

Changes and issues in the situation surrounding food, agriculture and rural areas

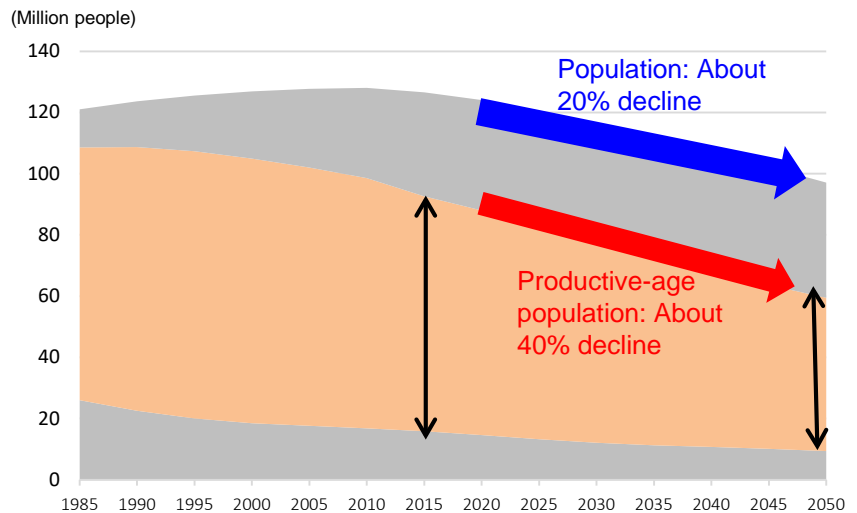
- While outcomes such as an increase in agricultural production income, the expanded export of agricultural, forestry and fishery products and food, and the recruitment of new young farmers have been achieved since the formulation of the previous Basic Plan, there are concerns that the production base may become vulnerable and local communities may decline in the face of issues including the shrinkage of the domestic market caused by population decline, new international settings such as the TPP, and the frequent occurrence of natural disasters and infectious diseases of domestic animals.
- Under these circumstances, it is important to enhance the production base and thereby improve the sustainability of agriculture and rural areas so as to be able to deal with various demands in Japan and abroad.

Changes in Japan's population and labor force

In Japan, its population is estimated to decline by approximately 20% by 2050 in comparison with the level in 2015 due to a full-fledged decline in the birthrate combined with a growing proportion of elderly people and population decline fully in progress.

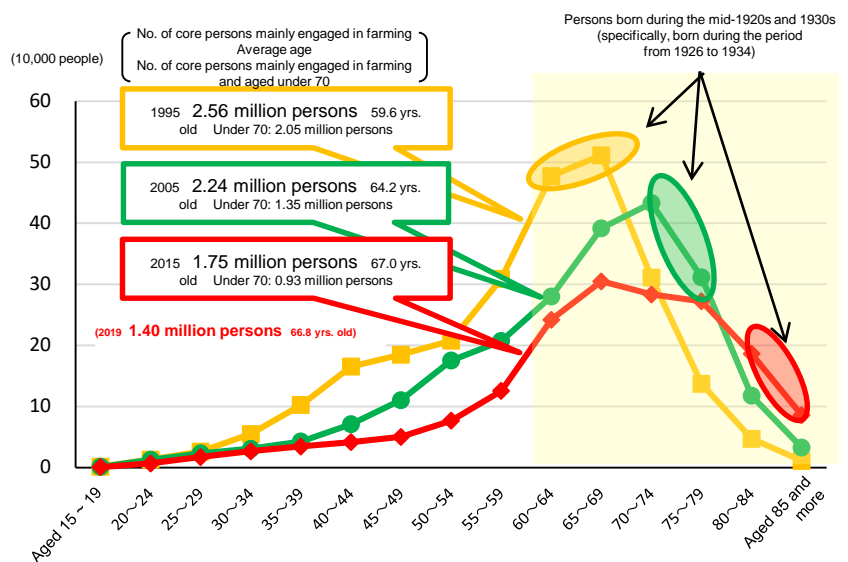
In particular, the proportion of its productive-age population serving as the workforce of the society is expected to fall by approximately 40% by 2050 in comparison with the level in 2015, indicating a significant reduction.

Figure 12-1 Estimated changes in Japan's population



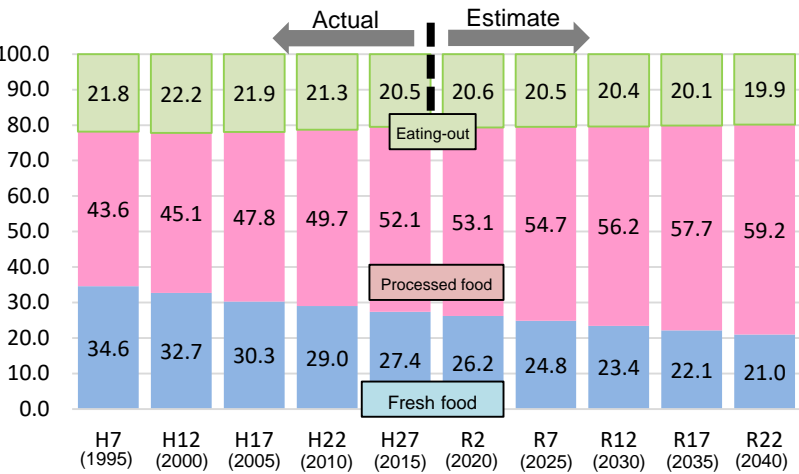
Sources: Ministry of Internal Affairs and Communications (MIC), "Population Census"; National Institute of Population and Social Security Research, "Household Projections for Japan (Nationwide) (2018)"

Figure 12-2 Changes in the age distribution of core persons mainly engaged in farming



Sources: MAFF, "Census of Agriculture and Forestry" (aggregate calculation after reclassification) and "Survey on Movement of Agricultural Structure"

Figure 13-1 Progress in the externalization of diet

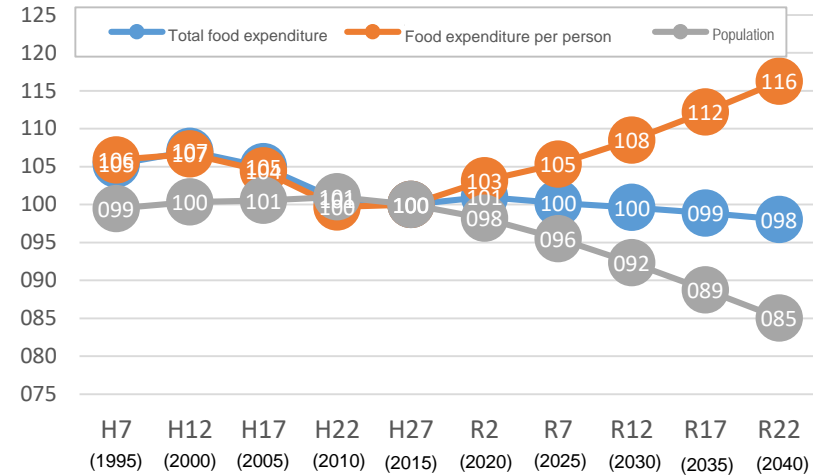


Notes: 1) Actual values calculated with reference to the Family Income and Expenditure Survey, the National Survey of Family Income and Expenditure, etc. are used up to 2015. For 2020 onward, estimates are used.
2) Fresh food means the total of rice, fresh seafood, fresh meat, milk, eggs, fresh vegetables and fresh fruits. Processed food means a group of items other than those categorized into fresh food or eating-out.

Source: Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (PRIMAFF), "Future Estimation of Food Consumption in Japan (2019 Ver.)" (August 2019)

Since the externalization of diet is projected to advance further with the increase of single-person households and dual-income households and incidental lifestyle changes, food demand is expected to shift from fresh food to processed food with high added value.

Figure 13-2 Estimation of the total food expenditure and food expenditure per person

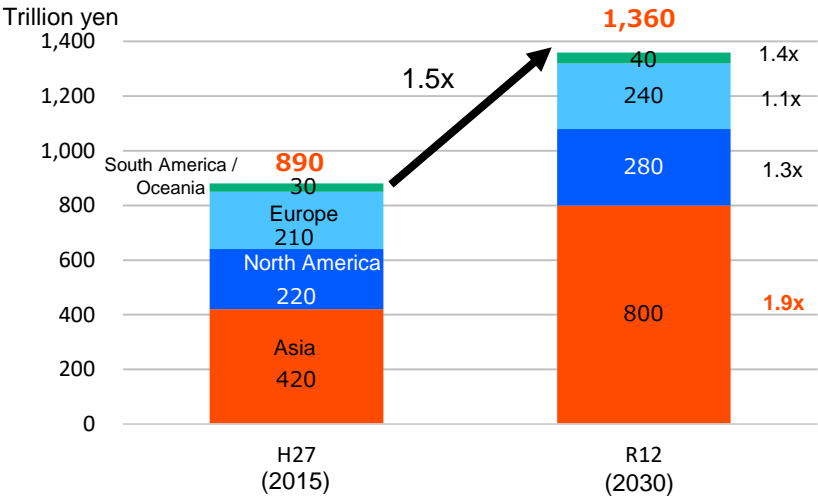


Source: PRIMAFF, "Future Estimation of Food Consumption in Japan (2019 Ver.)" (August 2019)

The food expenditure per person is expected to increase with the percentage of expenditure for processed food increasing. On the other hand, the advancement of population decline is likely to offset the growth of the food expenditure per person. Accordingly, the total food expenditure will remain roughly flat for the meantime and contract in the long run.

Prospects of the global food and beverage market scale

Figure 13-3 Prospects of the global food and beverage market scale



*The figures shown in the graph are rounded off.
Source: PRIMAFF, "Scale Estimation of the Global Food and Beverage Market" (March 2019)

The global food and beverage market scale is expected to expand to 1,360 trillion yen by 2030 (1.5 times more than the scale in 2015).

By region, the market scale in Asia is projected to expand 1.9 times from 420 trillion yen to 800 trillion yen as the growth of per capita GDP in the region is considerable.

Additionally, the TPP-11, the Japan-EU EPA, and trade agreements between Japan and the United States are set to create a massive market accounting for about 60% of the world's GDP. Accordingly, it is important to gain a share of the global food market while also dealing with the domestic market.

Population aging with a low birthrate and population decline are progressing in rural areas, particularly in hilly and mountainous areas, ahead of urban areas. On this basis, there is a risk that, in the future, there will not only be more areas where it is difficult to conduct regional joint activities and preservation and management activities, but there will also be areas where the maintenance of even daily-life infrastructures is difficult.

Additionally, it is predicted that the number of rural communities whose continued existence is at risk will increase fourfold or more in 30 years. Since 90% of such rural communities are located in hilly and mountainous areas, there is a concern about how the production base of agriculture will be affected by this trend.

Figure 14-1 Population changes and future prospects according to the classification of agriculture areas

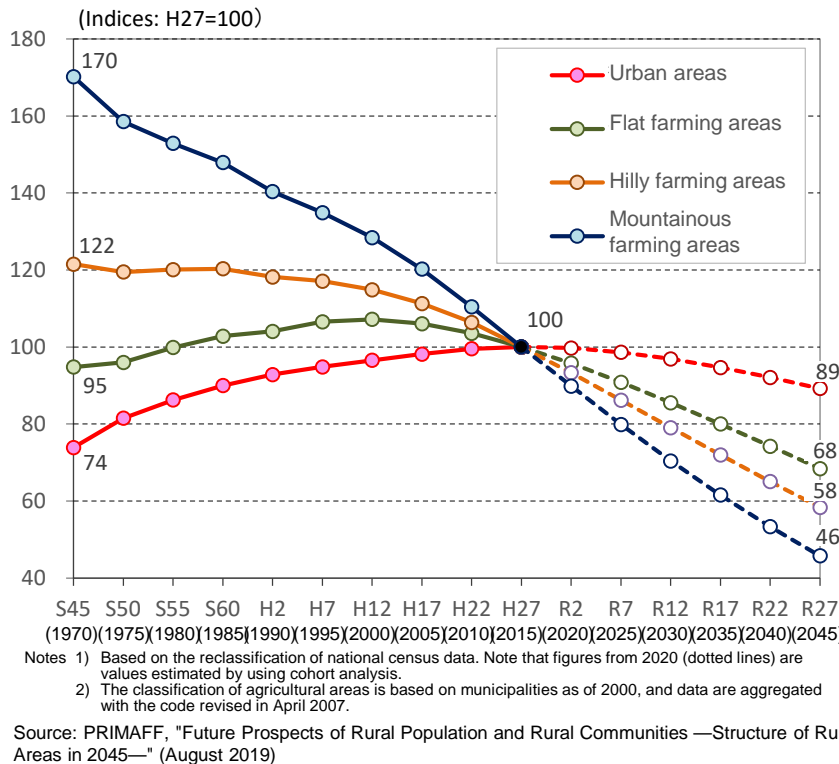
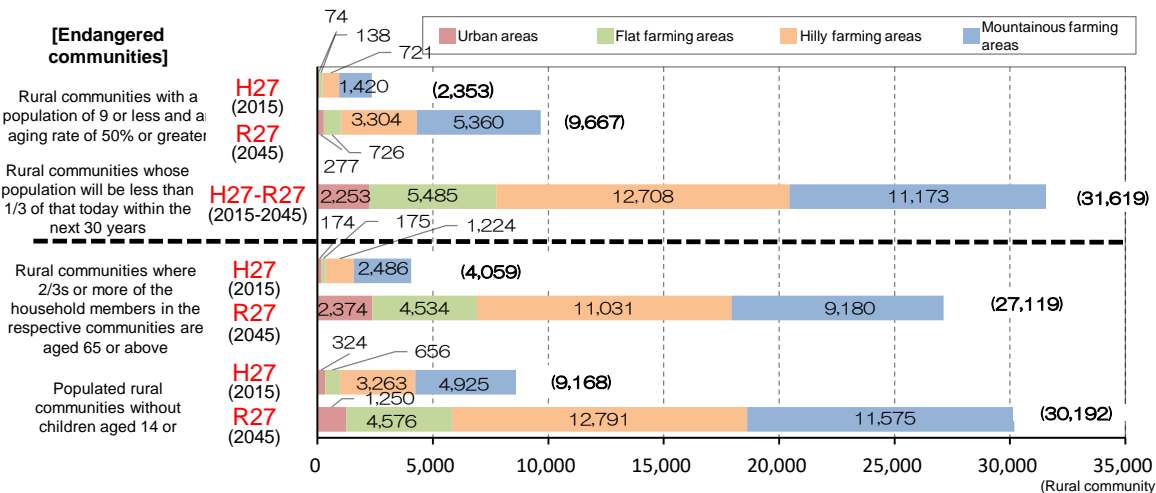


Figure 14-2 Changes in rural communities due to the progress of population decline and aging with a low birthrate (estimation results)



Source: PRIMAFF, "Future Prospects of Rural Population and Rural Communities —Structure of Rural Areas in 2045—" (August 2019)
Note: Based on rural community population by age estimated by using cohort analysis performed for each rural community.

Basic viewpoints for promoting measures

- Both "industrial policy" for developing agriculture into a growth sector and "regional policy" for promoting the maintenance and implementation of agriculture's and rural areas' multifunctional roles will be employed just like two wheels of a cart, thereby striving to ensure stable food supply into the future and to improve Japan's capacity for food self-sufficiency and establish food security.
- In so doing, measures will be implemented on the basis of the following viewpoints.

1. Promotion of measures that are in line with the needs of consumers and users

To deal with declining consumption incidental to changes in the domestic social structure and the progress of the externalization of diet, it is necessary to build production systems and value chains in line with changing needs. In the meanwhile, the development of new overseas sales channels and global production areas based on overseas regulations/demand need to be advanced in order to gain a share of the global food market that continues to expand and increase the income of farmers.

2. Establishment of food security and formation of a national consensus on the importance of agriculture and rural areas

For stable food supply, it is necessary to make efforts to increase domestic agricultural production as a basis and secure food by appropriately combining imports and stocks. For increasing domestic agricultural production, consumption-focused initiatives to encourage consumers to actively choose domestic agricultural products are essential, in addition to production-focused initiatives.

3. Implementation of measures to develop/secure human resources and enhance the production base with the aim of ensuring the sustainability of agriculture

In order to ensure the sustainability of agriculture, it is important to establish an agricultural structure that ensures that efficient and stable farm management constitutes a considerable portion of agricultural production. Furthermore, it is important to enhance the production base through promotion of the active participation of diverse human resources and entities that support agricultural sites

4. Acceleration of smart agriculture and promotion of Digital Transformation in agriculture

To address the aging of farmers and labor shortage in the future at the same time as transforming agriculture into a growing sector, it is essential to reform agriculture into a new form that creates and provides value which accurately addresses consumer needs through data-driven agricultural management (Digital Transformation in agriculture (Agriculture DX)).

5. Integration of regional policies and maintenance and implementation of multifunctionality

To maintain and pass rural areas on to the next generation, it is important for relevant ministries, local governments, business operators, etc. to mutually cooperate with each other with a view to effective and efficient use of national land and make efforts to "integrate regional policies."

6. Enhancement of responses to risks that pose a threat to the sustainability of agriculture, such as climate change leading to disasters, infectious diseases of domestic animals, etc.

In the future, an even greater weight will be placed on responses to risks that pose a threat to the sustainability of agriculture, including large-scale natural disasters, which have occurred frequently in recent years, infectious diseases of domestic animals such as CSF (classical swine fever), and also COVID-19.

7. Promotion of measures to expand agricultural income and income in rural areas

It continues to be important to increase agricultural income through raising the agricultural production value and reducing production costs and to increase relevant income in rural areas through means such as Affrinnovation and the promotion of innovation originated from rural areas.

8. Implementation of measures to back up sustainable efforts based on the SDGs

Even in the fields of food, agriculture and rural areas, it is necessary to tackle various economic/social/environmental issues in an integrated manner.

Part 2

Food self-sufficiency ratio targets

- Challenges to be overcome in securing stable food supply and promoting agricultural production that responds to changes in domestic and overseas demand are shown by item. Furthermore, as the levels that can be attained when such challenges are overcome, the total food self-sufficiency ratio targets for 2030 are set to 45% on a calorie supply basis and 75% on a production value basis.
- In addition, as an indicator to evaluate the situation of food production in Japan with activities in the livestock industry appropriately reflected in it irrespective of whether feed is domestically produced or imported, national food production ratio targets are newly set.

Trend of the total food self-sufficiency ratio

Japan's food self-sufficiency ratio was on a decline in the long term but has roughly stayed level in recent years.

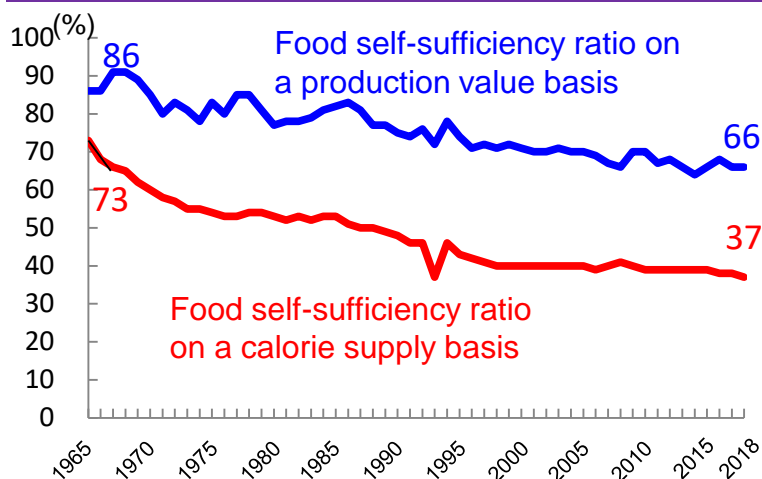
[Calorie supply basis]

- Focuses on energy (calorie) as it is a foundational nutritional value
- Evaluates the situation of food security

[Production value basis]

- Focuses on economic value
- More appropriately reflects production activities for vegetables, fruits, livestock products, etc. with high added value

Figure 17-1 Trend of the food self-sufficiency ratio



Total food self-sufficiency ratio targets

On the basis of the prospects of food consumption and production effort targets (Figure 17-1), food self-sufficiency ratio targets are set as the levels that can be attained when various challenges are overcome.

	FY2018 (base fiscal year)	FY2030 (target fiscal year)
Total food self-sufficiency ratio on a calorie supply basis	37%	45%
Total food self-sufficiency ratio on a production value basis	66%	75%

(Reference)

	FY2018 (base fiscal year)	FY2030 (target fiscal year)
Total farmland area	4.420 million ha (4.397 million ha in 2019)	4.14 million ha
Total planted area	4.048 million ha	4.31 million ha
Utilization rate of cultivated land	92%	104%

Targets of the national food production ratio that focuses on domestic production

	FY2018 (base fiscal year)	FY2030 (target fiscal year)
Feed self-sufficiency ratio	25%	34%
National food production ratio on a calorie supply basis	46%	53%
National food production ratio on a production value basis	69%	79%

In addition to the total food self-sufficiency ratio targets, national food production ratio targets are newly set as an indicator to evaluate the situation of food production in Japan with activities in the livestock industry appropriately reflected in it irrespective of whether feed is domestically produced or imported.

Prospects of food consumption and production effort targets

In order to achieve the food self-sufficiency ratio targets for FY2030, it is important that (i) in terms of food consumption, the connection between consumers and food and agriculture is deepened and efforts are made to expand the demand for domestic agricultural products in response to the externalization of diet and consumers' growing preference for convenient food, and that (ii) in terms of agricultural production, production and supply that meet changes in domestic and overseas demand are implemented in a systematic manner and, at the same time, the production base is enhanced. Based on these viewpoints, prospects of food consumption and production effort targets are set for each item.

(Examples)

Wheat/Soybean: Promotion of the development/introduction of new varieties with excellent disease resistance, etc., and promotion of large-scale areas and block rotation

Beef : Promotion of increasing the number of cows for breeding, productivity improvement and scale expansion which also cover small- and medium-sized/family businesses, expansion of demand for domestically produced beef through export promotion

Vegetables: Expansion of production of vegetables for processing and manufacturing use through formation of new production areas by utilizing paddy fields, and expansion of the daily vegetable consumption of adults (target: 350 g)

Figure 17-1 Prospects of food consumption and production effort targets for FY2030

Item	Prospects of food consumption				Production effort targets (10,000 tons)	
	Consumption per person per year (kg per person per year)		Supplies for domestic consumption (10,000 tons)			
	FY2018	FY2030	FY2018	FY2030	FY2018	FY2030
Rice (excluding rice for flour and rice for feed)	54	50	799	714	775	723
Rice for flour	0.2	0.9	2.8	13	2.8	13
Rice for feed	-	-	43	70	43	70
Wheat	32	31	651	579	76	108
Barley / Naked barley	0.3	0.3	198	196	17	23
Soybean	6.7	6.4	356	336	21	34
Buckwheat	0.7	0.7	14	13	2.9	4.0
Sweet potato	3.8	4.0	84	85	80	86
Potato	17	17	336	330	226	239
Rapeseed	-	-	257	264	0.3	0.4
Vegetables	90	93	1,461	1,431	1,131	1,302
Fruits	36	36	743	707	283	308
Sugar beet <refined sugar equivalent>	<18>	<17>	<231>	<206>	361 <61>	368 <62>
Sugar cane <refined sugar equivalent>					120 <13>	153 <18>
Tea	0.7	0.7	8.6	7.9	8.6	9.9

Item	Prospects of food consumption				Production effort targets (10,000 tons)	
	Consumption per person per year (kg per person per year)		Supplies for domestic consumption (10,000 tons)			
	FY2018	FY2030	FY2018	FY2030	FY2018	FY2030
Raw milk	96	107	1,243	1,302	728	780
Beef <carcass equivalent>	6.5	6.9	93 <133>	94 <134>	33 <48>	40 <57>
Pork <carcass equivalent>	13	13	185 <264>	179 <256>	90 <128>	92 <131>
Chicken	14	15	251	262	160	170
Hen egg	18	18	274	261	263	264
Feed and forage crop	-	-	435	519	350	519

Note: The figures for feed and forage crop are the total digestible nutrients(TDN) of quality roughage.

(Reference)

Item	Prospects of food consumption				Production effort targets (10,000 tons)	
	Consumption per person per year (kg per person per year)		Supplies for domestic consumption (10,000 tons)			
	FY2018	FY2030	FY2018	FY2030	FY2018	FY2030
Fish and shellfish <for human consumption>	24 <24>	25 <25>	716 <569>	711 <553>	392 <335>	536 <474>
Seaweeds	0.9	0.9	14	13	9.3	9.8
Mushrooms	3.5	3.8	53	54	47	49

Note: The supplies for domestic consumption denote the amount obtained by multiplying the consumption per person per year by population and adding the amount lost during transportation from the production areas to consumers, etc.

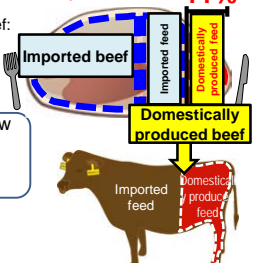
Food self-sufficiency ratio target (with the feed self-sufficiency ratio reflected)

Feed self-sufficiency ratio reflected: **11%**

Food self-sufficiency ratio for beef:
11% (calorie supply basis)
(2018)



It is possible to know how much can be really self-sufficient including feed.



Self-sufficiency ratio for domestically produced beef
27%

- The producible part can be precisely evaluated only with domestically produced feed.
- Production efforts for domestically produced feed are reflected.

➡ Evaluates the situation of food security of Japan

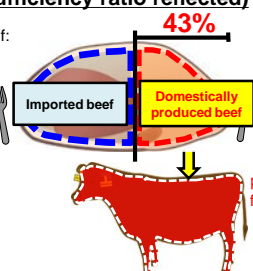
National food production ratio target [newly set] (without the feed self-sufficiency ratio reflected)

National food production ratio for beef:

43% (calorie supply basis)
(2018)



It is possible to know the capability of Japan's livestock industry.



National food production ratio for domestically produced beef
100%

- The efforts of livestock farms in increasing their amount of livestock and production according to demand are reflected.
- It matches the actual feeling that consumers who purchase domestically produced livestock products daily have.

➡ Takes account of the activities of the livestock industry and evaluates the situation of domestic production irrespective of whether feed is domestically produced or imported

➡ Strive to improve the "food self-sufficiency ratio that reflects the feed self-sufficiency ratio" while making efforts to improve both the "national food production ratio" and "feed self-sufficiency ratio"

Food self-sufficiency potential indicator (food production potential)

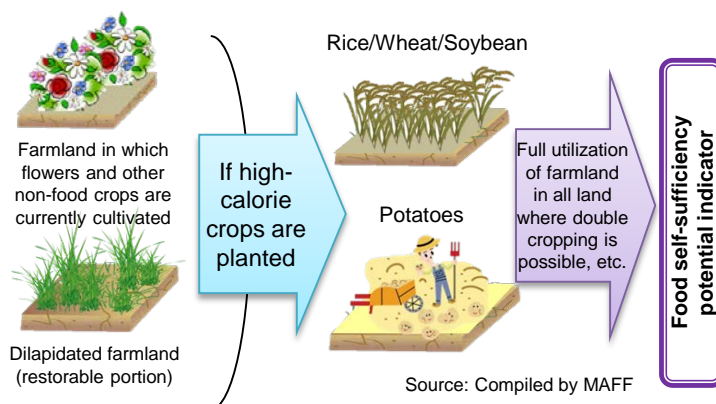
- The food self-sufficiency potential indicator, which indicates the food production potential of Japan, has been improved so that it takes into consideration agriculture labor force and labor-saving agricultural technology.
- Furthermore, with prospects for 2030 also presented, it has been designed to evaluate how the securing of farmland and agriculture labor force for the future and how yield improvement can contribute to improving the food self-sufficiency potential.

Concept of the food self-sufficiency potential indicator and its relationship with the food self-sufficiency ratio

In an unforeseeable event, it is necessary to secure the maximum food supply within Japan. Accordingly, it is important in normal times to understand the food production potential of agriculture, forestry and fisheries in Japan.

For that reason, the "food self-sufficiency potential indicator" has been set as an indicator to estimate "how much food can be produced by domestic production alone" (food production potential).

Figure 18-1 Concept of the "food self-sufficiency potential indicator"

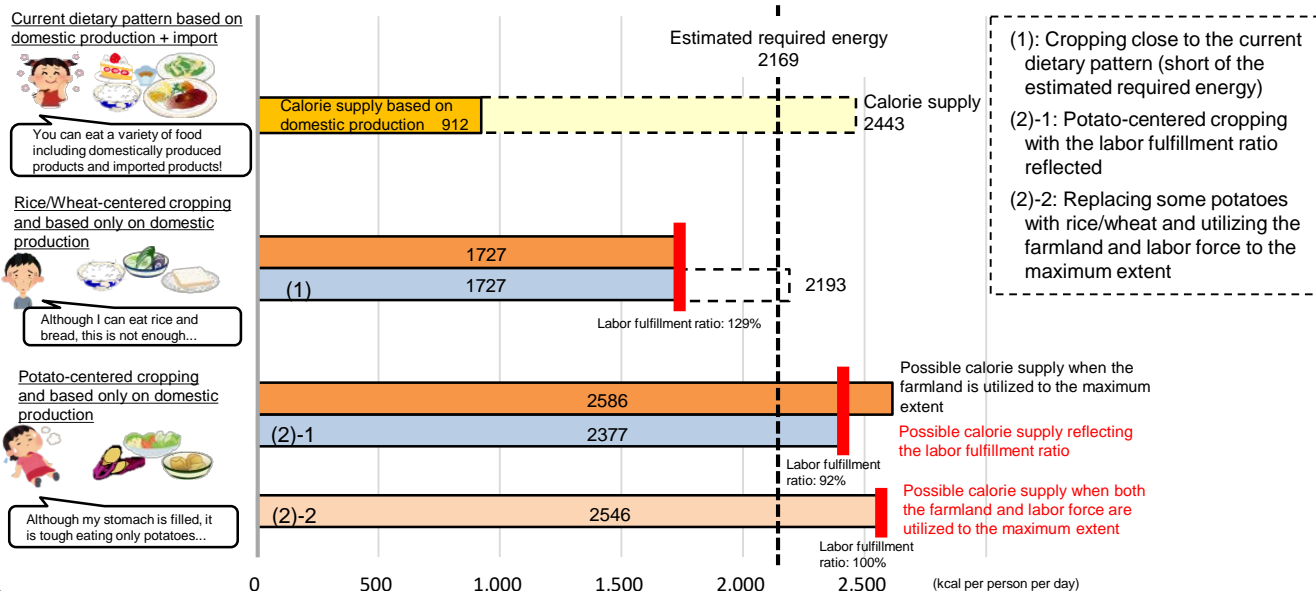


Current status of the "food self-sufficiency potential indicator"

The current food self-sufficiency potential indicator (FY2018) is below the Japanese average level of estimated required energy per person in the case of "rice/wheat-centered cropping," while it is above the same level in the case of "potato-centered cropping."

Since "potato-centered cropping" is short of labor force required for the cropping by 10%, a possible calorie supply that can be generated when part of the cropping is replaced with more labor-saving crops such as rice/wheat and both the farmland and labor force are utilized to the maximum extent is presented.

Figure 18-2 Concept of the "food self-sufficiency potential indicator"



Prospects of the “food self-sufficiency potential indicator” in the future (FY2030)

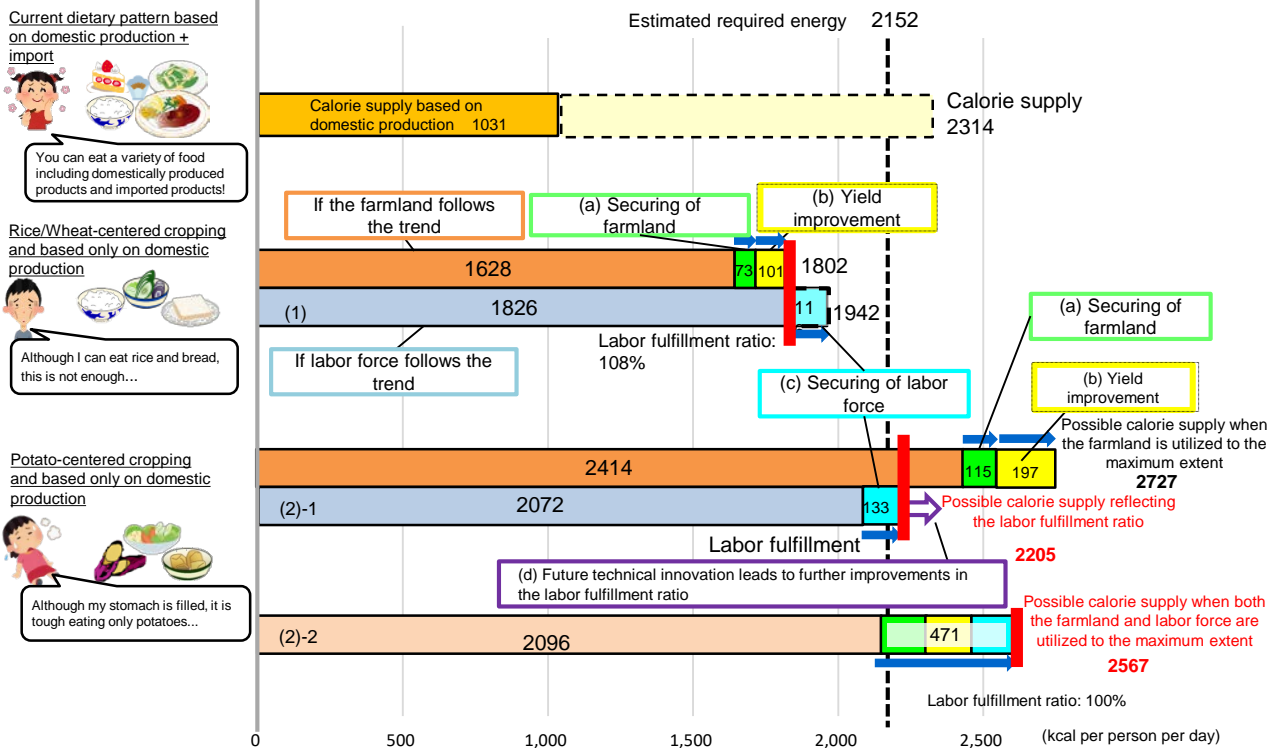
The new Basic Plan shows how the securing of farmland and agriculture labor force for the future and yield improvement contribute to an increase in the possible calorie supply per person per day, respectively.

With the advancement of (a) the securing of farmland and (b) yield improvement, the possible calorie supply for the case where the farmland is utilized to the maximum extent can be boosted up from the level for the case where "the farmland follows the current trend."

Furthermore, if (c) the securing of labor force is advanced, for example, with improvement in the retention rate of young newcomers, the possible calorie supply reflecting the labor fulfillment ratio can be pushed up from the level for the case where "labor force follows the current trend." In addition, technical innovation is advanced, the calorie supply can be further boosted up (d).

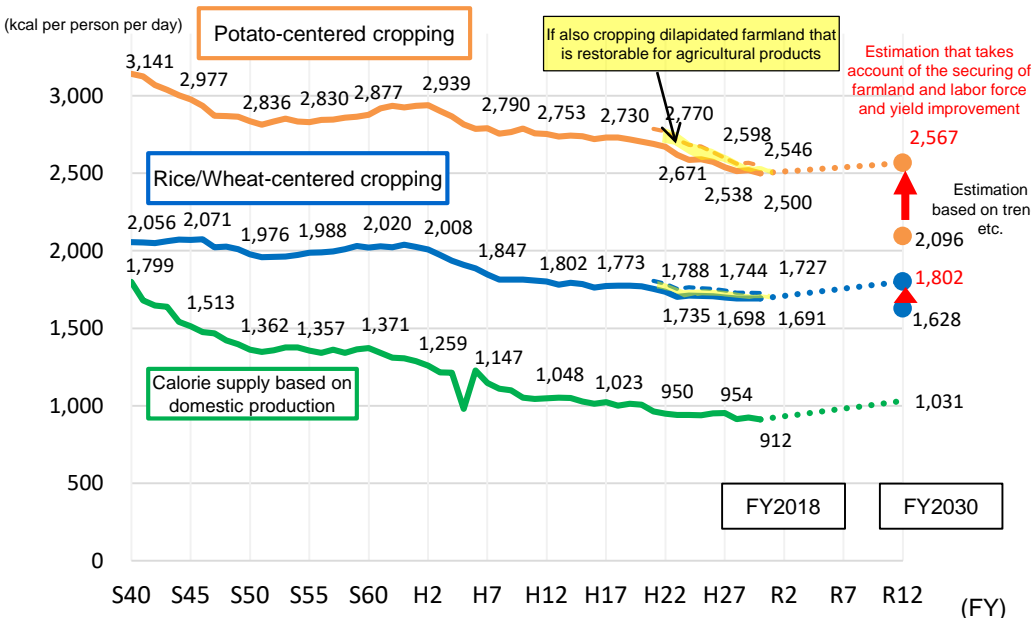
Thus, it is important to work on the food self-sufficiency potential indicator together with the securing of farmland and labor force, yield improvement and technical innovation as above.

Figure 19-1 Prospects of the “food self-sufficiency potential indicator” in FY2030



Trend of the “food self-sufficiency potential indicator”

Figure 19-2 Trend and prospects of the “food self-sufficiency potential indicator”



The food self-sufficiency potential indicator had been on a decline until FY2018 due to the declining area of farmland, sluggish yield growth, etc.

The estimation for FY2030 that takes account of the securing of farmland and labor force and yield improvement pushes up the possible calorie supplies of both rice/wheat-centered cropping and potato-centered cropping in comparison with those supplies according to estimation based on trends, etc.

Exploration of demand through the creation of new value

- Taking account of the progress of externalization of diet, growing preference for convenient food, health-oriented behavior, etc. due to aging population and lifestyle changes, the government will promote the creation of new value through cooperation and coordination among relevant parties while also stepping up responses to the diversification and sophistication of consumers' and users' needs.

Initiatives for creation of new markets

In order to respond to food-related market changes such as the health-oriented behavior of people and the aging of population, such initiatives for creation of new markets as those below will be promoted:

- Dissemination of care food
- Services to support health management through food
- Smart-breeding by utilizing big data, etc.
- FoodTech that combines food and advanced technology

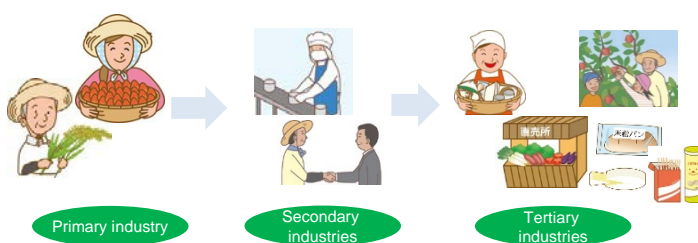
Figure 20-1 Initiatives for creation of new markets



Creation of new value chains according to demand

Initiatives for Affrinnovation so far will be further developed to promote the creation of businesses with high added value through active cooperation between agriculture and secondary industries such as the food processor industry and tertiary industries such as the tourism industry.

Figure 20-2 New development of Affrinnovation



Enhancement of the competitiveness of the food industry

To enhance the competitiveness of the food industry, the following actions will be promoted:

- Streamlining in the entire supply chain
- Efforts to resolve labor shortage
- Promoting enactment and utilization of JAS and international standards that contribute, for example, to ensuring smooth transactions and the rationalization of consumers' choice

Figure 20-3 Streamlining of food distribution

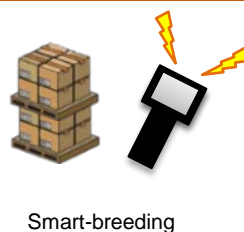


Figure 20-4 Specific JAS Logo



"Specific JAS Logo" for differentiation and branding

Responses to environmental issues including food loss and waste

Initiatives for reduction of food loss and waste will be accelerated with the aim of attaining the target of halving business-related food loss and waste.

Furthermore, measures to deal with plastic waste in fields associated with the food industry will be strengthened.

Food-related business operators' actions for climate-related risk management will be promoted.

Figure 20-5 Responses to environmental issues



"Loss-non" logo of a national movement for reduction of food loss and waste



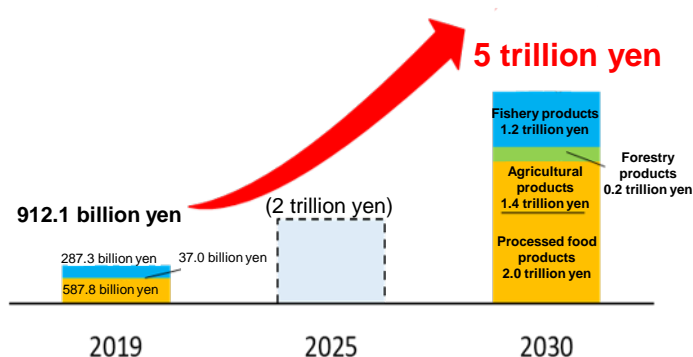
Action promotion mark for plastic waste generation control

Strategic exploration of the global market

- The entire government will promote the export of agricultural, forestry and fishery products and food with the aim of increasing the income of farmers.
- The government will work on promoting the overseas business expansion of the food industry and protecting and exploiting intellectual property, etc.

Promotion of the export of agricultural, forestry and fishery products and food

Figure 21-1 New export targets



The entire government will promote export by establishing of Headquarters for the Export of Agricultural, Forestry, and Fishery Products and Food within the MAFF as the control tower for export promotion and therethrough preparing execution plans and implementing progress management.

The government will develop an environment for addressing factors obstructing export and for expanding export and promote the creation of global production areas through the GFP (Global Farmers / Fishermen / Foresters / Food Manufacturers Project) and the strengthening of production bases that can contribute to the expansion of export according to the challenges that each item faces.

In addition, strategic promotion will be conducted through the Japan Food Product Overseas Promotion Center (JFOODO) in expanding the export of agricultural, forestry and fishery products and food produced in Japan.

Furthermore, the government will strategically promote not only the export of products but also efforts to meet overseas demand, such as the overseas business expansion of food-related industries (such as the food industry and agriculture) through, for example, the establishment of global food value chains by utilizing Japan's technology and know-how.

Figure 21-2 Promotion aimed at export expansion



Business negotiations at overseas trade exhibitions



Sales promotion for Bonsai plants

Protection and exploitation of intellectual property, etc.

Figure 21-3 Geographical indication protection system



With the aim of further raising awareness about the geographical indication (GI) protection system, the protection of Japan's GI products will be enhanced.

Additionally, since the current plant variety protection system is not able to place restrictions on taking new, high-quality varieties of plants developed in Japan out of the country, the government will work on developing an environment that ensures the enhancement of appropriate protection.

Moreover, efforts will be made to enhance the protection of the genetic resources of high-quality livestock.

Deepening of the connection between consumers and food/agriculture

- To deepen the connection between consumers and food/agriculture, the government will work on the promotion of food education and local consumption of local produce on the basis of changes in dietary patterns and dietary habits, the expansion of consumption of domestic agricultural products, the preservation/inheritance of the WASHOKU culture (Japanese traditional dietary culture), and the strengthening of the relationship between consumers and producers.

Promotion of food education and expansion of consumption of domestic agricultural products

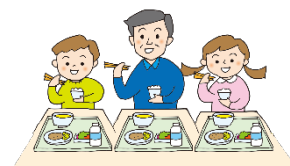
Efforts will be made to encourage exchanges with consumers and food-related business operators so that they actively select domestic agricultural products and to increase opportunities for consumers to know and experience Japanese food and agriculture.

The government will promote food education taking into consideration, among other factors, the diversification of dietary patterns and the characteristics of different generations, and also promote the expansion of consumption of domestic agricultural products through, for example, local production for local consumption.

Figure 22-1 Initiatives for deepening the connection between consumers and food/agriculture



Exchange between consumers and farmers/food-related business operators



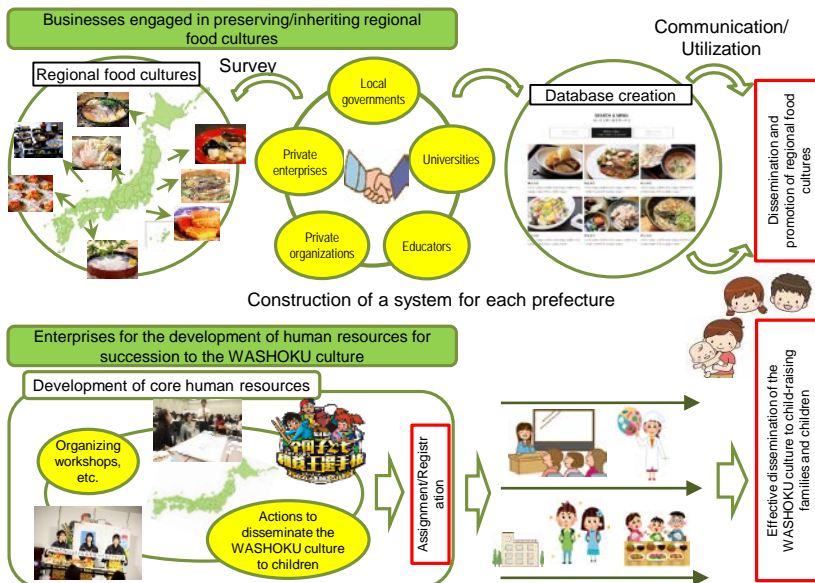
Use of local ingredients for school lunch and meals at institutions such as hospitals / Promotion of local consumption of local produce

Preservation and inheritance of the WASHOKU culture

For preservation and inheritance of the WASHOKU culture that is Japanese people's dietary habit based on the spirit of "respecting nature," the following actions will be implemented:

- Accumulation of scientific evidence regarding the usefulness of WASHOKU in terms of health
- Study of the local cuisines of each region and creation of a database of such local cuisines
- Development of core human resources for succession to the WASHOKU culture to the next generation
- Improvement in how WASHOKU is viewed (for example, the artistic quality of WASHOKU) to back up the export of agriculture, forestry and fisheries products, etc.

Figure 22-2 Preservation and inheritance of the WASHOKU culture



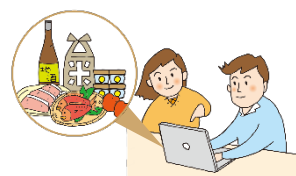
Strengthening of the relationship between consumers and producers

While food and agriculture have become further away from each other, as shown by the fact that the number of opportunities to cook at home have decreased, community supported agriculture (CSA), in which consumers and farmers are directly connected to each other and execute preliminary contracts for transactions involving agricultural products, has been implemented. Against this background, efforts to connect production areas and consumers through utilization of EC sites and SNSs will be made.

Figure 22-3 Strengthening of the relationship between consumers and producers



Japan Harvest
(Occasion of exchange between producers and consumers)



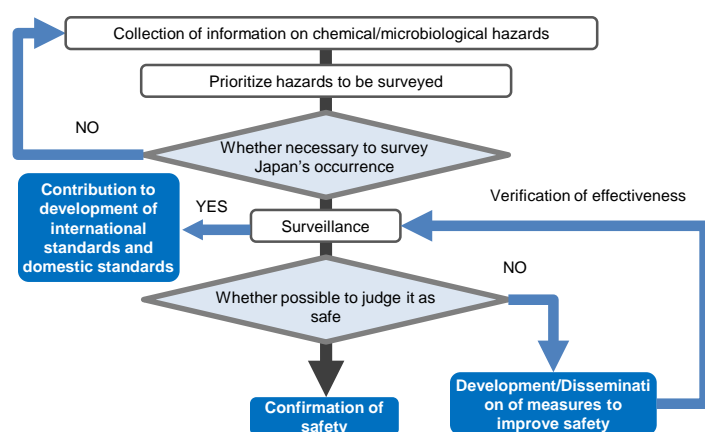
Use of EC sites

Ensuring food safety and consumer confidence taking international activities into consideration

- In order to ensure food safety and consumer confidence, the government will continue to steadily conduct risk assessment, risk management and risk communication based on sound science, consistent with internationally agreed frameworks and the principle “prevention is better than cure.”
- The government will work on ensuring consumer confidence in food through means such as enrichment and appropriate indication of food labeling information.

Enhancement of efforts to ensure food safety based on scientific development, etc.

Figure 23-1 Efforts to ensure food safety

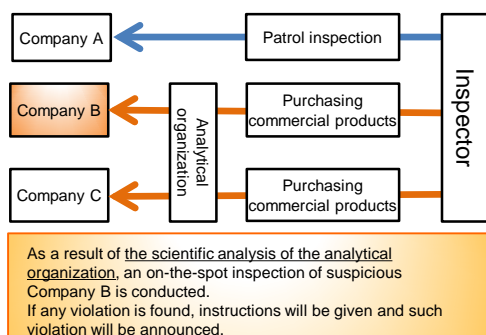


- Surveillance of the occurrence of hazards in foods
- Formulation of measures to improve safety in coordination with producers and food-related business operators
- Development of international standards and code of practice concerning food safety

In addition to implementing the above efforts, other necessary efforts for ensuring food safety in each stage of production, manufacturing and importing will be implemented.

Securing of consumer confidence in food through means such as enrichment and appropriate indication of food labeling information

Figure 23-2 Monitoring by using scientific analysis methods

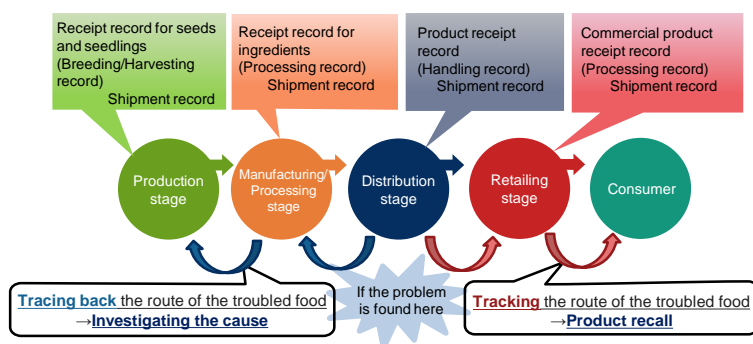


The government will implement effective and efficient monitoring by using scientific analysis methods such as DNA analysis and promote proper food labeling.

The government will disseminate the country of origin labeling system for ingredients of processed food by, for example, organizing seminars for food-related business operators.

With regard to the labeling of the origins of ingredients in the case of eating-out and home-meal replacements, the government will make efforts to develop an environment that can enable even small- and medium-sized business operators to implement the labeling smoothly.

Figure 23-3 Food traceability



Furthermore, the government will disseminate and raise public awareness of food traceability that enables a lot number to be identified and traced back to its record in the case where a problem such as a food-related accident occurs.

Establishment of comprehensive food security with risks associated with food supply taken into consideration

- In recent years, factors that potentially affect Japan's stable food supply have emerged, which include food demand growth accompanying global population growth and economic development, climate change, and infectious diseases of domestic animals.
- In preparation for unforeseeable events, the government will work on establishing comprehensive food security through, for example, analysis and assessment of the impact of risks even in normal times, consideration and revision of measures against such risks, securing stable grain imports, etc., and enhancement of measures against animal epidemics and for plant protection.

Efforts to be made in normal times in preparation for unforeseeable events

The government will analyze the impact, etc. of risks that potentially affect the supply of Japan's key agricultural, forestry and fishery products even in normal times and consider and implement measures to reduce such impact.

In order to enable prompt responses to unforeseeable events, simulations based on a scenario for each event and the verification of effectiveness of such simulations will be conducted, and further enhancements will be made.

Furthermore, the government will make efforts to develop understanding of food security through dissemination and raising awareness of the importance of stockpiling at home in preparation for large-scale disasters.

Figure 24-2 Example stockpile at home



Figure 24-1 Import situation of grains



Operations carried out for the export of corn in the United States

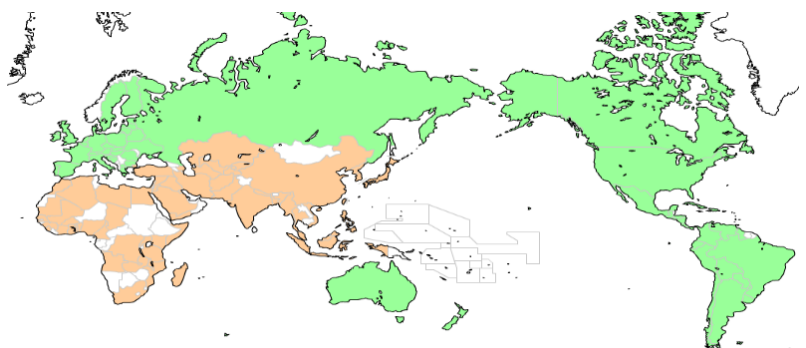
Understanding and analysis of international food supply and demand, securing stable grain imports, etc., and promotion of international cooperation

The government will examine the supply and demand situation of grains, etc., in the world, forecast their long-term supply and demand, and collect, analyze and communicate information concerning the logistics, infrastructure, etc. of importing countries.

In order to secure a stable supply of grains and other items for which Japan relies on imports from overseas, the government will maintain and strengthen Japan's good ties with importing countries and work on making stable and diversifying imports through collection, etc. of relevant information.

Moreover, the government will also promote international cooperation in tackling global issues such as starvation, poverty, malnutrition and climate change.

Figure 24-3 Prospects of the supply and demand of main crops by region



Note: The green parts mean the areas expected to have export surpluses in 2050, and the orange parts mean the areas expected to have import surpluses in the same year.

Figure 25-1 Measures against infectious diseases of domestic animals



Farm entry prevention fences
(Strengthening sanitary control over domesticated animals)



Oral vaccine against CSF for wild boars
(Measures for wild animals)



Quarantine detector dog working at an airport
(border control)

In order to prevent the entry of infectious diseases of domestic animals such as African swine fever (ASF) and classical swine fever (CSF) from overseas, the government will implement thorough border control to "prevent the intrusion of viruses" into Japan and, in case such intrusion occurs, implement thorough epidemic prevention in the country, such as strengthening sanitary control over domesticated animals in "preventing viruses from being carried into" farms.

With regard to plant pests, the government:

- implements border control to prevent their entry from overseas;
- is enhancing measures to prevent their occurrence and spread including timely and prompt control of pests that have occurred, and regulation on movement of plants; and
- is upgrading technology on pest control.

Part 3-1

Basic Plan p. 38

Adapting to new international settings such as the TPP and taking strategic approach to international negotiations in the future

- In line with the comprehensive TPP-related policy framework, the government will implement measures for enhancement of the production bases and for stable management and stable supply so as to firmly ensure sustainability.
- In future trade negotiations for agricultural products, the government will also engage in such negotiations with due consideration given to sensitivity and aim at securing negotiation results that lead to export expansion.

- Promotion of internationally competitive innovation of production areas



Development of bases for storage, processing, etc.

- Comprehensive project for strengthening the profitability of livestock farms and dairy farms

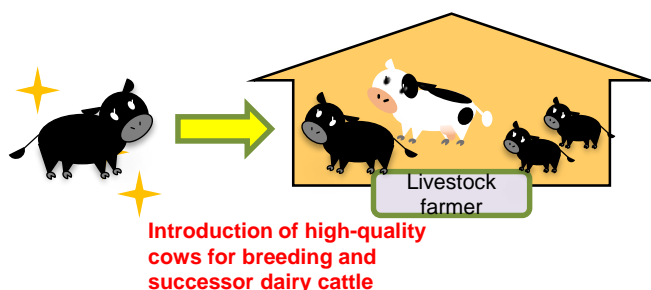


Figure 25-3 Current status of Economic Partnership Agreements

