance with agricultural chemical residue regulations by recreating the cultivation calendar and conducting agricultural chemical residue inspections.



- Cooperating with Kumamoto, Saga, Wakayama, and other prefectures to expand the lot and export period.

Conduct both initiatives in parallel

Building a consistent strategic supply chain in Japan and overseas

Current status/ issues

- It is necessary to carry out a thorough reform of production and distribution in an integrated manner in order to supply products that meet the needs, in conjunction with market development.

Measures

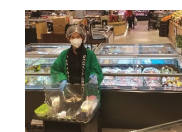
- ✓ In order to deliver high-quality Japanese products to overseas consumers, promoting various measures, including cost reduction, **shift to organic production systems**, **establishment of collection and shipment systems**, and establishment of domestic and overseas distribution systems by **securing refrigerated distribution**.



Cooperation among export production areas and business operators to meet local needs (joint shipment of multiple items and by multiple production areas)



Establishment of refrigerated distribution through the introduction of equipment



Promotion for local consumers

Main measures for each export item

- By addressing **item-specific issues**, it aims to achieve **5 trillion yen**, the export target in 2030 for agricultural, forestry, and fishery products and foods (1.5 trillion yen in 2024 (actual)).
- **Specific export strategies** will be set by product and country/region in light of various changes in the export environment.

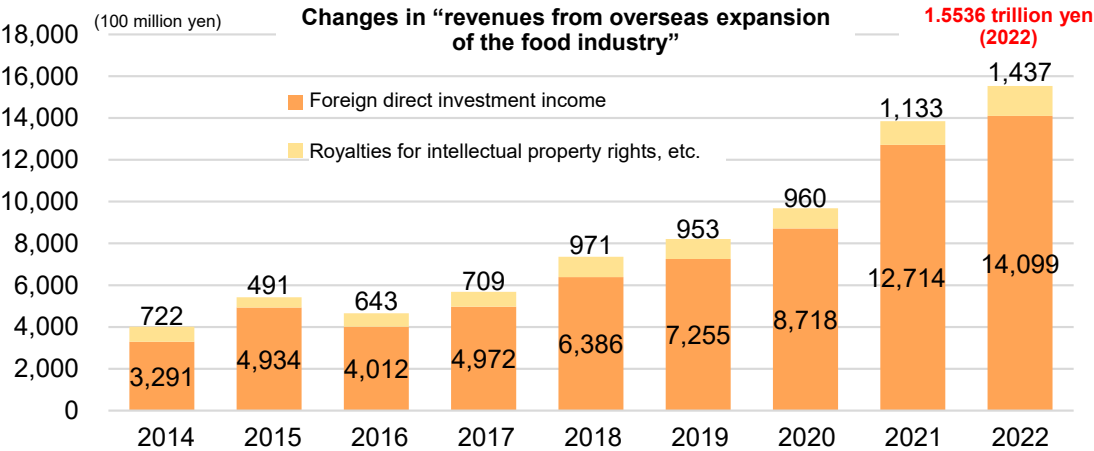
Item	Amount of exports in 2024	Export target in 2030	Main measures for each item
Beef	64.8 billion yen	113.2 billion yen	<ul style="list-style-type: none"> • Having discussions on lifting the export ban with export destination countries and regions, and expanding export demand for cuts such as round and chuck, together with the loin cut, through the dissemination of cutting techniques. • Responding to the needs of export destination countries and regions by developing and enhancing the capabilities of export certified establishments.
Milk and dairy products	30.5 billion yen	88.3 billion yen	<ul style="list-style-type: none"> • Producing long-life milk and other products that meet overseas needs and promoting new commercial distribution. • Facilitating sales channel development, value promotion, and development of processing facilities for value-added milk and dairy products and processed products, such as confectionery products.
Apple	20.1 billion yen	27.9 billion yen	<ul style="list-style-type: none"> • Promoting the accumulation and consolidation of orchards, infrastructure development, introduction of labor-saving tree forms, and development and introduction of smart agricultural technologies and labor-saving cultivars. • Promotion of cultivation of production areas to meet regulations and needs of export destination countries and regions, such as revision of a pest control calendar.
Strawberry	5.4 billion yen	25.3 billion yen	<ul style="list-style-type: none"> • Increasing the production volume of cultivars that can withstand even long-distance transport, and disseminating pest control methods compatible with standards for agricultural chemical residues in exporting countries and regions (review of a pest control calendar).
Rice, packaged rice, rice flour, and rice flour products	13.6 billion yen	92.2 billion yen	<ul style="list-style-type: none"> • Reducing production costs through farmland accumulation and consolidation, expansion of farmland partitions, and the use of high-yielding cultivars and smart agricultural technologies. • Enhancing rice milling and storage facilities to meet the procurement standards required by export partners, or improving the manufacturing ability of packaged pre-cooked rice that meet the hygiene standards. • Promoting discussions on expanding milled rice exports to China.
Tea	36.4 billion yen	81 billion yen	<ul style="list-style-type: none"> • Shifting the production and processing systems to expand the production of organically grown tea and “ten-cha” powdered green tea, which is an ingredient of matcha, for which demand is expected, and promoting the development and introduction of smart agricultural technologies. • Promoting the establishment of standards for agricultural chemical residues (import tolerance) in export destination countries and regions.
Sake (Japanese sake)	43.5 billion yen	76 billion yen	<ul style="list-style-type: none"> • Diversifying export destination countries and regions, developing sales channels with a view to continuing transactions, and promoting appropriate quality control in local distribution, etc.
Yellowtails	41.4 billion yen	73.6 billion yen	<ul style="list-style-type: none"> • Improving productivity through the use of ICT and the introduction of labor-saving and power-saving technologies. • Promoting the increase of production of artificial seeds and seedlings, development of breeding technologies and low-fishmeal feed, etc., expansion of new aquaculture fishing grounds, and acquisition of private-sector certification. • Promoting discussions toward the early removal of China’s import restrictions.
Scallops	69.5 billion yen	115 billion yen	<ul style="list-style-type: none"> • Strengthening domestic processing systems by introducing labor-saving and power-saving technologies. • Securing alternative processing destinations in China, developing certified processing facilities such as those complying with HACCP to diversify export destinations, and promoting the acquisition of private-sector certification, etc. • Promoting discussions toward the early removal of China’s import restrictions.

Overseas expansion of the food industry, and the expansion of food-related consumption by inbound tourism

- The overseas expansion of the food industry and the expansion of food-related consumption by inbound tourists are expected to lead to the enhancement of “earning power” by themselves, as well as a synergistic effect with export expansion through the dissemination of Japanese food and food culture.
- In cooperation with relevant ministries and agencies such as the Ministry of Economy, Trade and Industry and the Japan Tourism Agency, specific measures will be implemented, such as strengthening the systems in overseas sites, while taking into account the various needs of overseas markets and business operators.

Overseas expansion of the food industry

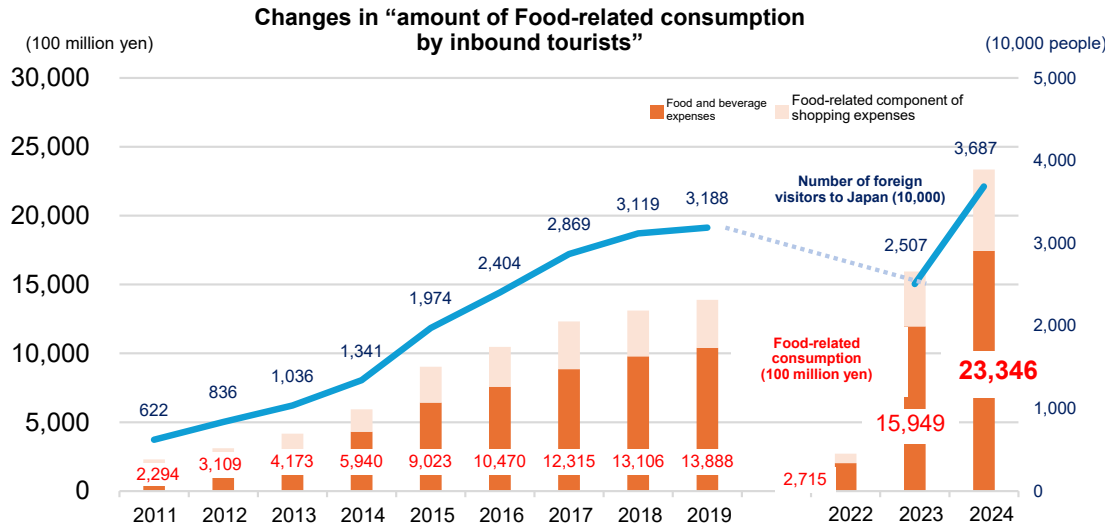
[Target] Revenues from overseas expansion of the food industry: 3 trillion yen (2030)



(Source) Estimated by the MAFF based on Ministry of Finance, “Balance of Payments Statistics” and the Ministry of Economy, Trade and Industry, “Basic Survey of Overseas Business Activities.”

Expansion of food-related consumption by inbound tourists

[Target] Amount of food-related consumption by inbound tourists: 4.5 trillion yen (2030)



(Source) Estimated by the MAFF based on Japan Tourism Agency, “Survey on Consumption Trends of Foreign Visitors to Japan” and JNTO, “Visitor Arrivals to Japan”

Measures

In cooperation with the Japan Tourism Agency, JNTO, JFOODO, etc., the measures, including the following initiatives, are being reinforced :

- Promotion of **countryside stays** utilizing local food and landscape resources, and promotion of overseas dissemination of **local food culture** and other attractions to **attract** inbound tourists to rural areas.
- In promoting Japanese food, **there is mutual cooperation between export measures and tourism measures**, such as disseminating the appeal of domestic production areas in the tourism aspect in an integrated manner through the further utilization of GI products.

[Example initiatives (rice ball shop)]

- Opened a specialty store of rice balls in Hong Kong in 2011.
- Started shokuiku (food and nutrition education) at local schools in 2023 to disseminate rice ball culture.
- Expanding to more than 150 stores in Hong Kong, using 2,000 tons of Japanese rice annually.
- Planning to open 10,000 stores worldwide in the future and use 140,000 tons of Japanese rice annually (10 million rice balls per day (maximum)).

Measures

In cooperation with METI, JETRO, etc., reinforcing the measures, including the following initiatives:

- Provision of information on support measures, **trends in overseas markets/regulations**, and **good practices** through seminars and other events held under the framework of the Public-Private Council for Promoting Global Food Value Chain.
- Support for the **feasibility study projects related to the construction of logistics and commercial distribution** in overseas sites, and promotion of the utilization of agricultural support loans.
- Reinforcement of **support systems in overseas sites** through the use of **export support platforms**, such as support through local legal and tax affairs.



Information dissemination to stimulate the desire to visit Japan (Japan National Tourism Organization (JNTO))



Countryside stays to enjoy lodging, food, and experience (MAFF)



Gastronomic tourism (Japan Tourism Agency)



Sake brewery tourism (National Tax Agency)

Global expansion of plant varieties

- It is necessary to expand the “earnings” of Japan’s agriculture from overseas through strategic protection and utilization of Japan’s excellent varieties, and to lead to the investment in the development and introduction of highly competitive new varieties that are to be the source of “earnings.”

➔ Establish a framework to earn income from overseas and return it to the promotion of domestic agriculture, suppress the overseas outflow and unauthorized cultivation of excellent varieties,, and promote the development and reevaluation of market-oriented varieties..

Strategic promotion of overseas licenses

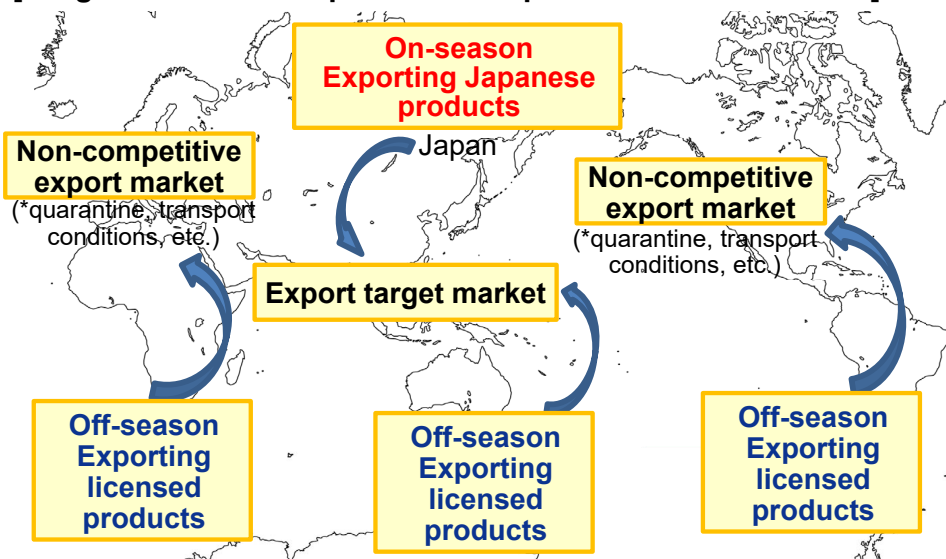
[Ideal image]

Through strategic licensing of excellent varieties,

- (1) Establishing a system that enables **year-round supply of Japanese brands** in the target market by conducting overseas licensed production during the off-season of Japanese production, and leading to **direct “earnings”** for farmers.
- (2) **Developing new competitive varieties** upon obtaining overseas royalties and **introducing them at the sites**, thereby leading to **farmers’ future “earnings.”**

➔ **Promote the early establishment and commercialization of a plant breeders’ rights management organization** responsible for these initiatives.

[Image of overseas expansion of Japan’s excellent varieties]



Suppression of overseas outflow and unauthorized cultivation of excellent varieties

- **Raising awareness of intellectual property among related parties**
 - Promoting **education on intellectual property to raise awareness thereof** among seed and seedling dealers and other related parties in Japan, and enhancing support by experts.
- **Domestic management to suppress outflow**
 - Formulating guidelines on how permission management should be so that only farmers handle seedlings.
 - **Suppressing outflow and promoting brand management** through the utilization of a seedling leasing system and the system management of seedlings.
 - **Enhancing the advantages and rights of plant breeders**, such as improving the effectiveness of the exercise of plant breeders’ rights against infringements, and creating an environment that facilitates the use of DNA variety identification technology.
 - Promoting **responses to new outflow risks**, such as the increase in online transactions.
- **Protection of rights overseas**
 - **Developing concepts and standards for overseas applications.**
 - Preparing the conditions for a **defensive overseas license** for the purpose of placing licensees in charge of monitoring and responding to infringements in countries with a high risk of variety leakage.

Development and reevaluation of market-oriented varieties

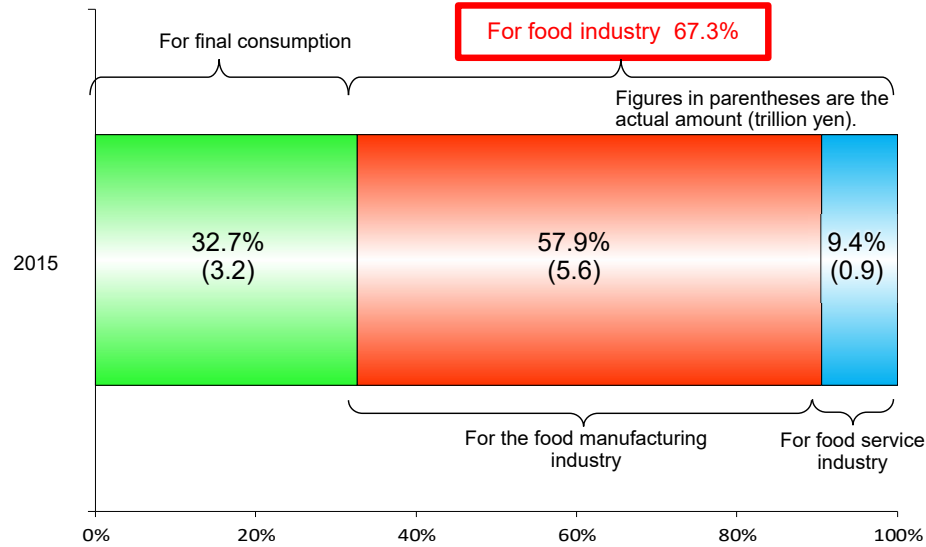
- In the short term, promoting the discovery of varieties with value and characteristics conducive to earning income overseas by reevaluating unused domestic varieties.
- In the medium term, enhancing the initiatives to reevaluate unused domestic varieties and promoting marketing and establishment of breeding targets in prospect of overseas markets.

4. Food security for every citizen and sustainable food systems

Sustainable development of the food industry

- In the food system, the food industry is positioned between farmers and consumers and plays an important role not only in the stable supply of food to citizens but also in improving the income of farmers with business relationships and in maintaining and developing regional economies.
- For such sustainable development of the food industry, initiatives by food business operators, etc. to improve productivity and increase added value will be promoted, such as the use of domestic agricultural products and the rationalization of distribution.

○ Ratio of domestic agricultural, forestry, and fishery products for food to each use



○ Position of the food manufacturing industry in local employment and economy

	Share of employees in the food manufacturing industry among all manufacturing industries in each prefecture	Share of shipment value of the food manufacturing industry among all manufacturing industries in each prefecture
Nationwide	National average: 15.9%	National average: 11.6%
1st	Okinawa Prefecture: 52.7%	Kagoshima Prefecture: 53.2%
2nd	Hokkaido: 47.1%	Okinawa Prefecture: 52.8%
3rd	Kagoshima Prefecture: 42.5%	Hokkaido: 41.1%
4th	Aomori Prefecture: 30.4%	Miyazaki Prefecture: 33.6%
5th	Miyazaki Prefecture: 30.2%	Aomori Prefecture: 33.5%

○ Initiatives by food business operators, etc. to improve productivity and increase added value

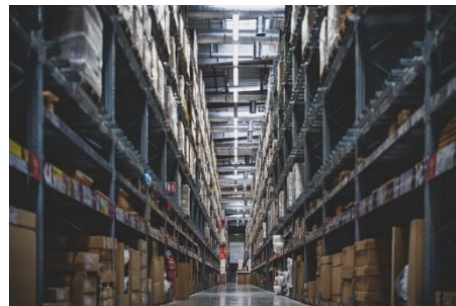
Establishment of stable business relationships with agricultural, forestry, and fishery operators

Example) Manufacturers set up primary processing facilities near production sites to respond to increased procurement of domestic sweet potatoes.



Rationalization of distribution

Example) Retailers newly set up dry centers to facilitate in-house collection and delivery of vegetables.



Promotion of reduction of environmental burden

Example) Manufacturers switch from gas-powered fryers to induction fryers to help reduce greenhouse gas emissions.



Contribution to consumer choice

Example) Retailers introduce display monitors and digital signage on sales floors and shopping carts to promote the initiatives of producers behind environmentally friendly food products and information on production areas through videos.

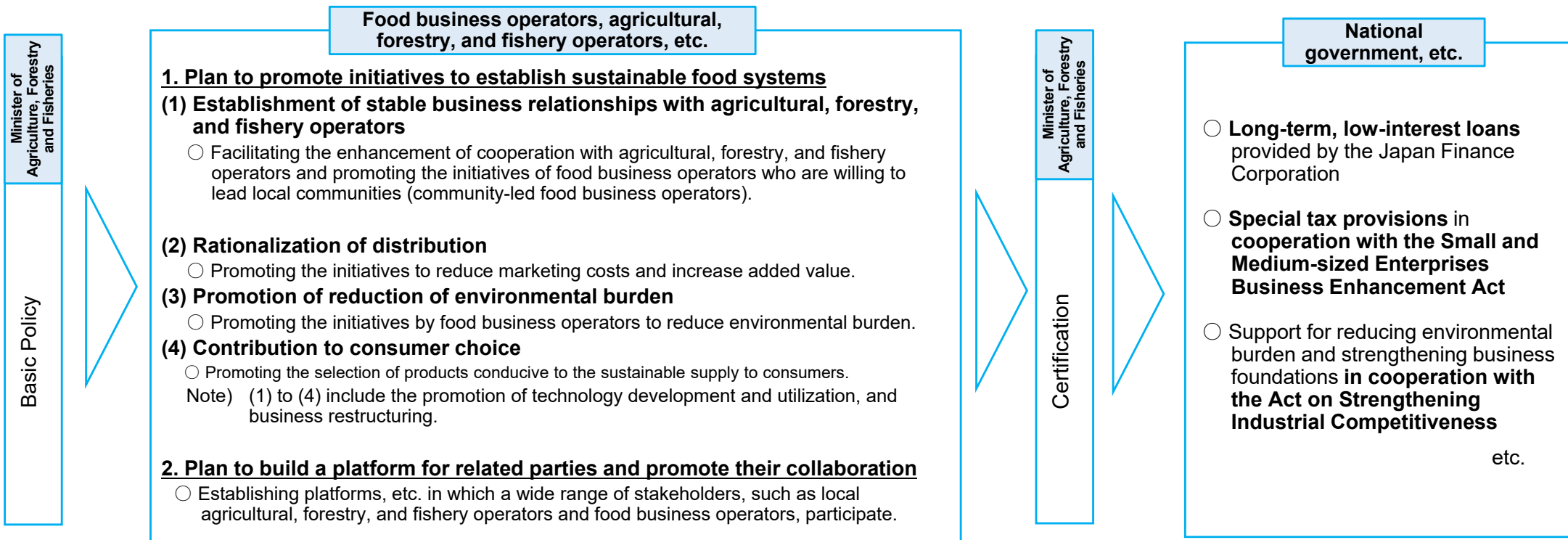


Sustainable development of the food industry

○ The following measures will be legislated to establish sustainable food systems:

- (1) **Food business operators, etc. formulate plans** in accordance with the basic policy formulated by the government. **Initiatives to establish stable business relationships with agricultural, forestry, and fishery operators** are implemented.
- (2) The government, etc. **provides comprehensive support** for these initiatives through financial loans, special tax provisions, etc.

[New planning system for sustainable development of the food industry]

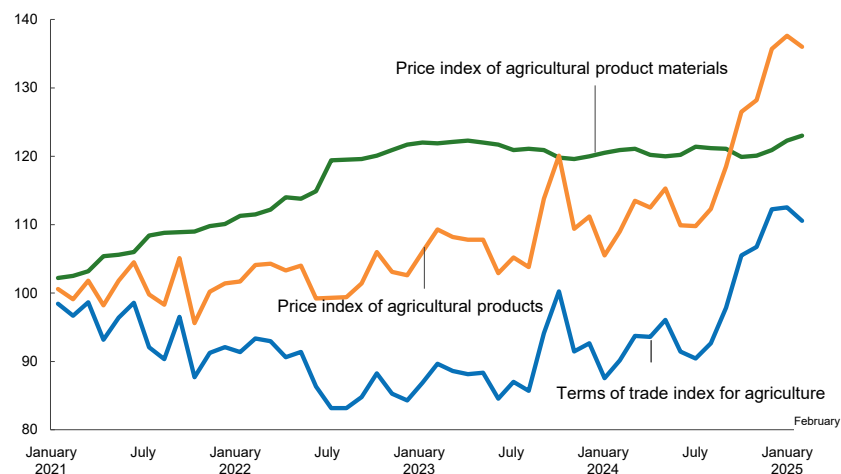


Formation of reasonable prices of food

- For the **formation of reasonable prices of food**, it is **necessary** for the **stakeholders in the food system to take into consideration reasonable costs** so as to ensure the sustainable supply of food **while appropriately reflecting the supply-demand situation and quality assessment**.
- In order to ensure sustainability of the food system, **a bill for price formation** that takes into account the reasonable costs required for the sustainable supply of food **will be submitted to the ordinary session of the Diet**, in line with the **discussions by a council** consisting of parties involved in each stage from production to processing, distribution, sales, and consumption.

○ Price indices of agricultural product materials and agricultural products as well as the terms of trade index for agriculture

- The price index of agricultural product materials has been rising since 2021 due to soaring prices of fertilizer, feed, etc. and has leveled off and remained high since 2023.
- Meanwhile, the price index of agricultural products, which had been almost flat since 2021, has risen sharply along with the terms of trade index for agriculture since the latter half of 2024 due to the large increase in the prices of rice and vegetables.



Source: MAFF, "Survey on Agricultural Price Statistics."

Note: 1) Figures for each month/year are based on the average price for 2020 as 100.

2) Estimates for 2024 and 2025.

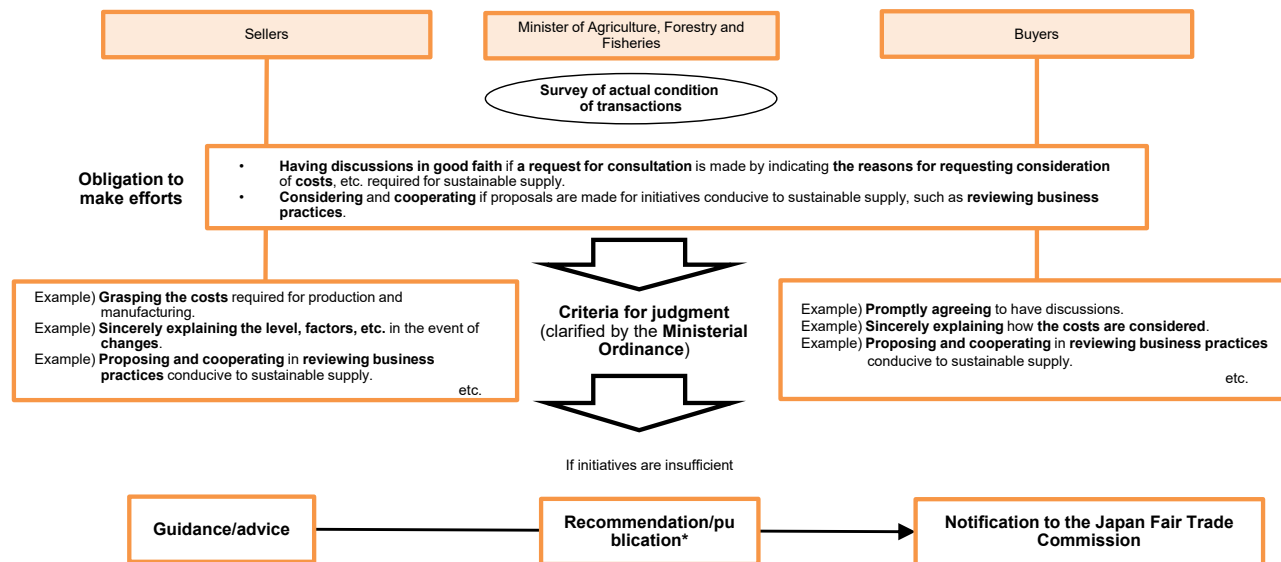
3) Terms of trade index for agriculture = Price index of agricultural products / Price index of agricultural product materials × 100.

4) The terms of trade index for agriculture are calculated from figures for each month/year based on the average value for 2020 as 100.

○ Specific measures for appropriate transactions

- For price formation that takes costs into account, the following measures will be taken:
- Establishing measures for the obligation to make efforts by buyers and sellers and a code of conduct on the obligation.
 - If the initiatives are insufficient, guidance/advice or recommendation/publication by the Minister of Agriculture, Forestry and Fisheries. (notification to the Japan Fair Trade Commission).
 - Designating items for which costs are usually difficult to recognize in transactions, and certifying organizations that create cost indicators.

[New framework] "Consideration" of reasonable costs while taking supply and demand as well as quality as a base - Introduction of regulatory measures -



*Collecting reports and conducting on-the-spot inspections (with penalties) to the extent necessary for making recommendations.

Ensuring food access

- Given that **the proportion of people unable to obtain sufficient food due to economic and physical reasons is believed to be increasing**, it is necessary to ensure that **every citizen has access to food and can enjoy a healthy dietary habit in normal times**.
- To this end, the relevant ministries and agencies will coordinate to promote **the establishment of systems for the provision of diverse food in cooperation with local stakeholders, the strengthening of functions of food banks and children's cafeterias, and the enhancement of last-mile delivery initiatives**.

Support measures related to economic access

- **Establishment of systems that contribute to the provision of food**
 - Establishing systems to facilitate the provision of food in cooperation with local stakeholders.
 - Building connections through food support, etc. from the perspective of preventing loneliness and isolation.
 - Establishing a framework for promoting food donations, etc. to food banks, etc.
- **Support for food provision activities by food banks, children's cafeterias, etc.**
 - Supporting the provision of food, etc. in cooperation with food banks, etc. by self-reliance consultation support organizations.
 - Supporting the establishment of food banks and children's cafeterias, etc. and strengthening of their functions.
 - Supporting the initiatives for food banks by local governments.
 - Supporting the provision of meals by children's cafeterias and children's food delivery.
- **Provision of food to food banks, children's cafeterias, etc.**
 - Provision government stockpiled rice free of to children's cafeterias, etc. and food banks.
 - Providing food stocks of the government for disasters to food banks, etc.
- **Dissemination of the status of food access and best practices, etc.**
 - Disseminating information on the "ensuring smooth food access" website.

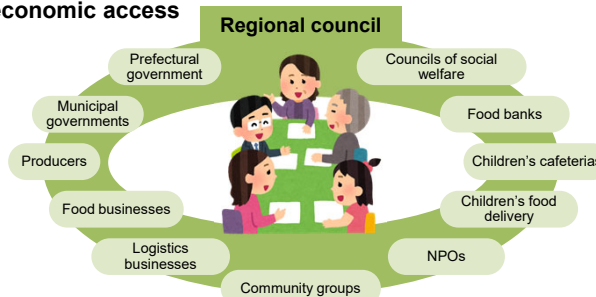
Support measures related to physical access (measures for people with shopping difficulties)

- **Development of facilities serving as bases for mobile sales, etc.**
 - Supporting the development of local exchange hub facilities that contribute to regional empowerment through mobile sales for people with shopping difficulties.
- **Securing the means of transportation to stores**
 - Supporting the maintenance of community functions such as transportation and welfare in depopulated areas and hilly and mountainous areas, etc.
- **Delivery of stores through mobile sales, etc.**
 - Supporting the implementation and introduction of mobile sales, etc. to realize last-mile delivery.
 - Supporting initiatives such as mobile sales in depopulated areas, etc.
- **Delivery of goods**
 - Supporting the operating expenses to improve the efficiency of last-mile delivery, including in depopulated areas.
 - Supporting the demonstration tests of automated delivery robots.
- **Dissemination of the status of food access and examples of countermeasures, etc.**
 - Proving information of food access problems (people with shopping difficulties, etc.) through portal websites, etc.
 - Introducing "dejikatsu (digital initiatives)" support for hilly and mountainous areas and support measures for people with shopping difficulties on a website.

○ Examples of support measures related to economic access



Support for establishment of food banks and children's cafeterias and strengthening of their functions



Establishment of systems to facilitate the provision of food in cooperation with local stakeholders

○ Examples of support measures related to physical access



Introduction of mobile sales vehicles



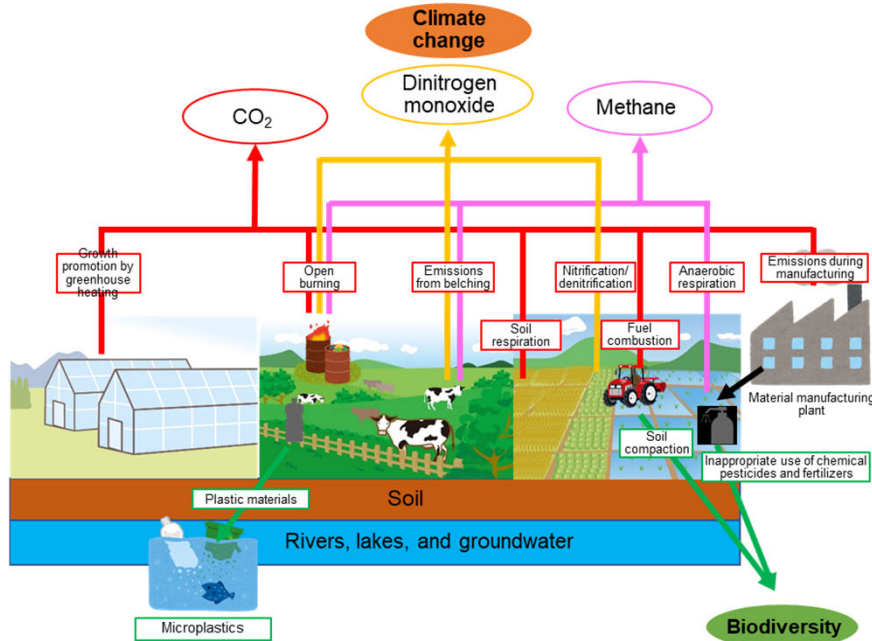
Establishment of unmanned stores

5. Establishing environmentally harmonized food systems and fulfillment of multifunctionality

Establishing environmentally harmonized food systems

○ Focusing on the aspect of food supply imposing burden on the environment, it is necessary to establish environmentally harmonized food systems through food production, distribution, and consumption that take into account the greenhouse gas emissions reduction, biodiversity conservation, and the effective use of resources in rural areas, with the understanding and mutual cooperation of farmers, food business operators, consumers, and other stakeholders in the food systems.

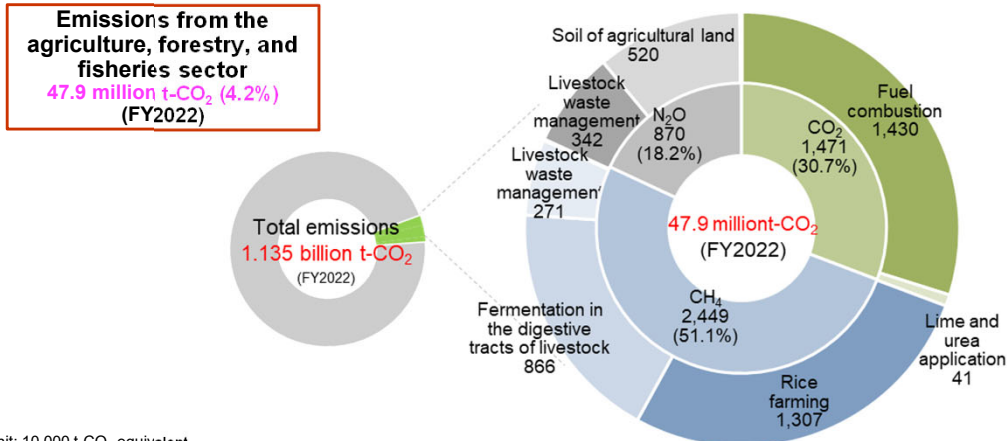
○ Agricultural production activities and global environmental risks



Matters identified as global environmental risks

Main items	Impacts on climate change and biodiversity
Fertilization (fertilizers)	<ul style="list-style-type: none"> • Generation of dinitrogen monoxide from fertilizer components that remain in the soil without being absorbed by crops • Use of fossil fuels along with fertilizer production and procurement • Deterioration of water quality due to nitrate-nitrogen
Pest control (agricultural chemicals)	<ul style="list-style-type: none"> • Loss of biodiversity due to inappropriate agricultural chemical use
Agricultural machinery, heating facilities, etc.	<ul style="list-style-type: none"> • CO₂ emissions from fossil fuel use • Soil compaction by agricultural machinery work
Plastic materials, etc.	<ul style="list-style-type: none"> • Treatment at the disposal stage • Fuel combustion in the manufacturing stage • Effects of microplastics on marine organisms • Ecosystem disturbance due to inappropriate treatment
Livestock rearing	<ul style="list-style-type: none"> • Methane generation by fermentation in the digestive tracts of ruminants such as cattle • Generation of methane and dinitrogen monoxide from treatment of livestock waste • Water pollution by nitrate-nitrogen
Field management	<ul style="list-style-type: none"> • Methane generation from paddy field soil, etc. • Disturbance by plowing • Water pollution and eutrophication due to runoff of soil particles

○ GHG emissions from agriculture, forestry, and fisheries in Japan



Unit: 10,000 t-CO₂ equivalent

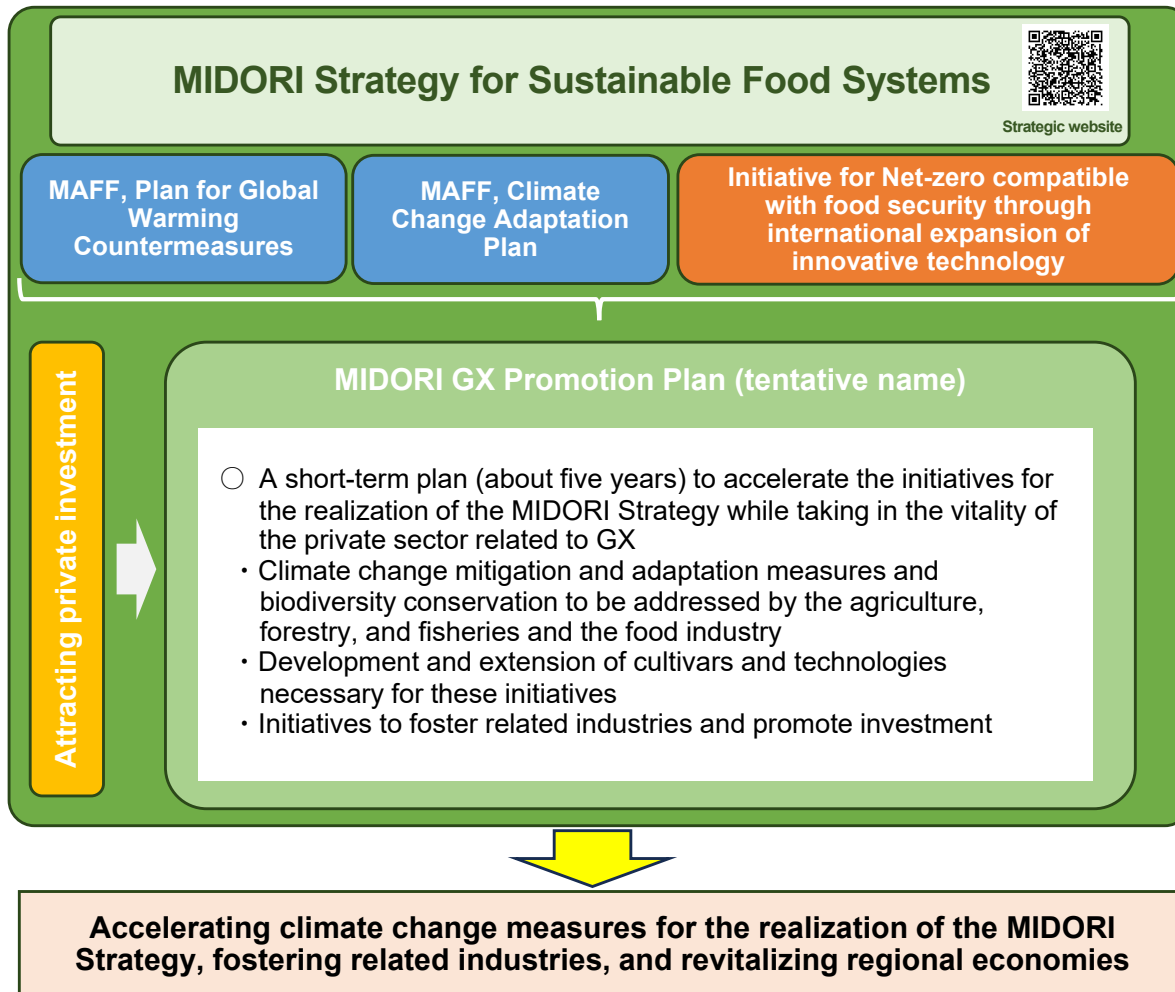
* The greenhouse effect is 25 times greater for methane and 298 times greater for N₂O than for CO₂.

* The total amount of emissions includes CH₄ and N₂O from fuel combustion and open burning of field crop residues, but they are not shown since they are negligibly small. For this reason, the sum of emissions shown in the breakdown does not necessarily correspond with the sum of emissions per gas.

Source: Prepared by the MAFF based on the Greenhouse Gas Inventory Office of Japan in the National Institute for Environmental Studies, "Greenhouse Gas Emissions Data for Japan."

Promotion of the MIDORI GX Promotion Plan (tentative name)

- The government as a whole has formulated the GX2040 Vision, which aims to link GX to economic growth, and the greenhouse gas emission allowance trading system (GX-ETS) will begin in FY2026. Therefore, it is necessary to incorporate the vitality of such private investment into the agriculture, forestry, and fisheries sectors to **accelerate climate change measures for the realization of the MIDORI Strategy, foster related industries, and revitalize regional economies.**
- In addition to **reducing greenhouse gas emissions, strengthening the functions of carbon sinks, and promoting regional circulation of resources and energy,** the “MIDORI GX Promotion Plan (tentative name)” will be formulated in the future, including the following initiatives: **the development and dissemination of production stabilization technologies and heat tolerant cultivars** to avoid and mitigate damage from climate change, the extension of smart agricultural technologies that contribute to the promotion of GX, and the **fostering of related industries** that process, distribute, and sell agricultural products produced with reduced environmental burden, as well as the **promotion of investment** in these initiatives.



Reference: Main technologies and actions for the GHG emissions reduction that can be implemented overseas

• GHG emission reduction technologies and initiatives

Methane emission reductions from paddy fields

Alternate Wetting and Drying (AWD)
prolonging mid-season drainage



N₂O emission reductions with reduced fertilizer application

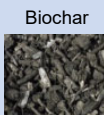
Biological Nitrification Inhibition (BNI) technology



Methane and N₂O emission reductions from livestock production

Amino acid balanced feed
Bypass amino acids
Feed additives reducing methane from enteric fermentation

Carbon storage increase in agricultural soils



Biochar

Reducing Emissions from Deforestation and Forest Degradation (REDD+) and enhancement of forest carbon sinks



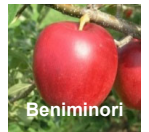
• Development and extension of cultivars and technologies

Development and dissemination of heat-tolerant cultivars

- Increased planting of heat tolerant cultivars (paddy rice) such as “Niji-no-kirameki”
- Development of cultivars with good coloring even at high temperatures



Niji-no-kirameki



Beniminori

• Fostering related industries and facilitating investment

Utilization of J-Credit system

Expansion and development of the J-Credit system that utilizes technologies of regional start-ups

Launch of the emission allowance trading system (GX-ETS)

Visualization of efforts to reduce environmental burden

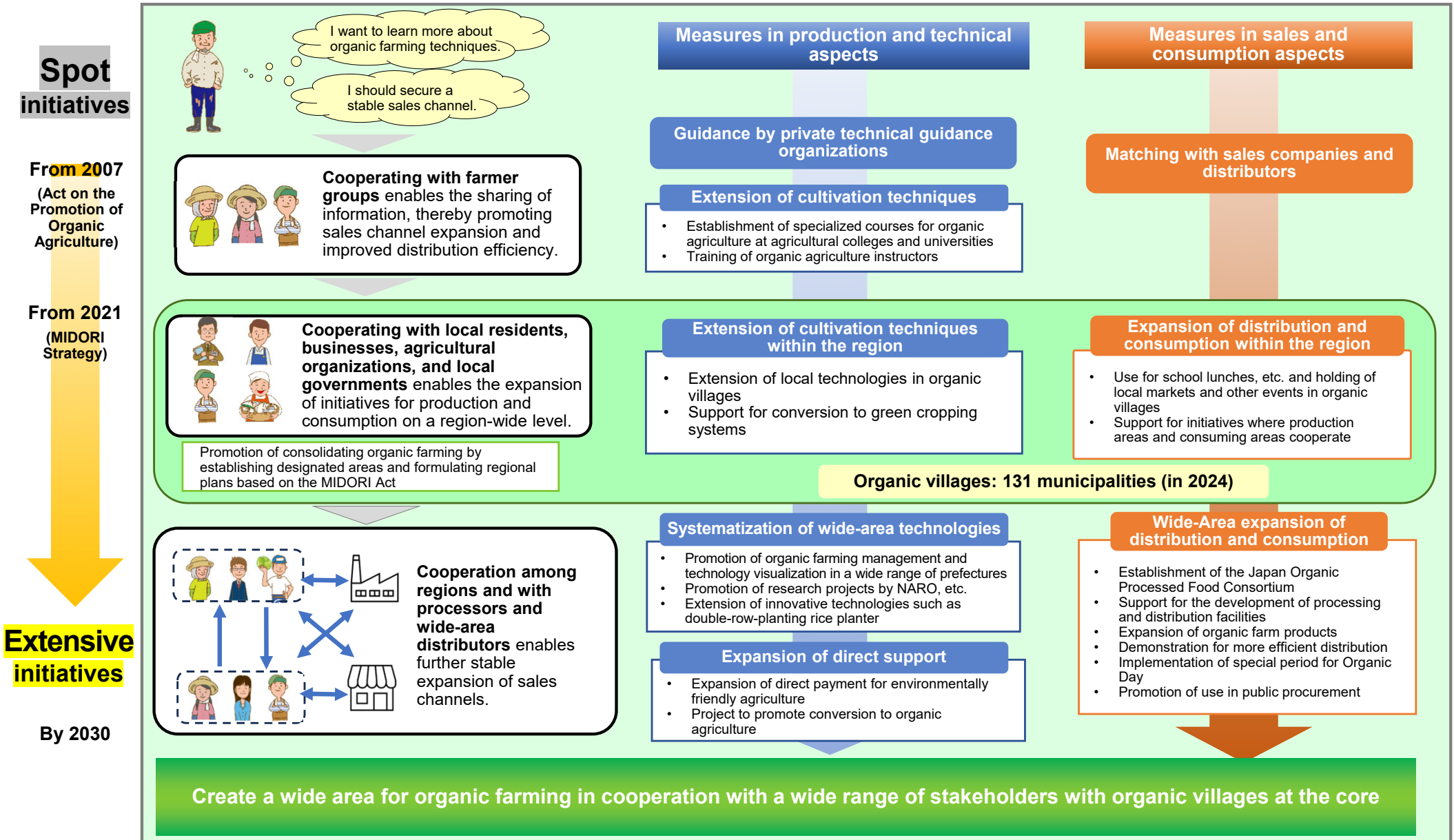
Processing, distribution, and sales of agricultural products produced with reduced environmental burden (ChoiSTAR)



*REDD+: Reducing greenhouse gas emissions attributed to deforestation and forest degradation in developing countries

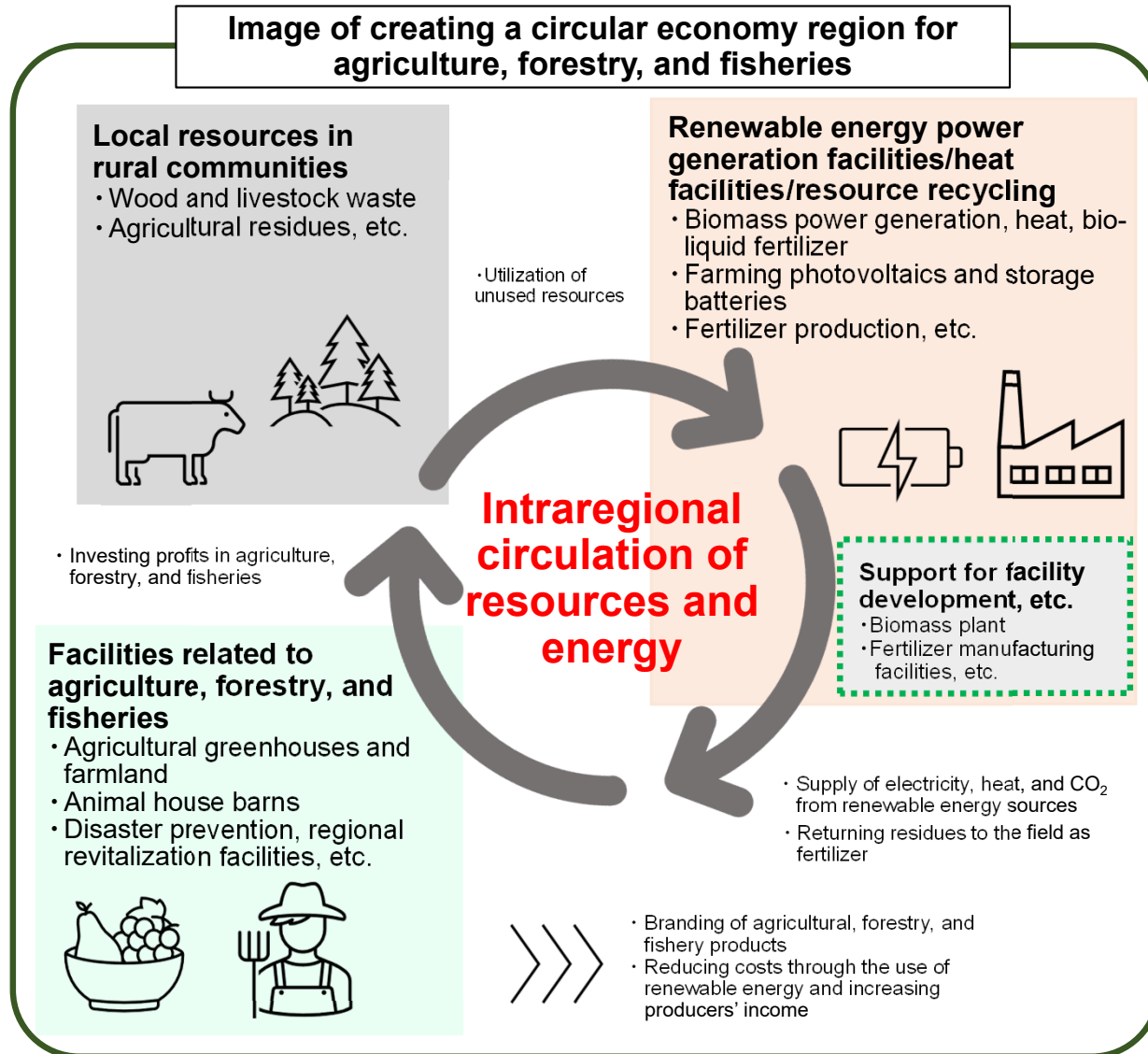
Promotion of organic farming

- Organic farming, which does not use chemical fertilizers, which are highly dependent on imports, not only contributes to the conservation of biodiversity and the prevention of global warming, but also contributes to the establishment of an agricultural production system that is less affected by international conditions.
- In order to facilitate the engagement of more farmers in organic farming, it is important to proceed from individual farmers' initiatives to extensive initiatives in cooperation with a wide range of stakeholders.



Initiatives for the circular economy in the agriculture, forestry, fishery, and food industries

- Based on the “MIDORI Strategy for Sustainable Food Systems” (formulated in May 2021) and the “MIDORI Food Systems Act” (enforced in July 2022), a **sustainable food system will be established** from inputs to production, processing, distribution, and consumption.
- The “**creation of a circular economy region for agriculture, forestry, and fisheries**” will be promoted, which produces **fertilizers and energy from unused resources derived from the agriculture, forestry, and fisheries** and uses them within the region.



Using electricity and heat from poultry manure boilers for fertilizer production to return to farm households

- Installing poultry manure combustion power generation boilers using local livestock waste (chicken droppings) as a raw material.
- Using electricity and heat for fertilizer production and rendering facilities, and returning produced fertilizer and feed materials to local livestock farms and crop farms.



Poultry manure combustion power generation boiler



Cultivation of Chinese chives

Utilizing heat and CO₂ from biogas power generation for agricultural greenhouses

- Developing biogas power generation facilities using local livestock waste and food wastes, etc. as raw materials.
- Using heat and CO₂ in tomato greenhouses, and returning bio-liquid fertilizer to local crop farms.



Biogas plant



Cherry tomato cultivation

Fulfillment of multifunctionality

- **Appropriate conservation and management of local resources and the continuation of agricultural production activities** are important for the **proper maintenance and fulfillment of the multifunctionality of agriculture**. Therefore, support is being provided for regional joint through the **multifunctional payment system** and the **direct payment system to farmers in hilly and mountainous areas**.
- On the other hand, as **population decline and aging** are concerned, there is concern that it will be difficult to continue regional joint activities. Therefore, it is necessary to **promote initiatives to strengthen the structure of community-based organizations and community agreements**, and to maintain and expand farmland that is engaged in appropriate conservation management, as well as continuation of agricultural production activities.

Promotion of appropriate conservation and management of local resources

- **Promotion of appropriate conservation and management of local resources**

Promoting participation of diverse human resources and regional expansion of community-based organizations for further strengthening the structure of the organizations subject to the multifunctional payment system.

- **Promotion of participation of diverse human resources**

Facilitating participation of diverse groups and non-farmers by promoting matching of the organizations with corporations, schools, and non-farmers who are interested in agriculture by prefectures, municipalities, etc.



Dredging up mud by members of the organization and employees of a construction company



Wildlife survey in collaboration with the organization and a local school

- **Promotion of regional expansion of organizations**

Establishing frameworks that enable conservation and management activities to be carried out over a larger area than neighborhood by promoting regional expansion of the organizations with support of prefectures, municipalities, etc.

- **Promotion of initiatives to reduce environmental burden**

Efficiently and effectively promoting the initiatives to reduce environmental burden, such as extending midseason drainage and winter flood control, through coordinated regional efforts under the multifunctional payment system.



Extending midseason drainage



Winter flood control

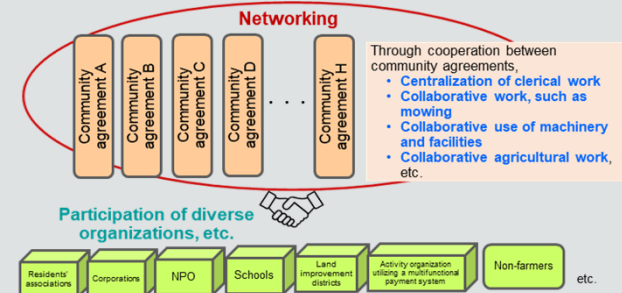
Continuation of agricultural production activities in hilly and mountainous areas

With regard to the direct payment system to farmers in hilly and mountainous areas, promoting the creation of a system that facilitates the continuation of joint activities, as well as the labor-saving and efficiency improvements in agricultural work, and revitalization activities in rice terrace areas.

- **Establishment of a system to continue joint activities**

Promoting the creation of a framework that facilitates the continuation of joint activities by establishing a network of community agreements and creating a system that allows various organizations to participate in activities.

<< Image of system creation >>



Establishment of a contract system for agricultural work and a joint work system centered on business farmers

- **Labor saving and efficiency improvement of farm work**

Promoting labor-saving and efficiency improvement in agricultural work by promoting the introduction of smart agricultural technologies.



Introduction of remote-controlled self-propelled mower

- **Promotion activities in rice terrace areas**

Facilitating the initiatives to promote rice terrace areas based on the Certified Rice Terrace Area Promotion Activity Plan.



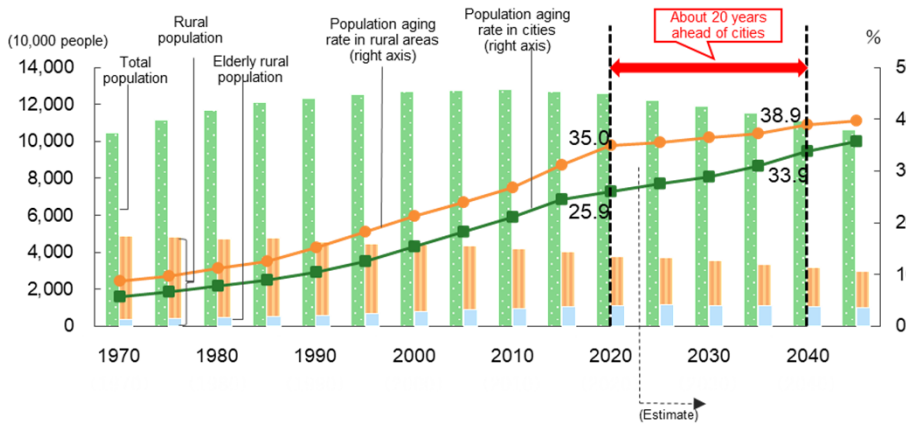
Conservation of rice terrace

6. Promoting the Development of rural areas

Expansion of populations related to rural communities

- In rural areas, **population decline and aging are progressing** ahead of urban areas, raising concerns that the **stable food supply will be hindered** by the decrease in the number of farmers.
- Due to the **decline in community functions** associated with the decrease in farmers, **activities such as mowing and mud removal, which are inseparable from agricultural production activities** that have been conducted jointly by farmers, **will become stagnant**, raising concerns that this will **affect agricultural production activities**. The number of **non-farmers** in rural areas is also expected to **decline sharply in the future**, raising concerns that it will be **difficult to maintain regional communities in rural areas**.
- To this end, it is **important to maintain the population in rural areas and expand** the number of diverse human resources outside rural areas who will be continuously involved in agriculture and rural areas ("**populations related to rural communities**").

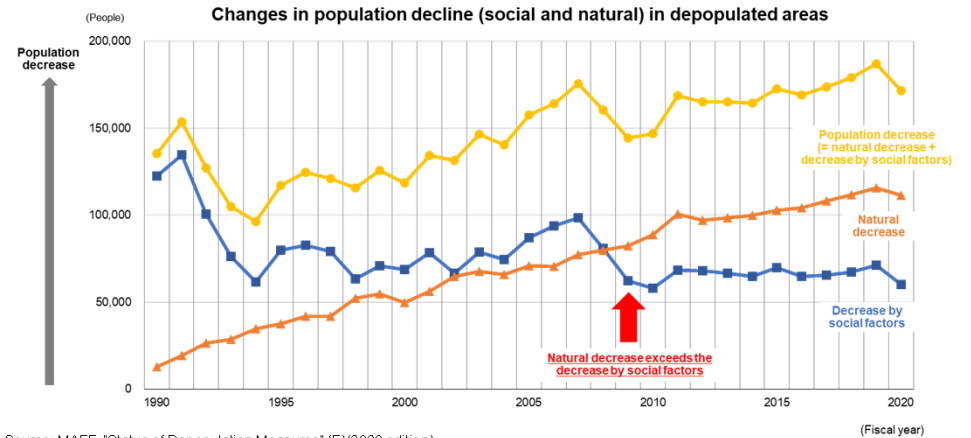
○ Population and aging rate in rural and urban areas



Source: Compiled by the MAFF based on the Ministry of Internal Affairs and Communications, "National Census of Japan" and the National Institute of Population and Social Security Research "Population Projections for Japan by Region (2018)."

Note: Densely inhabited districts (DID) in the national census are defined as cities and the rest as rural areas. The aging rate is the percentage of the elderly aged 65 and over in the total population.

○ Changes in population decline (social and natural) in depopulated areas



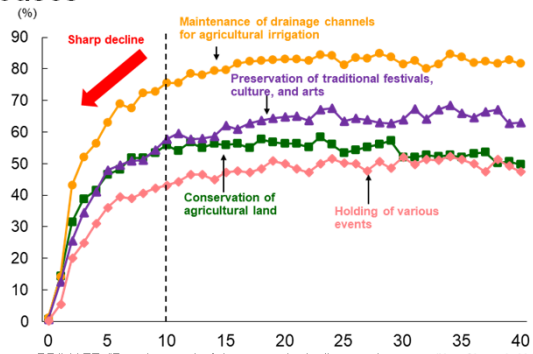
Source: MAFF, "Status of Depopulation Measures" (FY2020 edition).

Note 1: Depopulated areas are areas falling under (1), (2), or (3) below. (Indicators are the population decline rate, the ratio of elderly, the ratio of the young, and the financial strength index.)

- (1) Areas of municipalities prescribed in Article 2, Paragraph 1 of the Act on Special Measures concerning Support for Sustainable Development of Depopulated Areas (hereinafter referred to as the "Sustainable Development Act") or areas of municipalities deemed to be depopulated areas pursuant to Article 41, Paragraph 1 of said Act.
- (2) Areas deemed to be depopulated areas pursuant to the provisions of Article 3, Paragraph 1 or Paragraph 2, or Article 41, Paragraph 2 of the Sustainable Development Act (including cases that are applied mutatis mutandis pursuant to the provisions of Paragraph 3 of the same Article).
- (3) Areas of municipalities deemed to be depopulated areas pursuant to the provisions of Article 42 of the Sustainable Development Act.

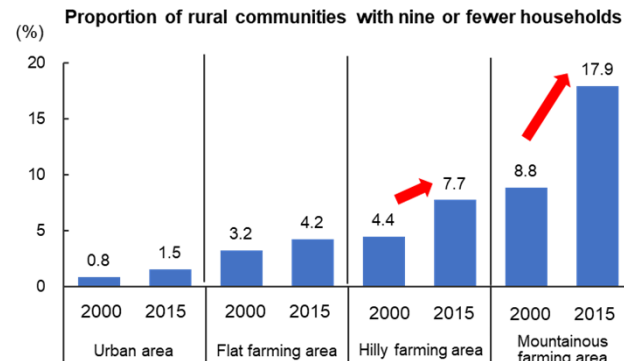
Note 2: Some depopulated areas for which data cannot be obtained are excluded.

○ Relationship between the implementation rate of community activities and the total number of houses



Source: PRIMAFF, "Development of Japanese Agriculture and Rural Structure - Comprehensive Analysis of the 2015 Census of Agriculture and Forestry" (December 2018).

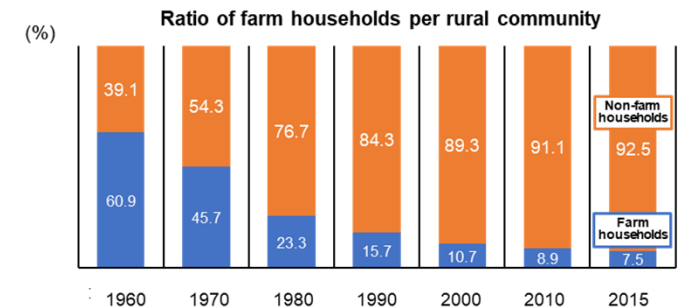
○ Proportion of rural communities with nine or fewer households



Source: MAFF, "Census of Agriculture and Forestry."

Note: For the classification of agriculture area, the November 2001 revision is used for 2000, and the December 2017 revision is used for 2015.

○ Ratio of farm households per rural community



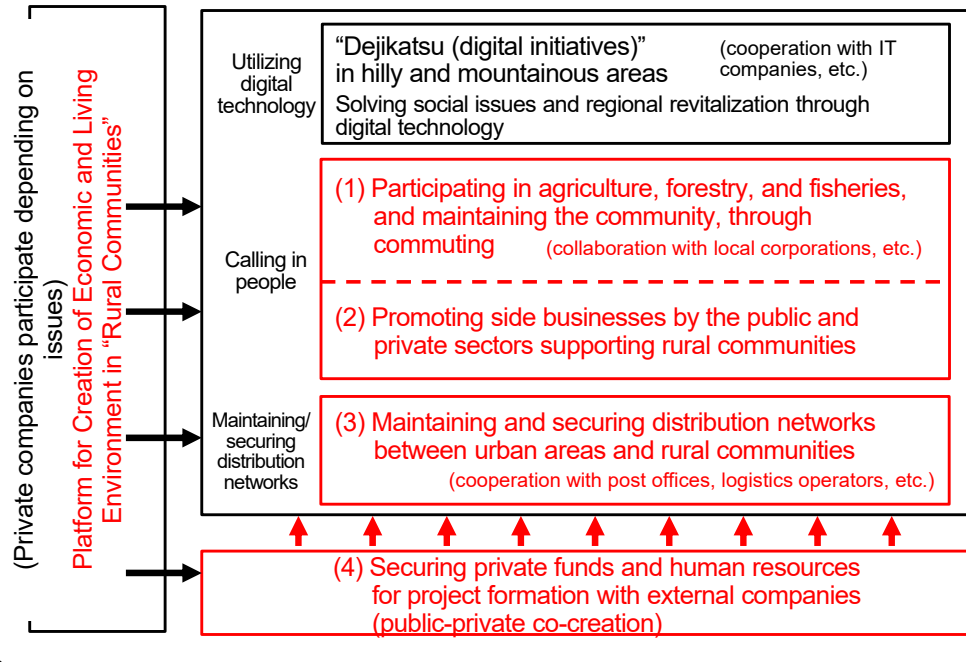
Source: MAFF, "Census of Agriculture and Forestry."

Creating opportunities for diverse human resources to be involved in rural areas

- In cooperation with not only farmers but also private companies in other industries and regions, local governments, and relevant ministries and agencies, external human resources will be involved while utilizing the framework of public-private co-creation, which will create innovation in the region through “connections” of different fields, thereby solving regional issues.

Project for Creation of Economic and Living Environment in “Rural Communities”

- In February 2025, the “Platform for Creation of Economic and Living Environment in ‘Rural Communities’” was established to involve many stakeholders, including private companies, educational institutions, and financial institutions, in order to form projects on the ground, and discussions are held on how best to match and cooperate with local communities and companies.
- This platform, where industry, government, academia, finance, labor, and media gather, is utilized as a place to connect with various stakeholders and create “new connections” between rural communities and local financial institutions, IT companies, tourism companies, office workers and companies in major cities, local food industries, universities, and start-ups.



New “connections” with other industries and human resources not only within the region but also outside the region

Example of rural areas × regional financial institutions

A local financial institution acting as an intermediary to match issues in rural areas with private companies



Matching event in Kumamoto Prefecture (supported by Higo Bank)

Examples of rural areas × office workers and companies in large cities

Entry into agriculture by JR East employees as a side business



JR East employees working at a cherry farm

Agriculture support volunteer tour utilizing the corporate version of hometown tax payment (Asahi Breweries, Nikka Whisky, JTB)



Apple harvesting by tour participants

Example of rural areas × IT enterprises

Facilitating labor-saving of farm work through a tool developed by an IT company to check and automate farm work in real time



Source: Ezowin Inc.

Example of rural areas × tourism companies

Collaboration between local stakeholders and tourism companies utilizing the value and appeal of local resources



High-value-added dishes using local ingredients

Countryside stay to experience rural life

Winter activities unique to snow country

Example of local food industry × universities and start-ups

A start-up making use of unused local resources, such as awamori lees, to produce plant-based umami ingredients using original fermentation technology



Example of production of seasoning made by fermenting awamori lees

Economic and lifestyle initiatives

- As “**economic**” initiatives to improve income and create employment by utilizing the diverse local resources of rural areas, various initiatives will be promoted, including the following: the creation of new value-added, internally generated businesses by fully utilizing local resources and further promoting initiatives in cooperation with other fields; countryside stay that contributes to attracting tourists (including inbound tourists) to rural areas and the improvement of the unit price of accommodation (greater value added); social participation of persons with disabilities and others who need support in their social lives; and agriculture-welfare collaborations aiming to promote regional agriculture through these initiatives.
- As a “**lifestyle**” initiative to secure the convenience of life, multiple community agreements and residents’ associations are cooperating to support the formation, establishment, and enhancement of activities of rural RMOs that support farmland conservation and livelihoods, and to promote the establishment of support systems in cooperation with municipalities, prefectures, and relevant ministries.

“Economic” initiatives

Promotion of added value creation using diverse resources in rural areas

- Promoting initiatives to create added value through the utilization of diverse local resources other than agricultural, forestry, and fishery products and the participation of diverse entities other than farmers.
- Promoting the sixth industrialization through the processing and sale of agricultural products and the management of farm restaurants.



Selling bread made by processing eggs at a developed facility

Promotion of countryside stay

- Establishing an implementation system involving stakeholders both inside and outside the region, and promoting the development of tourism content utilizing diverse local resources such as food, culture, history, and scenery, as well as improvement of the Internet usage environment.
- Promoting initiatives to expand food-related consumption through inbound tourism (synergistic effect with export expansion).



Lifestyle experience in an area with a certified world agricultural heritage

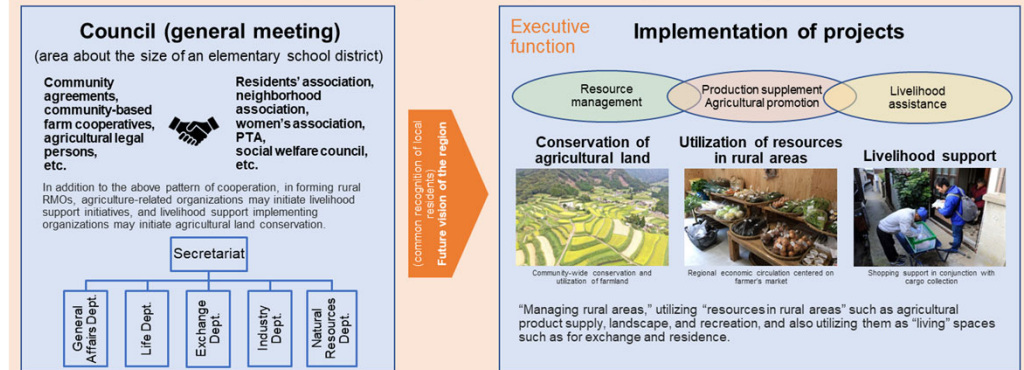
Promotion of agriculture-welfare collaborations

- Developing an environment conducive to work for people with disability while promoting the expansion of regional councils and the extension/expansion of universal farms, with the participation of municipalities, and agricultural and welfare stakeholders.
- Promoting understanding of the significance and effects of initiatives involving even corporations and consumers through Noufuku Day (November 29) and other events, and fostering specialized human resources in agriculture-welfare collaborations.

“Lifestyle” initiatives



Region management organization (rural RMO)



Case of a rural RMO in Maniwa City, Okayama Prefecture

With elementary schools closed and post offices closed, the Rural RMO was established. Initiatives are taken to improve the quality of life, secure profits through the sale of agricultural and specialty products, and restore abandoned cultivated land. Furthermore, on-demand transportation is provided to support shopping and other activities of the elderly.

- [Initiatives] (conservation of agricultural land and utilization of resources in rural areas)**
- Demonstration for the utilization of radio-controlled mowers
 - Measures against wildlife damage in cooperation with hunting associations
 - Sale of lunch boxes, etc. using local produce
 - Study of optimal land use



- [Initiatives] (shopping support)**
- Obtaining requests through questionnaires and providing feedback
 - Demonstration of cashless unattended store



- [Initiatives] (transportation support)**
- Study of a system for collecting agricultural products through the integration of passenger and freight transport (agricultural products)



Development of hilly and mountainous areas

- In order to overcome the various issues that hilly and mountainous areas are facing and to promote agriculture in those areas, **measures to “support” agriculture, measures to “earn” from agriculture, and measures to expand the relevant population “involved” in rural areas** will be implemented in an integrated package in accordance with the actual conditions of each region.

“Supporting” agriculture in hilly and mountainous areas

○ Rectification of disadvantageous agricultural production conditions

Regarding the direct payment system to farmers in hilly and mountainous areas,

- Promoting the creation of a network of community agreements and a system that allows various organizations to participate in activities.
- Promoting labor-saving and efficiency improvement in agricultural work and promotion activities in rice terrace areas through the introduction of smart agricultural technologies.



[Collaborative agricultural work]



[Introduction of remote-controlled self-propelled mower]



[Conservation of rice terrace]

○ Maintenance of community functions

- Promoting the formation of rural RMOs involving diverse human resources such as women and young people.
- For small-scale communities in hilly and mountainous areas, providing support for the establishment of rural RMOs and the enhancement of their activities, and promoting the establishment of support systems in cooperation with municipalities, prefectures, and relevant ministries and agencies.



[Conservation of agricultural land]



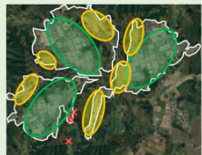
[Utilization of resources in rural areas]



[Livelihood support]

○ Formulation and implementation of regional land use plan

- Developing land use concept through community-wide discussions.
- Promoting initiatives to prevent, restore, and resolve dilapidated farmland, including the extensive use of labor-saving crops, grazing, etc. based on the land use plan.



[Development of land use concept]



Growing grasses on long slopes



Grazing

[Initiatives for conservation of agricultural land]

“Earning” through agriculture in hilly and mountainous areas

○ Initiatives to improve profitability

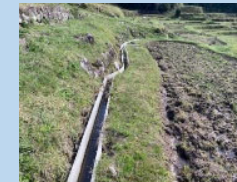
- Supporting the introduction of highly profitable crops that take advantage of regional characteristics, and initiatives for organic farming and multiple farming.
- Priority adoption of various support projects.



[Introduction of highly profitable crops]

○ Infrastructure development in line with local conditions

- Supporting the comprehensive development of agricultural land, irrigation facilities, production and sales facilities, etc.
- Supporting small-scale infrastructure development in line with local conditions, farm road development to improve access to farmland, and infrastructure development corresponding to smart technologies.



[Installation of U-shaped ditch in earth canal]

○ Promotion of the use of smart agricultural technologies

- Promoting the development and supply of smart agricultural technologies to address diverse regional challenges.
- Training and securing agricultural support service providers.



[Pest control with drones through automatic flight by service providers]

○ Increase in the added value of agricultural products

- Supporting the branding of agricultural products that take advantage of local characteristics, and product development that utilizes resources in rural areas.
- Supporting initiatives to develop sales channels, such as matching with distributors and sales companies.



[Development of new products using agricultural, forestry, and fishery products]

Expanding the number of people “involved”

○ Dissemination of the appeal of rice terraces and agricultural heritage

- As for rice terraces and agricultural heritage sites, promoting the participation of local residents and private companies in local activities, and the development and dissemination of products.
- By taking advantage of these opportunities, promoting initiatives to create and expand collaborations with various entities within and outside the region.



[Community activities in rice terrace (Oyama Senmaida rice terrace, Chiba Prefecture)]



[Sado's Satoyama in coexistence with Japanese crested ibis (Sado City, Niigata Prefecture)]

○ Promotion of agricultural experience

- Promoting the agricultural experiences using urban cropland, development of community farms, including stay-type models and experiential farming facilities.



[Holding of farmwork experience events]

Measures against damage by wildlife

- Since countermeasures are not sufficiently implemented in some regions due to the aging of capture workers, it is necessary to extend **more effective and efficient countermeasures** in the future. For this purpose, various measures will be promoted, including **smart measures against wildlife damage**, implementation of the **PDCA cycle in the case of capturing harmful wildlife**, development of **wide-area invasion-preventing fences**, **inspection activities throughout the region**, and training of **highly specialized human resources**. In addition, accompanying support will be provided to municipalities, etc. where damage is increasing significantly.
- As for the captured birds and animals, **the amount of their use as gibier** (Gibier is meat from wildlife which is hunted according to the hunting regulations or captured to prevent damage to agriculture or ecosystems) **is increasing**, but **the national average usage rate**^(note) **is low, at around 10%**. To this end, measures will be promoted at each stage from capture to consumption, such as **fostering gibier hunters** with knowledge and skills in sanitary control, **developing processing facilities, etc.** according to the terrain and capture status, and **stimulating new demand** in combination with high-value-added fields such as tourism.

Note: Percentage of captured individuals that are slaughtered as gibier in processing facilities.

Promotion of measures to prevent damage by wildlife

(Main issues)

[Population management (capture)]

- **Aging** of capture workers
- Focus on **capture activities in light of damage conditions**

[Others]

- There is a **lack of human resources who can utilize data and plan effective measures**.

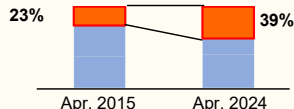
[Intrusion prevention measures]

- Fences **may not be properly installed or managed**.
- There will be an even greater **manpower shortage for management** in the future.

(Proportion of those who are 70 years old and over among the members of teams for implementing measures to prevent damage due to wildlife)

[Habitat management]

- In some cases, crop residues are left alone and **attract birds and animals**.



Expansion of the use of gibier

(Main issues)

[Capture]

- **The proportion of captured individuals brought** into a facility is **small** due to geographical restrictions, etc.
- There may be a **lack of hygiene awareness** among capturers.

[Processing]

- There is a **lack of facilities** in some regions.
- Many facilities are **under unstable management**, and it is difficult to secure slaughtering personnel.
- There is a **great burden of disposal** from individuals and parts that are difficult to use.

[Distribution and consumption]

- **Increasing added value** is an issue.
- It is also necessary to **increase their use other than restaurants**.
- **Quality assurance is an issue** for pet food.

(Direction of measures)

[Smart measures against wildlife damage]

- Dissemination of leading **smart measures against wildlife damage**, such as reducing the burden of patrolling traps and identifying points where capture should be promoted



Trap monitoring system



Capture confirmation application

[Population management (capture)]

- Enhancement of capturing that leads to damage reduction through the **implementation of the PDCA cycle** in trapping of harmful wildlife around agricultural land
- **Wide-area capture activities** led by prefectural governments in forest land, etc. around farmland

[Intrusion prevention measures]

- **Wide-area development of invasion-preventing fences** at the community level, etc.
- **Thorough inspection** of fences throughout the community

[Habitat management]

- **Continuous education** and effective implementation by municipalities, etc. **for farm households and residents**

[Development and securing of human resources]

- **Maintenance and reinforcement of the teams for implementing** measures to prevent damage due to wildlife
- **Fostering and securing specialized human resources** and promoting their assignment to the teams, etc.

[Others]

- **Accompanying support** to municipalities, etc. where damage is increasing significantly

Prevention of damage by wildlife

(Direction of measures)

[Capture]

- Promotion of bringing captured individuals into facilities by enhancing the training of **gibier hunters** with knowledge and skills in sanitary control



Gibier hunter



Mobile slaughter vehicle

[Processing]

- Development of **processing facilities, mobile slaughter vehicles**, etc., depending on topography, etc.
- **Securing of stable human resources** for processing
- **Effective use** of unused individuals and parts for pet food, etc. and **volume reduction**



Processing facility



Pet food (deer jerky)



Hunting experience tour

[Distribution and consumption]

- Stimulation of demand in combination with **high-value-added sectors such as tourism**
- Processing, manufacturing, sales, and distribution **Cooperation among business operators**
- **Enhancement of sanitary control** related to food and pet food use through presentation of guidelines, etc.

Expansion of the use of gibier

7. Cooperation among stakeholders in food systems

Cooperation among stakeholders in food systems

- There are **emerging issues that need to be addressed in cooperation among parties involved from food production to consumption**, such as price formation that takes into account reasonable costs, conservation of infrastructure for sustainable agriculture, and promotion of exports.
- For this reason, it is **essential not only to take conventional initiatives by horizontal organizations of the same industry, but also to take initiatives vertically across industries through mutual cooperation among organizations** from the viewpoint of the food system.

Food system

Farmers

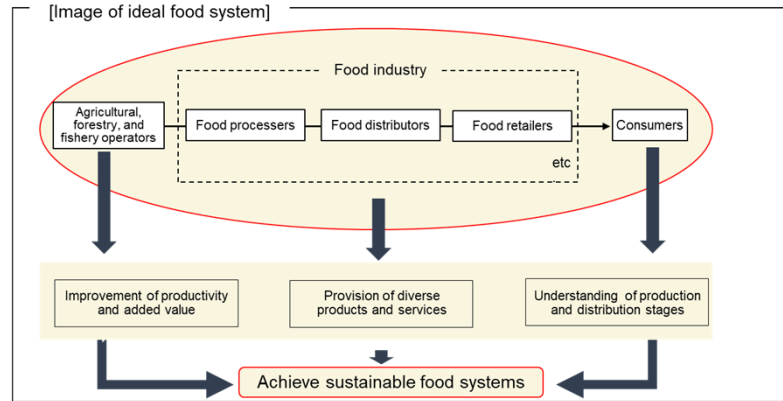
Food business operators

Consumers

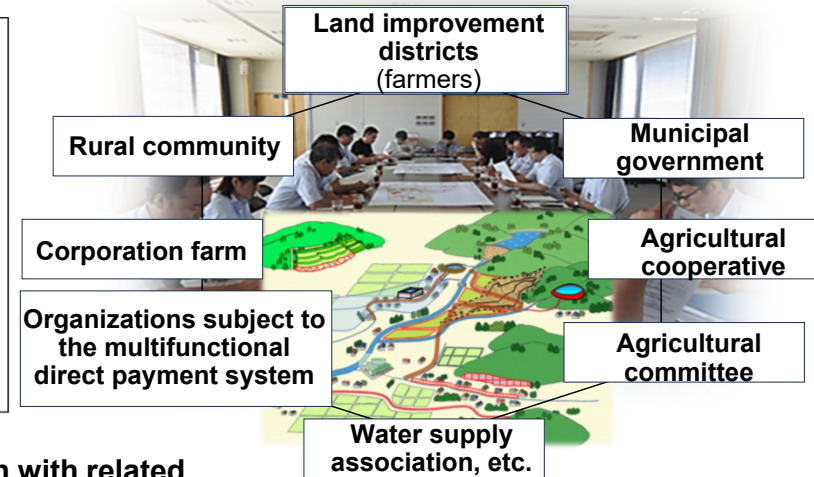
A system in which all stages of food production, processing, distribution, retail, and consumption work together organically to fulfill functions

Mutual cooperation among related parties and organizations

- Establishment of food systems for Formation of reasonable prices of food



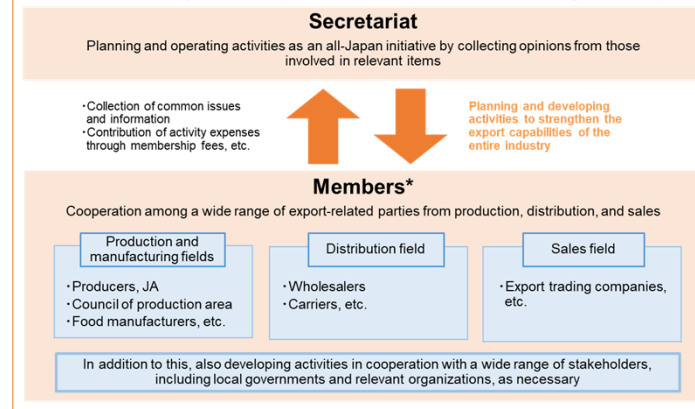
- Conservation of agricultural infrastructure in cooperation with local stakeholders



- Promotion of exports in cooperation with related parties from production to sales

< Organizational image of certified organization >

Certified Agricultural, Forestry, and Fishery Products and Food Export Promotion Organization (Authorized Export Promotion Organization)



Government
 · Certification by law
 · Activity support

JETRO FAMIC
 Advice, assistance, and cooperation

* Members ... In addition to direct members, members of member organizations (grandchild affiliates) may be included at the discretion of the organization.