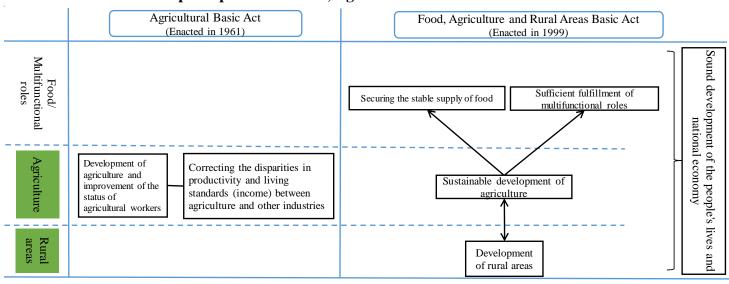


#### Food security risks are manifesting with the passing of a quarter of a century since the enactment of the Basic Act

- A quarter of a century has passed since the enactment of the Food, Agriculture and Rural Areas Basic Act (hereafter, "the current Basic Act"), and the food and agricultural sector as well as rural areas in Japan are facing challenges and changes in the situation that had not been anticipated during the enactment of the law or exceeded expectations.
- Specifically, the emergence of the following challenges have put us at a significant turning point in history: (1) growing food security risks caused by instability in food production, as a result of climate change and the intensification of competition for food due to global population growth; (2) growing interest in initiatives that take environmental sustainability into consideration, such as global warming and biodiversity; (3) growing concerns over the ability to support food supply as the number of agricultural workers falls rapidly amid the rapid decline in agricultural population ahead of domestic population decline.

#### Basic principles of the Food, Agriculture and Rural Areas Basic Act



Source: Prepared by MAFF.

## The Verification Subcommittee on the Basic Act conducted a verification and review of the current Basic Act and compiled a report in September 2023

- In September 2022, the Minister of Agriculture, Forestry and Fisheries consulted with the Council of Food, Agriculture and Rural Area Policies. The Verification Subcommittee on the Basic Act conducted interviews with experts and verified measures, and held active discussions with Committee members from various fields such as academics, producers, food-related businesses, and related organizations.
- In addition to implementing local opinion exchange meetings with 11 blocks across Japan, opinions were collected from the public through websites and other channels, reviews were conducted while listening widely to the voices of the people, and a report was compiled in September 2023.

## Significant changes in the domestic and overseas situation surrounding food, agriculture, and rural areas after the enactment of the current Basic Act

- There have been significant changes in the domestic and overseas situation surrounding food, agriculture and rural areas after the enactment of the current Basic Act.
- In particular, factors such as Russia's invasion toward Ukraine have destabilized global food production and supply.
- Furthermore, after the enactment of the current Basic Act, there has been significant progress in international discussions surrounding environmental conservation and sustainability, contributing to significant changes in the mindset toward agriculture/food industry and sustainability.
- The situation that had been the premise of the basic principles of the current Basic Act is undergoing major changes, and new challenges are also emerging.

#### Cases of destabilization of global food production and supply

#### Crop failure caused by droughts





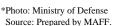


\*Photo: Ratchakith Dhanyajarath-Bhorn

\* © FAO/Sven Torfinn

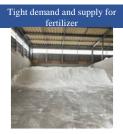
Outbreak of animal infectious Log





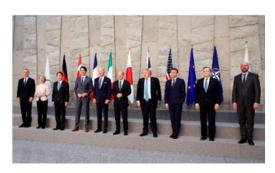


\*Photo: Agriculture & Livestock Industries Corporation (ALIC)



#### Heightening geopolitical risks related to food security due to changes in the global situation

- Complex risks have been manifesting in recent years due to the spread of COVID-19, soaring energy prices, climate change, and conflicts. Against this backdrop, global food supply has become even more unstable, with the stagnation of grain exports via the Black Sea and soaring international wheat market prices and prices of raw materials for fertilizers, due to Russia's invasion against Ukraine and other factors.
- The destabilization of the geopolitical situation could potentially have a serious impact on Japan's food supply, which is heavily reliant on imports.



G7 summit held in March 2022 regarding the situation in Ukraine Source: Website of the Prime Minister's Office URL: https://www.kantei.go.jp/jp/101\_kishida/actions/202203/24g7.html

#### Progress in international discussions on food security

At the 1996 World Food Summit, where discussions were held on the food problem on a global scale, the Food and Agriculture Organization (FAO) defined food security as follows: "Food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."

#### FAO's definition of food security

#### [Definition of food security by FAO]

"Food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." This widely accepted definition points to the following dimensions of food security:

#### [Four pillars of food security]

#### Food Availability

The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid)

#### Food Access

Access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources).

#### Utilization

Utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. This brings out the importance of non-food inputs in food security.

#### Stability

To be food secure, a population, household or individual must have access to adequate food at all times. They should not risk losing access to food as a consequence of sudden shocks (e.g. an economic or climatic crisis) or cyclical events (e.g. seasonal food insecurity). The concept of stability can therefore refer to both the availability and access dimensions of food security.

Source: Prepared by MAFF

## Decline in ability to deliver food in addition to an increase in the number of people who are unable to obtain sufficient food due to economic reasons

- Since the 1990s, the increase in non-regular employment and other factors have contributed to an increase in the number of low-income households. There has been a rise in the percentage of households with income below 2 million yen, as well as an increase in the number of people who are unable to obtain sufficient food due to economic reasons.
- Alongside the impact of the so-called "2024 problem in the logistics industry," there are growing concerns of disruption to food distribution. Moreover, the impact of a reduced domestic market is emerging and becoming increasingly serious, particularly in depopulated areas, and there is a growing number of people who have difficulty accessing grocery stores.

## Changes in the relative frequency distribution of households by income bracket

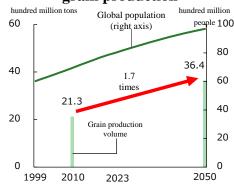


Source: Prepared by MAFF based on the Ministry of Health, Labour and Welfare's "Basic Survey on National Living Conditions."

## While food demand is increasing due to global population growth, food production is becoming unstable due to climate change and frequent abnormal weather conditions

- ➤ Global population which was approximately 6 billion in 1999, had increased to 8.01 billion in 2023 and is predicted to be approximately 9.7 billion in 2050. In response to this population growth, the worldwide grain production is also increasing.
- ➤ Due to the impact of global warming, abnormal weather conditions such as high temperatures, droughts, and large-scale flooding are occurring frequently. Since the beginning of the 2000s, localized crop failures have been occurring around the world almost on a yearly basis. Additionally, the destabilization of global food production, has contributed to repeated spikes and crashes of grain prices.

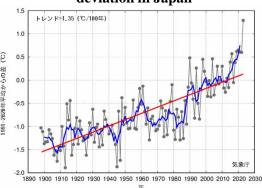
## Outlook for global population and grain production



Source: Prepared by MAFF based on the United Nations' "World Population Prospects 2022" and MAFF's "World Food Supply and Demand Outlook in 2050" (published in September 2019).

Note: Global population figures are estimates drawn up by the United Nations.

## Annual average temperature deviation in Japan



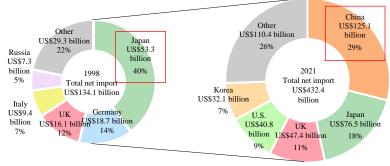
Source: Japan Meteorological Agency, "Changes in Japan's Annual Average Temperature Deviation Over Time (1898 - 2023)" (published in January 2024)

Note: The red line indicates the trend of long-term changes. Base value for average temperature is the average value from 1991 – 2020.

## With the emergence of new major food importing countries, import prices are rising, and there are concerns over stable imports

- Economic growth has slowed down significantly in Japan over the past 30 years under the conditions of a deflationary economy, while emerging economies worldwide, such as China and India, are experiencing rapid economic growth. Going forward, Japan's economic status is expected to decline even further.
- There is intensifying competition to procure grains, oilseed and agricultural production materials, such as fertilizers, and feed, for which Japan depends heavily on imports. It is becoming increasingly difficult to import the necessary food and agricultural production materials at the desired conditions.

## Percentage of net import amount for agricultural, forestry and fishery products by country/region



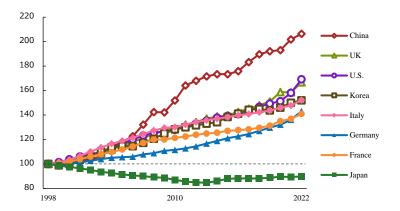
Source: Prepared by MAFF based on S&P Global's "Global Trade Atlas"

Note: Of the 41 target countries/regions that take into account economic scale and data constraints, the net import amount for countries/regions is aggregated for those with a positive net import amount (amount of imports - amount of exports).

Problems with the price formation function have surfaced under 30 years of deflationary economic conditions, where selling at cut-rate prices has become the norm and reluctance to increase food prices across the supply chain has become an entrenched culture

- Under 30 years of deflationary economic conditions, prices of agricultural products and food have nearly remained flat in Japan. With consumers demanding low-priced food, competition to sell at cut-rate prices has become the norm, and reluctance to increase food prices across the supply chain has become an entrenched culture. The inability to raise prices despite an increase in production costs has become an increasingly serious problem, making it difficult to pass on rapid hikes in the prices of agricultural products and agricultural production materials to product prices, and giving rise to a situation that could affect business continuity.
- > On the production side, it is not always possible to meet demand, including for rice cultivation, which has a large non-agricultural income and a predominantly part-time production structure, and is lack of progress in switching to other crops compared to other products.
- Under the prolonged deflationary economic conditions, it has become common for food sales to compete over low prices. As a result, production costs are not taken into account sufficiently in price formation, giving rise to a situation that makes it difficult to quickly reflect increases in production costs in selling prices.

#### **GDP** deflators in main countries

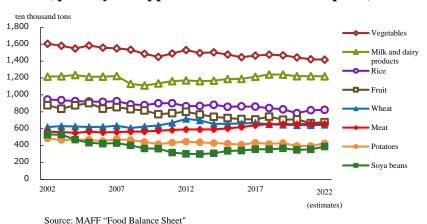


Source: Prepared by MAFF based on economic data from the World Bank Databank.

Notes: 1) GDP deflator is an indicator that shows price trends attributed to domestic factors, and is calculated by dividing nominal GDP by real GDP.

2) Index set as 100 for 1998.

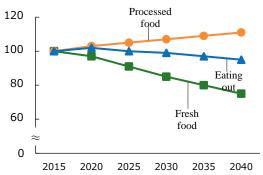
## Demand for major agricultural and livestock products (quantity of supplies for domestic consumption)



#### A shrinking domestic market due to population decline and an aging society

- Japan's population started to fall after peaking in 2008, and both total and per capita demands for food are expected to drop in the future due to population decline and an aging society. Therefore, rapid shrinkage of -the domestic food market is inevitable.
- The number of single-person households is also expected to increase due to declining birthrates and an aging society. Demand in households is expected to shift from fresh food consumed directly or after cooking, to precooked processed food.

#### **Future estimates of food consumption**



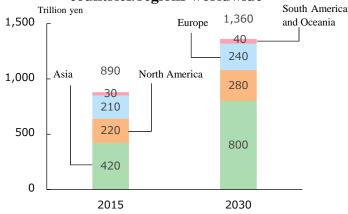
Source: PRIMAFF, "Future Estimates of Japan's Food Consumption (2019 Edition)" Notes: 1) Index set as 100 for 2015.

2) Fresh food refers to the total consumption of rice, fresh seafood, fresh meat, milk, eggs, fresh vegetables, and fresh fruit. Processed food refers to food items other than fresh food and eating out.

#### An expanding international food market associated with global population growth

- The international food market is expanding alongside global population growth, and the scale of the food and beverage market in key countries and regions is predicted to grow by 1.5 times between 2015 and 2030.
- ➤ The Asia region, in particular, is a center for economic growth in the world. Due to an increase in the number of high-income earners, among other factors, Japanese food is popular in this region, and demand for Japanese agricultural products and processed food is growing.
- From the perspectives of sustainable growth, risk diversification, and maintaining the agricultural production base, there is a need to promote the shift to an agricultural and food industry that focuses not only on the domestic market, but also on the overseas market.

## Scale of the food and beverage market in 34 key countries/regions worldwide



Source: PRIMAFF, "Estimated Global Food and Beverage Market Scale" (published in March 2019). Note: In addition to the 20 countries with the highest GDP in 2015 (excluding Japan), the 34 key countries/regions also include the top five EU member countries and the top 10 APEC member countries/regions.

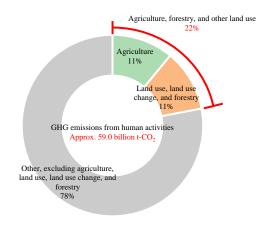
## There are growing concerns over the adverse impact of agriculture on environment and sustainability. Progress has been made on introducing policies to mainstream environmentally-friendly sustainable agriculture

- Progress has been made in international discussions toward the establishment of a sustainable society and economy, in aspects such as the conservation of the global environment and eradicating poverty.
- The mindset that it is important to minimize the adverse impact of food supply on ecosystem services such as maintaining soil fertility and conserving the natural landscape, becomes internationally prevalent.
- Based on the premise that agriculture has an adverse impact on the environment, as well as aspects that undermine sustainability, it is necessary to mainstream environmentally-friendly sustainable agriculture by working to reduce greenhouse gas emissions from agriculture and forestry and reduce the burden on the environment.
- Japan formulated the MIDORI Strategy for Sustainable Food Systems (hereafter, "MIDORI Strategy") in 2021, and the Act to Promote Environmental Burden Reduction Business Activities for the Establishment of Environmentally Harmonized Food Systems (hereafter, "MIDORI Act") was enacted in 2022. Under this framework, efforts are ongoing to reduce the environmental burden of agriculture.

#### Items identified as global environmental risks

Main items	Impact on climate change and biodiversity
Fertilization (fertilizers)	<ul> <li>Generation of dinitrogen oxide and deterioration of water quality due to excessive fertilization</li> <li>Use of fossil fuels associated with the production and procurement of fertilizers</li> </ul>
Pest control (pesticides)	· Loss of biodiversity due to the inappropriate use of pesticides
Agricultural machinery/heating facilities, etc.	<ul> <li>Generation of carbon dioxide due to the use of fossil fuels</li> <li>Soil compaction caused by work using agricultural machinery</li> </ul>
Plastic materials, etc.	<ul> <li>Treatment processes at the disposal stage</li> <li>Fuel combustion at the manufacturing stage</li> <li>Impact of microplastics on marine life, etc.</li> <li>Disruption to ecosystems due to inappropriate disposal, etc.</li> </ul>
Livestock farming	<ul> <li>Generation of methane due to fermentation in the digestive tract of ruminants such as cows</li> <li>Generation of methane and dinitrogen oxide associated with livestock waste treatment</li> <li>Water pollution from nitrate nitrogen</li> </ul>
Farming field management	<ul><li>Generation of methane from paddy soil, etc.</li><li>Water pollution and eutrophication due to soil loss, etc.</li></ul>

#### Global GHG emissions from agriculture and forestry



Source: Prepared by MAFF based on IPCC's "Climate Change 2022: Mitigation of Climate Change" (published in April 2022).

Notes: 1) Estimated values for 2019

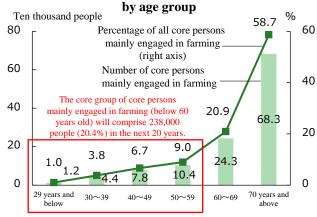
2) Emissions are shown as carbon dioxide equivalent.

Source: Prepared by MAFF

## Population decline is a serious issue in the rural areas of Japan, with significant decline and aging of the agricultural workforce

- Population decline is a serious issue in the rural areas of Japan, with significant decline and aging of the agricultural workforce.
- The number of core persons mainly engaged in farming halved from about 2.4 million in 2000 to about 1.16 million in 2023, and the peak of the age structure are those aged 70 and above. The group below 60 years old, which is expected to form the core of core persons mainly engaged in farming in the next 20 years, has remained at about 240,000 people, making up about 20% of the total.

#### Number of core persons mainly engaged in farming,



Source: Prepared based on MAFF's "2023 Survey on Movement of Agricultural Structure."

Notes: 1) Figures as of February 1, 2023.

"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 job.

# Technological innovation that contributes to improving productivity such as smart agricultural technologies has advanced. On the other hand, demonstration projects have revealed challenges such as the adoption cost of smart agricultural machinery, etc.

- > Technological innovation that contribute to improving agricultural productivity such as smart agricultural technologies has advanced. Amid the decline in the agricultural workforce going forward, and in light of the progress in digital innovation, it is important to further promote smart agriculture in order to maintain the food supply base and establish a highly productive agriculture industry.
- Since FY2019, MAFF has been promoting smart agriculture demonstration projects in 217 districts nationwide. The projects clarified that the number of work hours can be reduced significantly and also verified the effects of freeing agricultural workers from dangerous and heavy work, as well as from the need of on-site monitoring, alongside contributing to realizing the MIDORI strategy by reducing environmental burden. On the other hand, the projects have also uncovered issues such as the high costs of adopting smart agricultural machinery, etc. and the shortage of human resources to operate such equipment, the fact that smart agricultural technologies do not fully demonstrate their effects when introduced directly to conventional cultivation methods, and the need to promote the development of smart agricultural technologies in areas where development is inadequate.

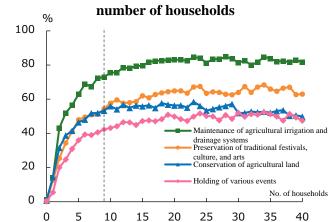


Using drones to spray pesticides Source: Yamaha Motor Co., Ltd.

#### Declining power to support agriculture due to shrinking rural population and rural communities

- Rural areas are experiencing population decline and depopulation ahead of urban areas.
- There are situations where it becomes difficult to maintain the functions of a rural community. When the number of households in a rural community falls to nine or fewer, a significant decline in communal activities, such as the management of irrigation and drainage canals and the preservation of farmland, is sometimes observed.
- The decline in rural populations and rural community functions has become an issue that should be recognized as a risk to food security.

#### Implementation rate of rural community activities by total

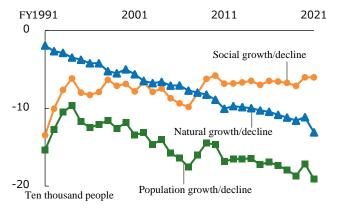


Source: Prepared by MAFF based on PRIMAFF's "Development of Japanese Agriculture and Rural Structure - Comprehensive Analysis of the 2015 Census of Agriculture" (published in December 2018).

## In depopulated regions, natural decline is expected to progress on a scale that exceeds that of social decline. There are concerns over the continuity of agricultural production activities that used to be supported by the rural communities

- Against the backdrop of significant aging populations in depopulated regions, particularly in hilly and mountainous areas, natural decline is exceeding the scale of social decline since FY2009. Going forward, natural decline is expected to progress on a greater scale even if social decline were mitigated to a certain degree through migration to rural villages and other measures.
- There are concerns over the continuity of agricultural production activities that used to be supported by the rural communities.
- In particular, it will become difficult to support the maintenance and management of peripheral agricultural infrastructure such as irrigation and drainage systems as well as farm roads, which have been supported by the region until now based on the premise of a certain number of residents.

#### Changes in population in depopulated regions, by factor



Source: Prepared by MAFF based on the Ministry of Internal Affairs and Communications' "Status of Depopulation Measures, FY2021" (published in March 2023).

#### Decision on the New Directions in the Development of Food, Agriculture, and Rural Area Policies

In reviewing the current Basic Act, the Headquarters on Measures to Secure Stable Supply of Food and Strengthen the Agriculture, Forestry, and Fisheries Industries made a decision on New Directions in the Development of Food, Agriculture, and Rural Area Policies in June 2023, in particular for matters that require the addition or revision of basic policies. The New Directions clearly set out a policy direction based on the following three new pillars: (1) establish food security for every citizen during normal times; (2) shift to sustainable agriculture and food industries that are environmentally friendly; and (3) establish a food supply infrastructure that remains robust and sustainable even under conditions of population decline.

#### Overview of the New Directions in the Development of Food, Agriculture, and Rural Area Policies

#### Establishing food security for every citizen during normal times

O Definition of food security

Food security is defined as a state in which every citizen is able to gain access to food easily at all times, and food security shall be secured from normal times.

O Strengthening the stable supply of food to mitigate import risks

In addition to **expanding domestic agricultural production** for items such as wheat and soybeans, processed vegetables and vegetables for commercial use, and rice for producing rice flour, as well as **securing production materials such as feed and fertilizers**, **emphasis is also placed on securing imports in a stable manner and effectively utilizing stockpiles**.

- O Shifting to an industry that is also targeted at overseas markets
  - The production base for the agricultural and food industries shall be secured by **expanding exports.**
- O Building a food system aimed at realizing fair price formation

To build a sustainable food system, **efforts shall be made to realize fair price formation at each stage** from production to processing, distribution, and sale, starting with feasible items.

O Improving food access so that all citizens can enjoy healthy diets

A supply system shall be established by local food businesses so that those facing "shopping difficulties" or those who are unable to obtain sufficient food for economic reasons can enjoy healthy diets.

### Shift to environmentally-friendly and sustainable agricultural and food industries

- O Establishment of food systems that are in harmony with the environment
- · Mainstreaming sustainable agriculture that engages in efforts to reduce environmental burden, etc.
- Going green across the entire food system including agricultural production, processing, distribution, and retail.

Establishing a robust food supply base that remains sustainable even under conditions of a population decline

- $\sim$  Establishment of agriculture that can supply food even amid the rapid decline in the number of farmers  $\sim$
- Establishment of a supply base that maintains production even under conditions of population decline
  - Nurturing and securing management entities, etc. (farmers) who can take over agricultural land of management entities that are leaving the agricultural sector amid the rapid decline in rural population
  - · Strengthening the management base of agricultural corporations, etc.
  - Participation of farmers as well as diverse agricultural human resources in conservation and management of agricultural land in the region based on dialogue within the community, leading to sustainable production
- Improving productivity through smart agriculture, etc.
- Improving productivity through the utilization of smart technology, and securing food supply
- Nurturing and securing support service businesses for agricultural management entities through management and technologies, etc.
- Strengthening response to livestock infectious diseases and pests, disaster prevention and mitigation etc., and protecting intellectual property
- ~Maintaining rural community functions amid a decline in rural population~
- O Maintaining rural communities
- Efforts shall be made to promote migration from cities to rural areas and increase the related population through the innovation-driven business creation and the development of information infrastructure.
- O Securing the functions of rural infrastructure
- Even in regions where there are concerns of a decline in rural community functions, efforts shall be made to maintain and manage agricultural water irrigation facilities, etc. that are indispensable to agricultural production.

#### Strengthening food security in times of emergency

- In light of the growing risk of a significant reduction in food supply due to changes in global food demand and supply, destabilization of production, and other factors, the legal system that serves as the basis for responding in times of emergency has been reviewed. The Review Committee for Food Security in Times of Emergency organized the following points as the basic stance, and compiled a report in December 2023: (1) based on independent efforts by farmers and other business operators, (2) put in place countermeasures at an early stage when food supply shortages have been predicted in order to prevent such shortages from impacting the lives of citizens and the national economy, and (3) add measures to secure food supply in phases as the situation develops.
- In response, the Government submitted, to the 213th ordinary session of the Diet, a bill on measures for situations of difficulty in food supply, which prescribes measures such as the establishment of the Headquarters for Measures for Situations of Difficulty in Food Supply, and requests to coordinate shipments or sales, expansion of imports, or expansion of production in order to secure stable supplies of the food in question. The aim of the bill is to enable response in times of a significant shortage, or high risk of significant shortage in the supply of food that is important to the dietary habits of the people or to the national economy, including but not limited to rice, wheat, and soybeans.

#### Stages of the situation **Government system** Main measures <Gathering information from Japan and overseas> Organizing policies for initiatives to be implemented [Peacetime] Surveys on food demand and supply in Japan and overseas during peacetime and contingencies Gathering information by Minister of Agriculture, Capturing information on private-sector (manufacturing and Forestry and Fisheries distribution) inventories (collecting reports, conducting surveys, etc.) Government response headquarters < Request for voluntary initiatives by the private sector> [Emerging signs of food supply difficulties] Outreach to consumers Support for imports and production through incentive measures Established by the Prime Minister O Events that may lead to a decline in food supply (Suppress behavior of rushing out to buy supplies, reduce food loss, etc.) (Decision based on reports from the Minister of Agriculture, Forestry occur, which may lead to the occurrence of Adjusting deliveries and sales and Fisheries) Response based on requests even in serious circumstances food supply difficulties. (Prevention of holding back sales, planned deliveries such as O Under the government response headquarters comprising the supply destination adjustments.) Prime Minister and all Cabinet ministers, decisions shall be Expansion of imports made on the implementation policy for measures that the Expansion of production (when the necessary amoun relevant ministries and agencies need to take corresponding to the severity of the situation. cannot be secured even with deliveries and imports) < Declaration by the government [Occurrence of impact from food supply difficulties] <Instructions from the government to secure food supplies> response headquarters> Adjusting deliveries and sales (planned deliveries, etc.) O There is a significant shortfall, or strong risk of a Review of implementation policy according **Expansion of imports** shortfall, in the supply of critical food items to how the situation progresses Expansion of production \*While ensuring there is no reduction (assumed to be rice, wheat, soybeans, etc.), giving rise to substantive disruptions to the stability of Preparation and submission of plans by business operators people's lives or the smooth operation of the national (when supplies cannot be secured even with these measures) economy. Instructions to change plans [Criteria] · Decline (or risk of decline) of 20% or more of the supply volume compared to peacetime Businesss operators change plans and conduct their businesses · Occurrence of disruptions to people's lives/national economy (buying up supplies to hoard, price hikes, etc.) < Declaration by the government [Risk of a shortage of basic food needs] Production and allocation of food with an emphasis on calories> response headquarters> Requests/instructions for crop diversion O Particular risk of disruption to people's lives Review of implementation policy according to Request for production that places the emphasis on calories. Issue instructions to prepare plans how the situation progresses and change plans if it is difficult to make requests. [Criteria] · (Risk of) daily calorie intake per person falling below Carry out allocation and distribution (Act on Emergency Measures for 1,900 kcal. Stabilizing Living Conditions of the Public)

New legal framework for strengthening food security in times of emergency

#### Establishing food security for every citizen

With regard to food security, in addition to securing food (stable supply of food) for the country as a whole, the law will also be reorganized to include ensuring that every citizen is able to gain access to food.

#### Strengthening the stable supply of food to mitigate import risks

In addition to increasing domestic agricultural production of wheat and soybeans, processed vegetables and vegetables for commercial use, and rice for rice flour, etc., as well as securing agricultural production materials such as feed and fertilizers, efforts will also be made to secure stable imports and effectively utilize reserves.

#### Positioning the promotion of exports as essential toward maintaining the domestic agricultural production base

With the domestic market shrinking due to population decline, promoting exports will be positioned as essential policy toward maintaining the domestic agricultural production base.

#### Promoting efforts to ensure smooth food access so that all citizens can lead healthy dietary habits

- With regard to line haul logistics, efforts will be made to promote the use of pallets and modal shifts, promote the review of business practices toward improving logistical productivity and the standardization as well as streamlining of logistics, and promote the introduction of mechanisms to encourage behavioral changes among shipping companies and other entities.
- With regard to regional logistics within consumption areas, and particularly last-mile logistics in hilly and mountainous areas, reviews will be conducted in collaboration with the relevant ministries and agencies on establishing mechanisms to ensure food access in cooperation with local public organizations, supermarkets, and delivery service operators.
- Reviews will be conducted in collaboration with the relevant ministries and government agencies that have jurisdiction over welfare policies and measures to address loneliness and isolation, etc., with regard to systems to facilitate provision of diverse food resources to food banks and children's cafeterias from producers and food businesses, such as the building of logistics systems and mechanisms for promoting donations.

#### Case of "shopping support"



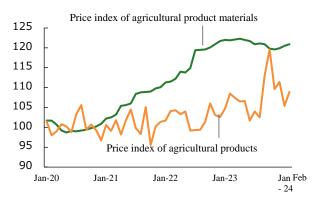
NPO TOMONI provides "shopping support" through mobile sales, as well as activities to look after the elderly (Shimane Prefecture)

Source: NPO TOMONI

#### Promoting measures toward realizing rational price formation

- The prices of agricultural products are basically established in response to the demand and supply conditions of the respective items and evaluation of their quality. On the other hand, while there are increases in costs, such as the cost of agricultural production materials, resulting from various factors such as intense price competition at the distribution stage, it is difficult to pass on these cost increases appropriately to trading prices.
- The rate of increase in index numbers of agricultural products is moderate and gradual, in comparison with the rate of increase in index number of price of agricultural production material. Soaring agricultural production material prices are directly linked to the increase in management costs for producers, etc. If such cost increases cannot be appropriately passed on to the selling price of the final product, they may weaken the foundations of stable food supply.
- To realize sustainable food supply, it is necessary to ensure the sustainability not only of production, but of all stages in the food chain including distribution, processing, and retail.
- In July 2023, MAFF established the Fair Price Project and carried out publicity activities to deepen understanding and consensus toward realizing sustainable food supply through rational price formation. In addition, the Council for Fair Price Formation was established in August 2023. Based on the actual situation and issues in trading, efforts are underway to build systems for promoting fair trade, including making use of the results of statistical surveys, drawing up cost indices in agreement with the concerned parties, and ensuring price pass-through at every stage.

## Price index of agricultural product materials and price index of agricultural products



Source: MAFF "Index numbers of commodity prices in agriculture"

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

2) Estimates for 2023 and 2024.

#### Case of the "visualization" of production costs

(Unit: Yen)

Item	Amount of increase by materials, etc. related to production and shipment (per case)						Amount of
	Fertilizers	Pesticides	Shipping materials	Utility costs	Labor wages	Freight	increase per case
Green pepper	26.3	9.1	9.7	5.7	38.1	5.0	93.9
Iceberg lettuce	160.3	2.8	39.2	2.0	54.0	8.0	266.3
Chinese cabbage	25.9	8.4	17.4	1.7	10.0	10.0	73.4
Sweet potato	33.3	7.6	9.3	4.5	27.1	6.0	87.9
Lotus root	53.3	1.9	23.0	7.5	31.9	6.0	123.6
Spring melon	86.8	12.4	20.6	3.1	52.1	10.0	185.0

The Ibaraki Prefectural Headquarters of the National Federation of Agricultural Co-operative Associations is promoting the "visualization" of increases in production costs, such as by preparing a trial balance table showing the increase in production costs by the main items or crop types and explaining it to trading partners, with a view to promoting understanding about price pass-through. Source: Ibaraki Prefectural Headquarters of the National Federation of Agricultural Co-operative Associations.

Note: Estimates as of June 2023.

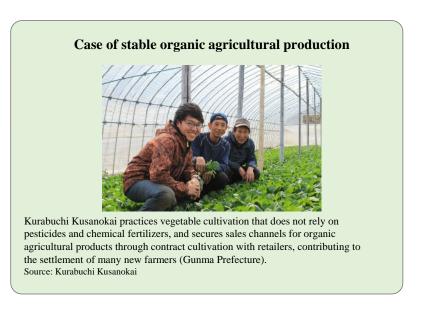
#### Stipulated the establishment of food systems that are in harmony with the environment in the Act

- In light of the importance of reducing the environmental burden at each stage across the food systems, from production to processing, distribution, and sale, the establishment of food systems that are in harmony with the environment has been stipulated in the Act.
- Toward reducing environmental burden in the agriculture and food industries, based on the promotion of the actions under the MIDORI Act, MAFF clarifies the minimum practices for environmental burden reduction and considers ways to avoid creating new environmental burden through the projects using MAFFs subsidies.
- To make it easier to advance initiatives to reduce environmental burden across the whole of the food systems, efforts will be made in the following three areas: (1) promote an initiative to visualize producer's efforts to reduce environmental burden; (2) utilize the J-Credit Scheme to promote decarbonization; and, (3) collaborate with users, such as food business operators, and foster understanding among consumers.

environment with consideration for safety in agricultural work

#### Minimum practices for environmental burden reduction required in cross-compliance Odor and pest Proper fertilization Proper pest control **Energy conservation** prevention E.g. · Record and storage of information on · Record and storage of information on · Record and storage of · Proper management of the status of use of fertilizers the status of use of pesticides information on the status of use · Fertilization corresponding to crop · Checking of and compliance with of electricity and fuels growth and soil nutrient level, etc. pesticide labeling, pesticide scattering prevention, etc Prevention of waste generation, Prevention of adverse impact Compliance with recycling, proper disposal on biodiversity environment-related laws · Compliance with laws required for · Implementation of controls · Reduction and proper farming corresponding to the pest disposal of plastic waste Improvement of the working

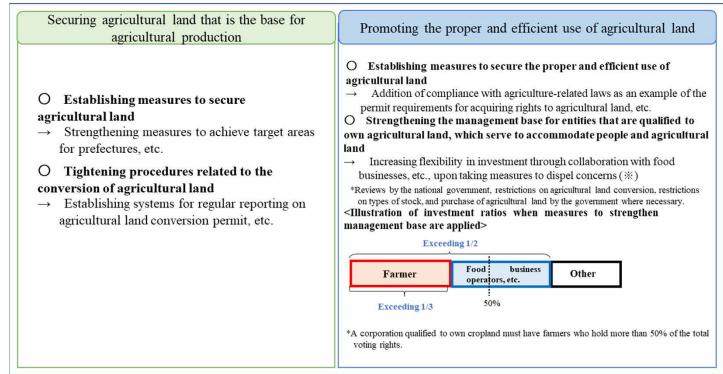
occurrence situation



#### Securing agricultural land, and promoting its appropriate and effective use

- In addition to steadily promoting the consolidation of agricultural land for recipients of maps that clarify the future state of agriculture and the future use of farmlands (target maps), based on the "Promotion Plan for Improvement of Agricultural Management Foundation in Area (PAA)" including target maps, it is also necessary for the government to take responsibility for securing agricultural land, which serves as the base for food production, and to ensure its appropriate and efficient use, in order to strengthen food security in Japan.
- The government submitted, to the 213th ordinary session of the Diet, a bill to partially amend the Act on Establishment of Agricultural Promotion Regions to secure, and ensure the effective use of, agricultural land for the stable supply of food. This bill includes the following contents: (1) strengthening of measures to achieve the target area of agricultural land that should be secured by the national and prefectural governments; (2) strengthening of measures to address the illegal conversion of agricultural land; and, (3) measures to establish certification systems for plans to develop management in cooperation with food business operators, etc. and other entities that are qualified to own cropland.

Overview of the bill to partially amend the Act on Establishment of Agricultural Promotion Regions to secure, and ensure the effective use of, agricultural land for the stable supply of food



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#### Promoting the shift to highly productive agriculture through the adoption of smart agricultural technologies

- The bill on promoting the utilization of smart agricultural technologies to improve agricultural productivity was submitted to the 213th ordinary session of the Diet. This bill sets out measures aimed at improving agricultural productivity, including the establishment of a certification system for plans to utilize smart agricultural technologies and at the same time introduce new production systems for agricultural products, as well as plans to develop smart agricultural technologies and promote the outcomes of the development, and special provisions for government-backed loans to those that have received such certification.
- To maximize the effects of adopting smart agricultural technologies, efforts will be made to promote the transition to production, distribution and sales methods that are suitable for smart agricultural technologies, such as the review of cultivation systems. This will be undertaken at the sites of production in collaboration with agricultural support service businesses and other entities that utilize smart agricultural technologies.
- Upon the clarification of key development goals leading up to implementation, the government will take the lead in promoting research and development by strengthening industry-academia-government collaboration through, for example the provision of the National Agriculture and Food Research Organization's (NARO) facilities to business entities such as start-ups that are engaged in research and development in line with such development goals.

## Legal framework for promoting the utilization of smart agricultural technologies



#### Case of automatic harvesting robot





inaho inc. is developing automatic harvesting robots for asparagus that are tailored to standardized farming fields that have expanded paths, and promotes the entry of young farmers (Kanagawa Prefecture).

Source: inaho inc.

## Promoting initiatives to preserve rural areas and secure the functions of their infrastructure, in order to maintain the functions of rural communities

- To increase the pool of human resources involved in rural communities, efforts will be made to promote the creation of businesses through innovation from rural areas that make use of regional resources such as sixth industrialization and countryside stays.
- In hilly and mountainous areas, in addition to promoting the development of rural RMOs, support will be provided for corporate activities aimed at contributing to society and expanding businesses in order to revitalize rice terraces and create vitality in the regions. Efforts will also be made to promote the development of complementary partnerships between corporations and regions.
- Support will be provided for community-wide discussions and detailed efforts to address extensive use of agricultural land, and to develop infrastructure and facilities, etc., in order to preserve agricultural land in hilly and mountainous areas. Sustainable land use in rural communities will also be promoted.
- With regard to revitalizing rural areas, in addition to efforts to maintain local communities, details on measures to mitigate wildlife damage, agriculture and welfare collaboration, etc. will also be clarified.

# YAMAGATA DESIGN Co., Ltd. implements urban development projects through industry-academia-government collaboration, such as securing and development of agricultural human resources, tourism, etc. (Yamagata

Source: YAMAGATA DESIGN Co., Ltd.

#### Promoting the fulfillment of multifunctional roles through joint activities that involve the entire community

- The agricultural industry and rural communities have multifunctional roles such as preservation of national land, conservation of water resources, and formation of good landscapes. To ensure the appropriate and full performance of these functions, it is important to continue with agricultural production activities and to conserve local resources through joint activities.
- Efforts will be made to realize a Japanese agricultural direct payment system, in order to establish a sustainable and robust food supply base while taking into account the population decline in the agricultural sector and rural communities.

## Submission of the bill to partially amend the Food, Agriculture and Rural Areas Basic Act to the 213th ordinary session of the Diet

- A bill to partially amend the Food, Agriculture and Rural Areas Basic Act was submitted to the 213th ordinary session of the Diet.
- In response to recent fluctuations in global food supply and demand, the progression of global warming, population decline in Japan, and other changes in the circumstances surrounding food, agriculture, and rural areas, the Basic Act will be amended to establish related fundamental measures, alongside the review of its basic principles. This is aimed at ensuring food security, establishing food systems that are in harmony with the environment, improving productivity for the sustainable development of agriculture, and preserving rural areas.

#### Overview of the bill to partially amend the Food, Agriculture and Rural Areas Basic Act

#### **Ensuring food security**

- (1) The basic principles are:
- ① Prescribe "ensuring food security," which is defined as "a state in which quality food is supplied at rational prices and in a stable manner, and every citizen is able to gain access to it."
- ②Prescribe that, in light of the importance of securing the foundation for agricultural production in providing stable supplies of food to the citizens, efforts must be made to maintain the food supply capacity through the development of the agricultural and food industries by promoting exports overseas as well as supplying food domestically.
- ③Regarding the formation of rational food prices, stipulate that farmers, food business operators, consumers, and other stakeholders in the food system must consider the reasonable costs necessary for the sustainable supply of food, ensuring that supply and demand conditions and quality evaluations are appropriately reflected in prices to realize the sustainable supply of food.
- (2) The basic measures are:
- ①Ensure that **food can be obtained smoothly (food access)** (such as by securing the means of transportation) and ensure the **stable import of agricultural products and agricultural materials** (such as by diversifying the import partner countries and promoting investment).
- ② Promote the export of agricultural products that contributes to improving profitability (such as by nurturing export-oriented production regions, promoting efforts by organizations of entities involved in the stages from production to sale (Authorized Export Promotion Organization), supporting the development of demand in export partner countries, etc.)
- 3 Prescribe the promotion of understanding among stakeholders in the food system so as to consider expenses in price formation, the promotion of efforts to clarify expenses, etc.

#### Establishing food systems that are in harmony with

#### the environment

- (1) Under the new basic principles, with regard to food systems, in light of the fact that every stage of food supply has aspects that places burden on the environment, stipulate efforts to reduce such burden and to achieve harmony with the environment.
- (2) Prescribe the following basic measure: the promotion of efforts to reduce burden on the environment in agricultural production activities and the business activities of food industries.

#### Sustainable development of agriculture

- (1) Under the basic principles, add the obligation to realize the sustainable development of agriculture through efforts to improve productivity and increase added value.
- (2) Prescribe basic measures such as the following: secure agricultural land by diverse farmers beyond efficient and stable agricultural management, strengthen the management base of agricultural corporations, consolidate and appropriately use farmland, preserve the agricultural production base, improve productivity by using advanced technology (smart technology), enhance the added value of agricultural products (such as by protecting and utilizing intellectual property), promote the activities of businesses that support agricultural management (service providers), prevent the outbreak of infectious diseases in livestock and the outbreak of harmful plants and animals, and mitigate the impact of price fluctuations in agricultural production materials.

#### **Development of rural areas**

- (1) Under the basic principles, add the obligation to develop rural areas so as to maintain local communities.
- (2) Prescribe basic measures such as the following: promote joint activities that contribute to the preservation of agricultural land, promote business activities that utilize local resources, promote business activities that provide opportunities to stay in rural communities (countryside stays), develop an environment for agricultural activities by persons with disabilities, etc. (agriculture and welfare collaboration), and measures to mitigate wildlife damage.

Source: Prepared by MAFF