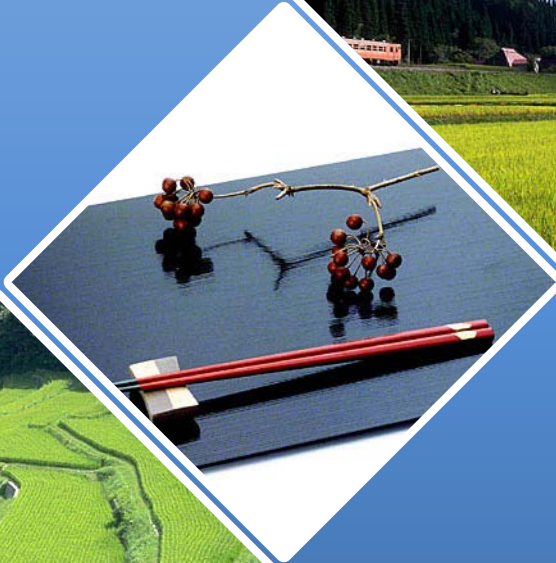


Summary of the Basic Plan for Food, Agriculture and Rural Areas

—Food, agriculture and rural areas over the next 10 years—



For efforts to respond to a population-declining society
and for invigoration of rural communities

April 2015

Ministry of Agriculture, Forestry and Fisheries

Contents

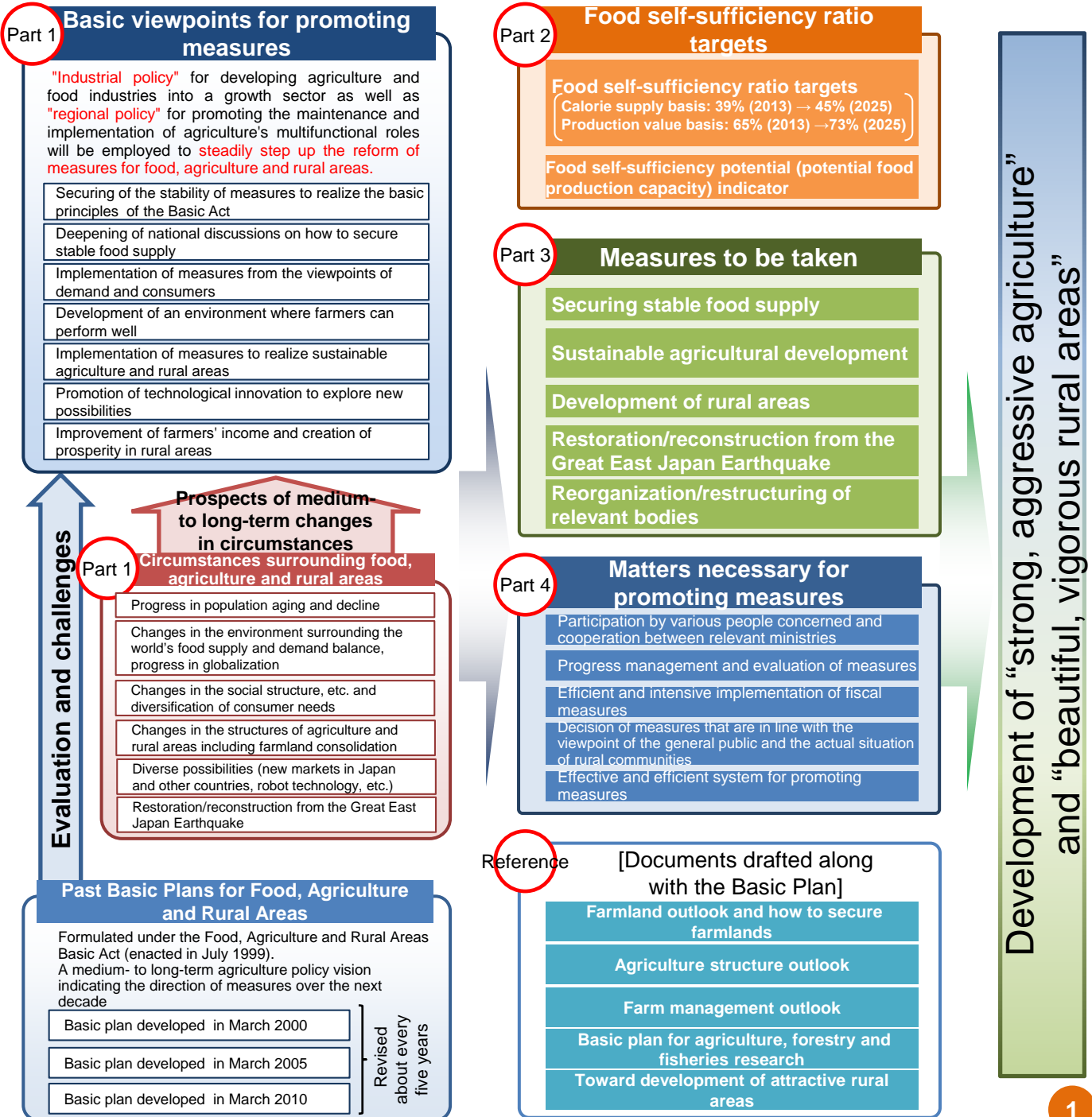
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What is the Basic Plan?

- The new Basic Plan for Food, Agriculture and Rural Areas is the fourth Basic Plan decided based on the Food, Agriculture and Rural Areas Basic Act.
- The Basic Plan for Food, Agriculture and Rural Areas serves as a guideline for advancing the reform of measures and efforts by the entire nation so as to enable Japan's agriculture and rural areas to accurately respond to structural and other changes in the economy and society, and to appropriately play their roles in the future, while fully demonstrating their potential.

Structure of the new Basic Plan

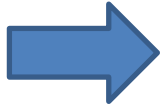


Key points of the new Basic Plan for

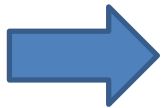
—A Basic Plan for Food, Agriculture and Rural Areas is developed based on the Food, Agriculture and Rural Areas Basic

[Key points]

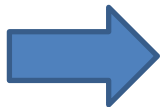
- Setting of food self-sufficiency ratio targets with consideration given to their feasibility
- Release of “food self-sufficiency potential indicator” for the first time



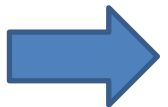
- Description on the enhancement of initiatives for expanding the export and promotion of AFFrinnovation (adding value to agriculture, forestry and fisheries products in an innovative way, making new combinations, or creating a value chain)



- Description on the Farming Income Stabilization Measures, Public Corporations for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Banks), and rice policy reform measures



- Description on the development of regional policy in consideration of progress in population aging and decline, such as the steady promotion of a multifunctional payment system and the maintenance of community functions through “integration and networking”



- Description on restoration/reconstruction from the Great East Japan Earthquake



- Description on the first agricultural cooperatives reform and agricultural committees reform in 60 years



Food, Agriculture and Rural Areas

Act about every five years with a vision for approximately the next 10 years, decided by the Cabinet, and reported to the Diet—

[Summary of the new Basic Plan]

Basic direction of measures

- "Industrial policy" for developing agriculture and food industries into a growth sector as well as "regional policy" for promoting the maintenance and implementation of agriculture's multifunctional roles will be employed to step up the agricultural policy reform.

Food self-sufficiency ratio targets

Calorie supply basis: 39% (2013) → 45% (2025), production value basis: 65% (2013) → 73% (2025)

(Food self-sufficiency potential indicator)

- By presenting "food self-sufficiency potential indicator" which evaluates Japan's potential food production capacity, the government intends to deepen national discussions on food security and promote initiatives for securing stable food supply.

Key measures

[Measures for securing stable food supply]

○ Promotion of exports of agriculture, forestry and fisheries products, and food, as well as global expansion of the food industry

- The government will develop an all-Japan framework for promoting exports, improve the export environment by such means as eliminating export-inhibiting factors, and promote the overseas expansion of Japanese food and food culture. It will improve the business investment environment, such as regulations and systems, based on "The Global Food Value Chain Strategy."

○ Strategic promotion of AFFrinnovation

- Through the promotion of AFFrinnovation, the government will create value chains in the production, processing and distribution stages of agricultural products, food, and other items.

[Measures for sustainable agricultural development]

○ Development/securing of business farmers for realizing a strong and sustainable agricultural structure as well as steady promotion of the Farming Income Stabilization Measures

- The government will provide intensive support, such as the Farming Income Stabilization Measures, to business farmers (such farmers as certified farmers, certified new farmers and community-based farm cooperatives). It will also promote the development of agricultural management through the incorporation of farmers and other means, recruitment of new farmers, and development/securing of human resources.

○ Consolidation of farmland to business farmers and securing of farmland through full-capacity operation of the Public Corporations for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Banks)

- The government will promote consolidation of farmland to business farmers by achieving the full-capacity operation of Farmland Banks. It will also work toward preventing farmland dilapidation and clearing dilapidated farmland.

○ Steady promotion of rice policy reform, as well as expansion of rice production for feed and other strategic crops

- Through the steady promotion of rice policy reform, the government will push forward production that meets demand. It will also make full use of paddy fields, as well as expand rice production for feed and other strategic crops in order to maintain and improve the food self-sufficiency ratio and potential.

[Measures for development of rural areas]

○ Steady promotion of the multifunctional payment system, etc.

- The government will promote the maintenance/succession of local resources through joint activities by the whole area, including family management entities, corporation management entities, and local residents. It will also support the continuance of farming in hilly and mountainous areas and other areas with disadvantageous production conditions.

○ Promotion of migration and settlement to rural areas as well as responses to damage due to wild animals

- The government will promote exchanges between urban areas and rural areas in collaboration with tourism, education, welfare, and other sectors, and migration and settlement of various human resources from urban areas to rural areas. It will also promote the enhancement of the prevention of damage due to wild animals, and the effective utilization of local resources, such as the use of captured wild animals for human consumption.

○ Maintenance of community functions through "integration and networking"

- The government will promote the formation of networks by developing traffic networks and "small hubs" that are key communities with concentrated functions such as life service functions.

[Measures for restoration/reconstruction from the Great East Japan Earthquake]

- The government will continue to promote activities including the steady restoration of farmland and agricultural facilities for early resumption of operations by affected farmers. In addition, it will respond to the Fukushima Daiichi Nuclear Power Plant accident and promote initiatives to ensure food safety and eliminate harmful rumors.

[Measures for the reorganization/restructuring of relevant bodies]

○ Agricultural cooperatives and committees

- The government will reform agricultural cooperatives and committees in order to enable motivated business farmers to carry out activities more.

Part 1

Situation surrounding food, agriculture and rural areas

Basic Plan p. 3–9

- Japan is experiencing the arrival of a super-aged society and a full-fledged population-declining society, as well as the progress and acceleration of globalization and informatization.
- Meanwhile, efforts have been started by various local people concerned to review their own strengths, make attempts to develop AFFrinnovation and export products overseas through original and creative approaches, and create new value and cultivate new markets.

1. Effects of aging and population decline on food, agriculture and rural areas

Aging and population decline are progressing in rural areas ahead of urban areas. Farmers are aging and decreasing, and the population of rural communities is also declining.

Dilapidation of farmland is progressing due to the retirement of aged farmers, and the production base is weakening due to a shortage of business farmers. Such trend is particularly notable in hilly and mountainous areas.

There is a risk that the number of farmers would substantially decrease, and as a result, agricultural management would not be passed on to the next generation, and valuable resources and techniques would cease to be handed down.

There is also a concern that the decline in the population of rural communities would impede the maintenance and management of local resources, such as farmland and irrigation systems and continued provision of life services and other functions.

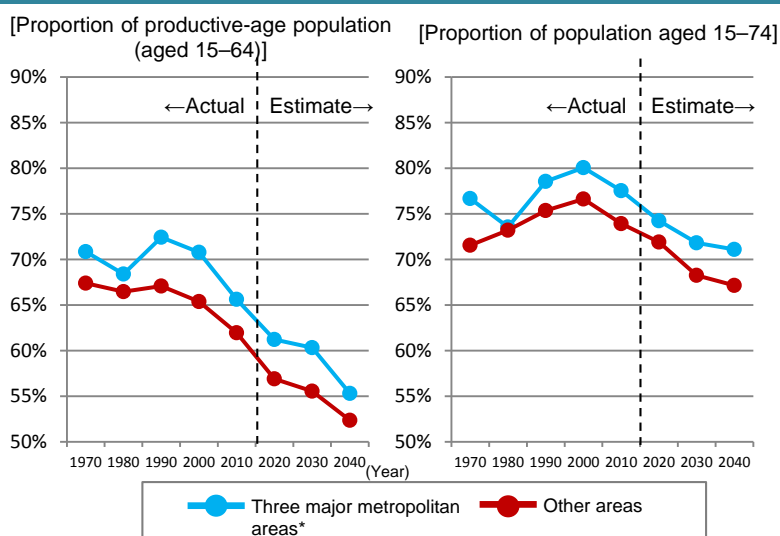
In the future, a full-fledged decline in the food consumption per person and the population decline associated with the progression of aging may cause shrinkage of the food market.

Japan's agriculture faces a risk of contraction if conventional initiatives are merely extended.

On the other hand, there is an expectation for the creation of new markets targeting elderly people who will grow in number in the future, such as markets for care food and services to support their health management through food.

Figure 4-1

Proportion in the total population

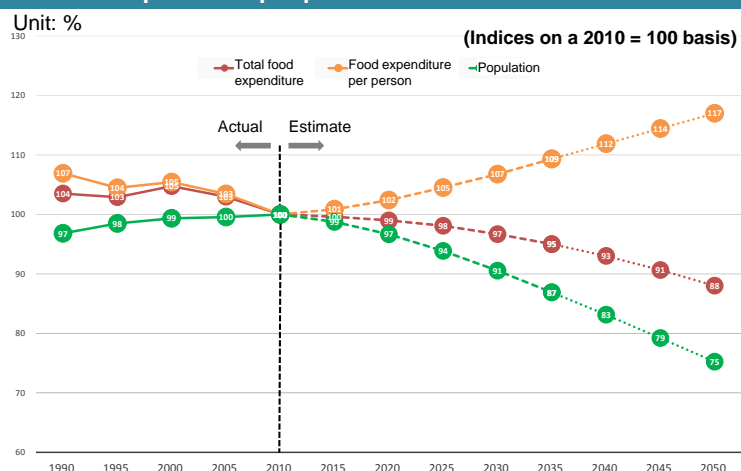


* Three major metropolitan areas: Total for the Tokyo area (Saitama, Chiba, Tokyo and Kanagawa Prefectures), Nagoya area (Gifu, Aichi and Mie Prefectures) and Osaka area (Kyoto, Osaka, Hyogo and Nara Prefectures)

Source: For data up to 2010, Ministry of Internal Affairs and Communications (MIC), "Population Census"; for data for 2015 onward, National Institute of Population and Social Security Research, "Population Projections for Japan (January 2012)" (Results of Projections According to the Medium-Fertility Assumption with High- and Low-Mortality Assumptions) and "Population Projections by Prefecture (January 2012)."

Figure 4-2

Future estimation of the total food expenditure and food expenditure per person



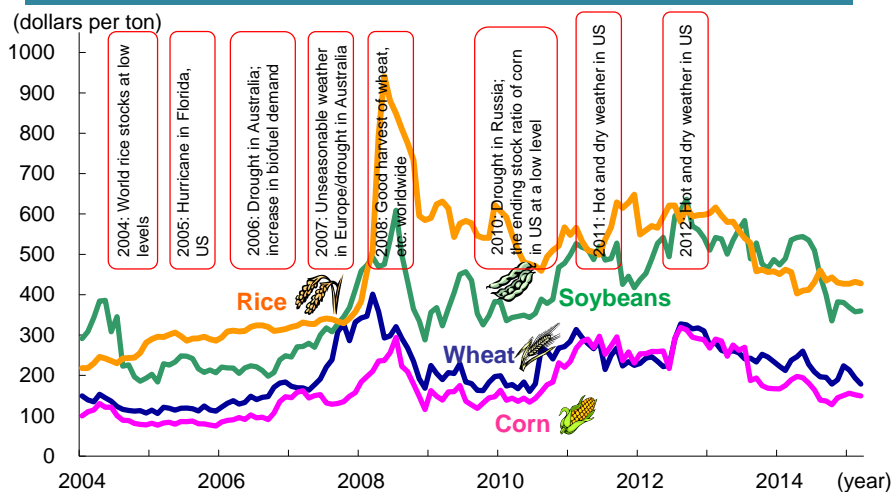
Source: Compiled by the Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (PRIMAFF)

Notes: 1) Real GDP growth rate for years up to 2022 is based on "OECD-FAO Agricultural Outlook 2013–2022." It rises to about 1.6% by 2022 and is fixed at that level thereafter. The following equation is used: (total food expenditure) = (food expenditure per person) × (population).

2) Supposing that the economy stays in zero growth, the food expenditure per person and the total food expenditure are estimated to be at about 100 and 87, respectively, in 2035, and at about 101 and 76, respectively, in 2050.

2. Prospects of global food supply and demand as well as progress of globalization

Figure 5-1 Changes in international prices of grains and soy beans



Source: The Chicago Board of Trade, and the Rice Committee, Board of Trade of Thailand.

Notes: 1) Prices for wheat, corn and soybeans are nearby futures prices on the Chicago Board of Trade on the first Friday of each month until March 2015.

2) Prices for rice are FOB prices for second grade 100% white Thai rice on the first Wednesday of each month announced by the Rice Committee, Board of Trade of Thailand.

The global demand for food and feed is estimated to continue growing in the future.

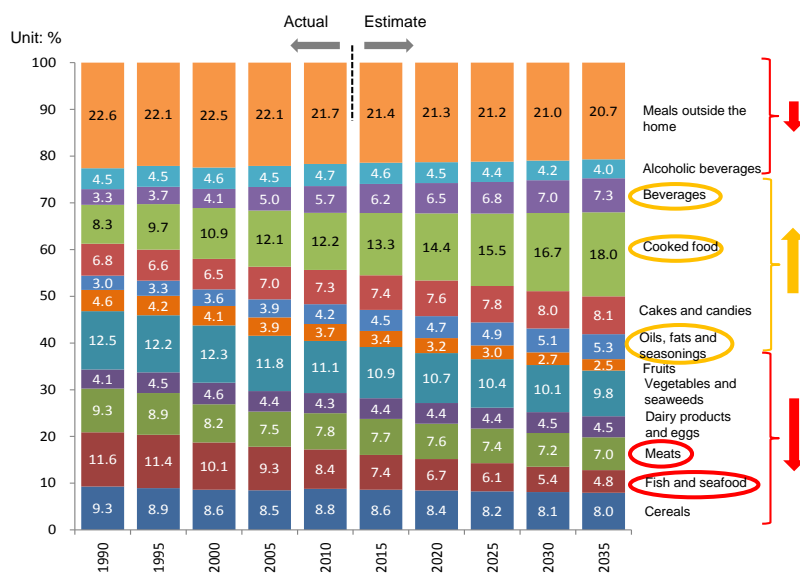
In the meantime, there is concern about food supply due to the impact of climate change, such as global warming.

While the global food-related markets are expected to continue expanding in the future, Japanese food is also drawing increasing attention overseas.

The globalization trend is likely to progress further in the future, with large food companies expanding their procurement of products and other items and reinforcing sales on a global scale, for example.

3. Diversification and evolution of consumer needs and diversification of issues concerning the relationship between consumers and food

Figure 5-2 Future estimation of the percentage of food expenditure by item (all households)



Source: Compiled by PRIMAFF.

In Japan, food quality, service styles and other aspects of the food industry are becoming increasingly diversified and evolved to meet changes in the social structure and lifestyles. For example, the following are more widely available than before:

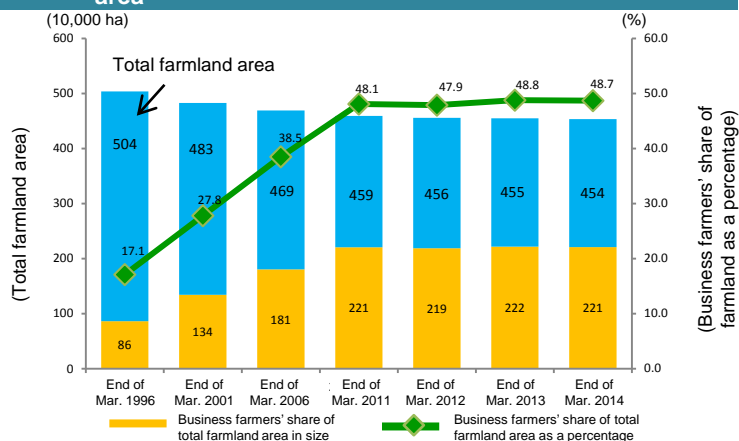
- (i) processed food and ready-to-eat dishes that require no cooking at home;
 - (ii) products in small sizes; and
 - (iii) food that can be purchased via the Internet.
- Such trend is likely to progress further in the future.

Meanwhile, the diversification of the relationship between consumers and food entails the following concerns:

- (i) a decline of the traditional food culture that has been handed down in local communities; and
- (ii) a decrease in people's understanding of agriculture and rural areas, and so on, due to the expanding distances between production sites and dinner tables.

4. Changes in the structure of agriculture and rural areas, such as business farmers that support agriculture

Figure 5-3 Business farmers' share of Japan's total farmland area



Source: MAFF, "Statistics on Cultivated Land and Planted Area," "Survey on Community-based Farm Cooperatives" (aggregate calculation after reclassification), MAFF surveys.

Notes: 1) Data are at the end of March for each year.

2) "Business farmers' share of total farmland area" represents farmland managed by certified farmers (including specified agricultural corporations), farmers who reach the level as specified in basic plans made by municipal governments, and community-based farm cooperatives (from FY 2003) based on ownership, land-utilization rights or contracts (only farming operations under contracts for community-based farm cooperatives).

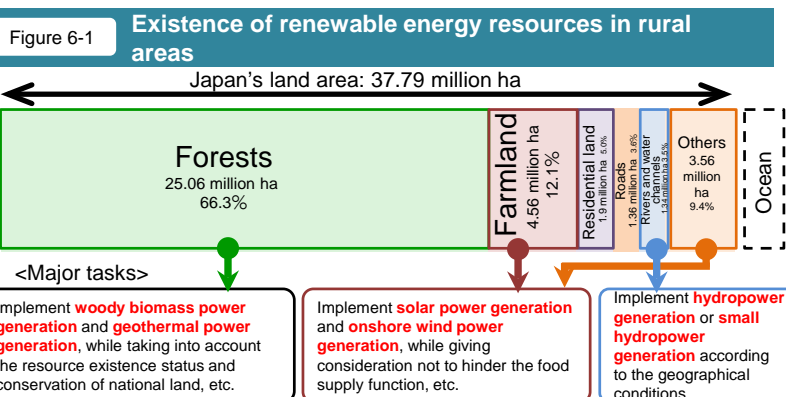
In Japan's agricultural structure, farmland concentration through establishment of land-utilization rights and other means has progressed to a certain extent. At present, business farmers have a share of about half of Japan's total farmland area. However, concentrated farmland is often scattered in a complicated manner in small partitions, serving as major impediments to productivity improvement.

5. Diverse possibilities of agriculture and rural areas

In some areas, there are movements to rediscover the attractiveness of agriculture and the value of rural areas which have such assets as a rich environment and scenery, and traditional culture.

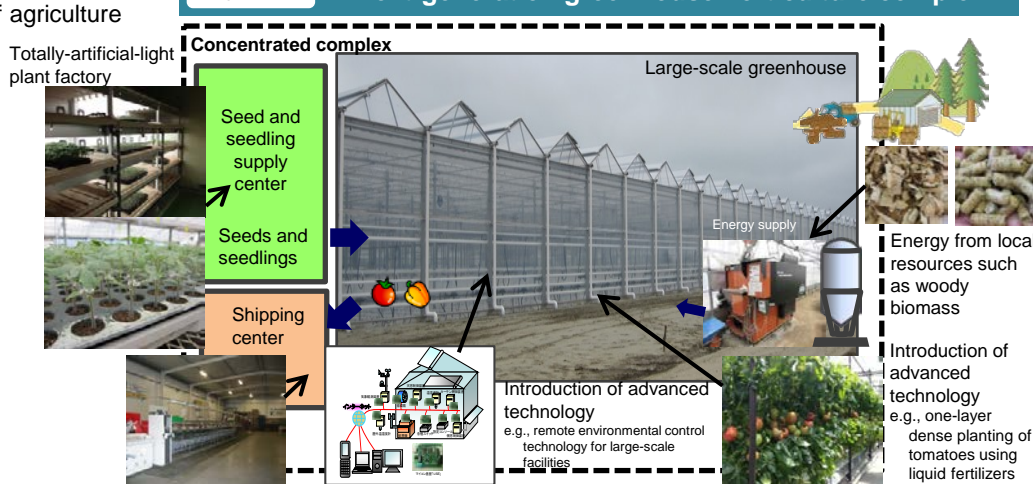
In addition, efforts have been started to create new businesses by effectively utilizing diverse local resources of rural areas that had not been fully utilized in the past, such as biomass utilization and production of renewable energy.

There are possibilities that productivity can be remarkably improved by applying Japan's advanced technology, such as robot technology and ICT, and technology that has been established in other industries in the field of agriculture and rural areas.



Source: Ministry of Land, Infrastructure, Transport and Tourism (MLIT), "FY2012 Trends Concerning Land."

Figure 6-2 A next-generation greenhouse horticulture complex



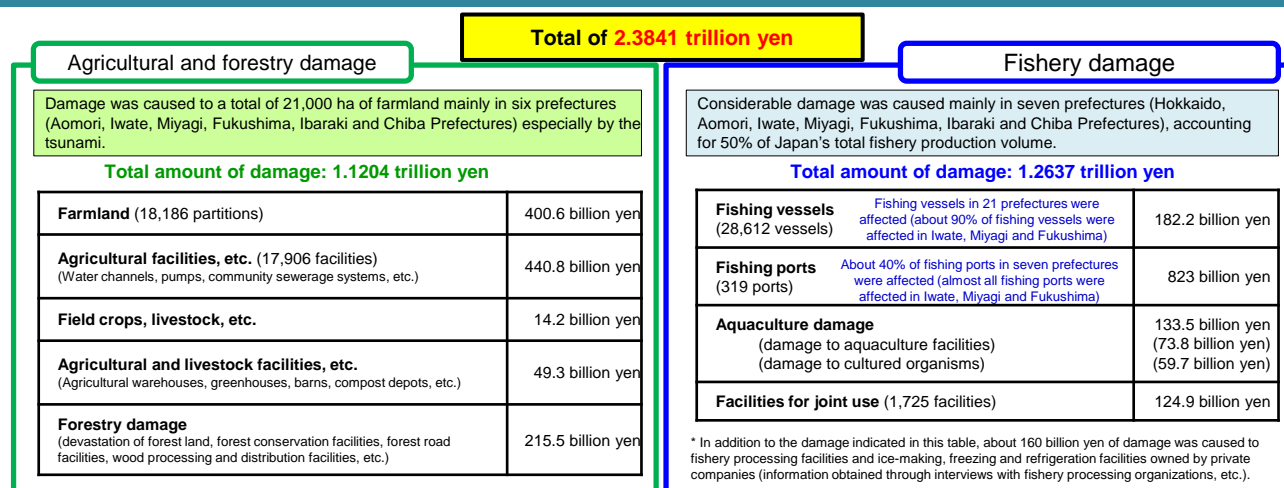
Source: Compiled by MAFF.

6. Status of restoration/reconstruction from the Great East Japan Earthquake

The Great East Japan Earthquake of March 11, 2011, and the resulting large tsunami inflicted major damage on agriculture and rural areas. Farmland totaling 21,480 ha and about 10,100 farming organizations were affected by the tsunami.

Since pollution by radioactive substances spread due to the accident of the Fukushima Daiichi Nuclear Power Plant of the Tokyo Electric Power Company (TEPCO), measures were taken to distribute only agricultural products whose radiocesium level does not exceed the standard limit. Specifically, radioactive substance inspections were conducted on agricultural products before shipping, and farmers' efforts to restart business were promoted in areas such as those in which evacuation orders used to be issued. At present, the radiocesium level exceeds the standard limit only in limited agricultural products and production areas.

Figure 6-3 Agricultural, forestry and fishery damage caused by the Great East Japan Earthquake



* The amount of damage does not include the damage caused by the nuclear disaster.

Part 1

Basic viewpoints for promoting measures

Basic Plan p. 9–12

- Industrial policy for developing agriculture and food industries into a growth sector as well as regional policy for promoting the maintenance and implementation of agriculture's multifunctional roles will be employed to step up the reform of measures for food, agriculture and rural areas.
- In that process, measures need to be implemented based on the following viewpoints.

1. Securing the stability of measures to realize the fundamental principles of the Basic Act

The government will secure the stability of measures so as to prevent causing unnecessary confusion or anxiety among producers, and to enable farmers and related businesses to engage in business expansion or advancement into new business fields with medium and long-term perspectives.

2. Deepening of national discussions on how to secure a stable food supply

The government will evaluate and indicate the food production potential of Japan's agriculture, forestry and fisheries and send out information including the trends and future prospects of global food supply and demand, the results of various risks associated with food supply, and responses to be taken in cases of unforeseeable events, thereby increasing mutual communication with the people.

3. Implementation of measures from the viewpoints of demand and consumers

The government will back up efforts whereby farmers, food industry business operators and various related businesses become strategic partners for absorbing new demand, and while deepening mutual communication, make efforts including accurately responding to diverse and evolved consumer needs based on the "market-in" concept and building production/supply systems for improving productivity.

Since reliable access to safe food is an essential prerequisite for a healthy diet, the government will continue to promote initiatives to secure food safety and consumer confidence in food.

4. Development of an environment where farmers can perform well

The government will promote initiatives for attracting motivated young people from in and outside the agricultural industry, and develop an environment where farmers can enthusiastically engage in management development with solid future prospects.

5. Implementation of measures to realize sustainable agriculture and rural areas

In order to ensure that people can enjoy the benefits of implementation of agriculture's multifunctional roles into the future, the government will promote efforts for local resources such as farmland, irrigation systems and beautiful scenery of rural areas to be preserved and managed in good conditions by local communities and other entities. The government will also promote efforts for ensuring reliable succession of agricultural business management and underlying technology to the next generation, and so on.

In promoting such efforts, the government will encourage the participation of various human resources and business operators from in and outside rural areas, including not only local business farmers, but also small-scale farm households, local residents and human resources in urban areas, and promote the creation of a local environment where such people can fully exert their potential capacity.

From the production aspect as well, the government will promote accurate responses to issues including climate change, and also promote resource-recycling agriculture that is in harmony with the environment.

6. Promotion of technological innovation to explore new possibilities

The government will promote technological development applying advanced technology such as robot technology and ICT, which are Japan's strengths. Meanwhile, it will comprehensively push forward the reform of R&D and technology transfer processes as well as the creation of an environment which enables technology to be widely spread to producers, involving various stakeholders. For example, the participation of farmers could be accelerated, as well as diffusion of organizations in the R&D process and joint research that gathers the knowledge of industrial, academic, financial and public sectors could be implemented.

7. Improvement of farmers' income and creation of prosperity in rural areas

The Plan to Create Dynamism through Agriculture, Forestry, and Fisheries and Local Communities and other documents point at "aiming to double the income of agriculture and rural areas over the next 10 years." To achieve this target, the government will promote measures to increase agricultural income through raising the agricultural production value and reducing production costs and to increase relevant income in rural areas through Affrinnovation.

Part 2

Food self-sufficiency ratio targets

Basic Plan p. 13–23

- While the food self-sufficiency ratio targets were set under the Basic Plan of 2010 as “high targets that can only be achieved by inputting all of Japan’s available resources,” the ratio in FY2013 was 39% on a calorie supply basis and 65% on a production value basis, indicating that there are gaps between the targets and the actual ratios.
- Taking such situation into account, new food self-sufficiency ratio targets have been set with a “focus on their feasibility over the plan period,” which are to raise the ratio on a calorie supply basis from the current 39% to 45% and to raise the ratio on a production value basis from the current 65% to 73%.

1. Past food self-sufficiency ratio targets

The food self-sufficiency ratio targets under the Basic Plan for Food, Agriculture and Rural Areas of 2000 and 2005 were set at 45% on a calorie supply basis and at 74% (reference value in the Basic Plan of 2000) and 76% (the Basic Plan of 2005) on a production value basis, “with consideration given to their feasibility over the plan period.”

On the other hand, under the Basic Plan of 2010, the targets were set at 50% on a calorie supply basis and 70% on a production value basis, as “high targets that can only be achieved by inputting all of Japan’s available resources.”

Figure 8-1 Past approaches

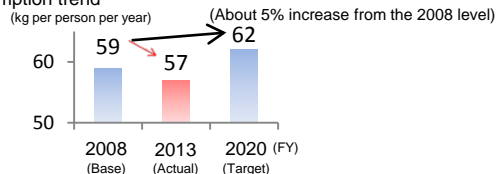
	Total food self-sufficiency ratio targets		Approach to food self-sufficiency ratio targets
	Calorie supply basis	Production value basis	
Basic Plan of 2000	45%	74% (reference value)	Since the targets serve as guidelines for food consumption and agricultural production during the plan period, they were set with consideration given to their feasibility and their impact on initiatives by people concerned and on the promotion of measures.
Basic Plan of 2005	45%	76%	Bearing in mind that the targets function as guidelines for desirable dietary patterns and domestic production that meet consumer needs, they were set with consideration given to their feasibility over the plan period.
Basic Plan of 2010	50%	70%	The targets were set as high targets that can only be achieved by inputting all of Japan’s available resources.

Source: Compiled by MAFF.

Looking at the progress status of the food self-sufficiency ratio targets under the Basic Plan of 2010, the ratio on a calorie supply basis remained at 39% in FY2013, with the consumption of such crops as rice falling below projections and the production of such crops as wheat showing sluggish growth.

Figure 8-2 Prospects of food consumption (example: table rice and other crops)

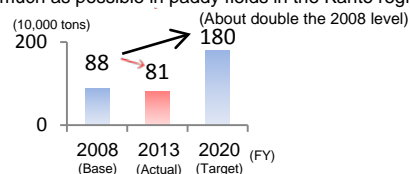
- Excessively high prospects were set in disregard of the actual consumption trend



Source: Compiled by MAFF

Figure 8-3 Production effort targets (example: wheat)

- Excessively high prospects were set, such as conducting double cropping as much as possible in paddy fields in the Kanto region and westward.



Source: Compiled by MAFF

2. New food and feed self-sufficiency ratio targets

Based on the verification results of the Basic Plan of 2010, the new targets were set with “focus on their feasibility over the plan period.”

Figure 8-4 New food and feed self-sufficiency ratio targets

Basic Plan of 2015		FY2013 (base fiscal year)	FY2025 (target fiscal year)
	Calorie supply basis	39%	45%
	Production value basis	65%	73%
	Feed self-sufficiency ratio	26%	40%

Source: Compiled by MAFF.

Figure 8-5 (Reference) Prospects of the total farmland area, the total planted area and the utilization rate of cultivated land

	2013	2025
Total farmland area (10,000 ha) (Note 1)	454 (452 in 2014)	440
Total planted area (10,000 ha)	417	443
Utilization rate of cultivated land (%) (Note 2)	92	101

Source: Compiled by MAFF.

Notes: 1) The figures are estimated with consideration given to the past trend and the effects of efforts to reduce farmland dilapidation and restore dilapidated farmland.

2) The utilization rate of cultivated land is obtained by dividing the total planted area by the total farmland area.

3. Prospects of food consumption and production effort targets

In order to achieve the food self-sufficiency ratio targets for FY2025, it is important that (i) in terms of food consumption, consumers, food industry business operators, and other related people make more active efforts to expand the consumption of domestic agricultural products, and (ii) in terms of agricultural production, producers expand production that meets the diverse and evolved consumer needs based on the “market-in” concept. Based on such viewpoint, the prospects of food consumption and production effort targets have been set for each item.

(Examples)

Rice: With regard to such crops as table rice, the tasks are to promote demand-based production that does not rely on the target volume of rice production allotted by administration and reduction of the production costs, while responding to consumer needs, such as preference for convenient food, and needs related to eating out and home meal replacements.

Vegetables: The tasks are to expand vegetable consumption by adults, which currently does not reach the target intake level (350g per day), and to promote the enhancement of the production base of vegetables for processing and other food industries.

Raw milk: The tasks are to expand demand for domestic milk and dairy products through product development and AFFrinnovation, and to promote enhancement of the production base through such means as encouraging “livestock clusters.”

Figure 9-1 Prospects of food consumption and production effort targets for FY2025

Items	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)			
	FY2013	FY2025	FY2013	FY2025		
Rice (excluding rice for flour and rice for feed)	57	53	857	761	859	752
Rice for flour	0.1	0.7	2.0	10	2.0	10
Rice for feed	-	-	11	110	11	110
Wheat	33	32	699	611	81	95
Barley/naked barley	0.3	0.2	208	213	18	22
Soybeans	6.1	6.0	301	272	20	32
Buckwheat	0.7	0.5	14	11	3.3	5.3
Sweet potatoes	4.2	4.4	102	99	94	94
Potatoes	16	17	340	345	241	250
Rapeseed	-	-	232	216	0.2	0.4
Vegetables	92	98	1,508	1,514	1,195	1,395
Fruits	37	40	766	754	301	309
Sugar beet (refined sugar equivalent)					344 (55)	368 (62)
Sugar cane (refined sugar equivalent)	(19)	(18)	(246)	(220)	119 (14)	153 (18)
Tea	0.7	0.7	8.9	8.5	8.5	9.5

Items	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)			
	FY2013	FY2025	FY2013	FY2025		
Raw milk	89	93	1,164	1,150	745	750
Beef	6.0	5.8	124	113	51	52
Pork	12	12	244	227	131	131
Chicken	12	12	220	208	146	146
Hen eggs	17	17	265	251	252	241
Feed and forage crops	-	-	436	501	350	501

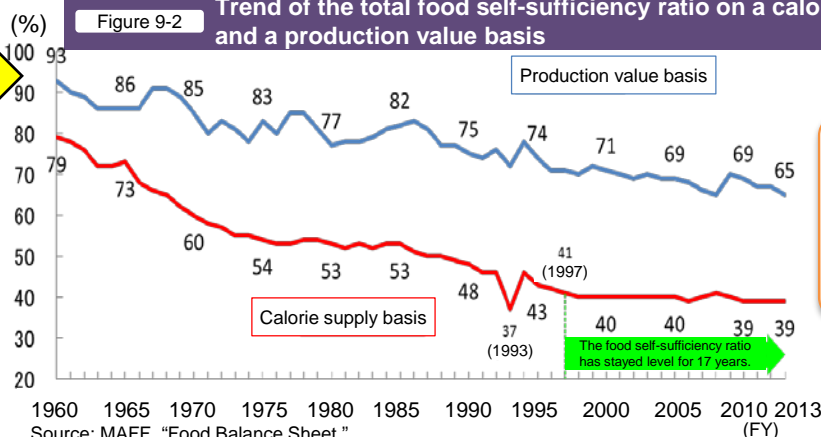
Note: The figures for feed and forage crops are expressed by the total volume of nutrients that can be digested by domestic animals (total digestible nutrients [TDN]).

(Reference)

Items	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)			
	FY2013	FY2025	FY2013	FY2025		
Fish and shellfish (for human consumption)	27 (27)	30 (30)	785 (622)	842 (635)	429 (370)	515 (449)
Seaweed	1.0	1.0	15	15	10	11
Mushrooms	3.4	3.6	53	53	46	46

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.
Source: Compiled by MAFF.

Figure 9-2 Trend of the total food self-sufficiency ratio on a calorie supply basis and a production value basis



Japan’s food self-sufficiency ratio had been on a decline in the long term, but has stayed level in recent years.

Part 2

Food self-sufficiency potential indicator (Food production potential)

Basic Plan p. 24–28

- At a time when many people are concerned about a decline in food supply capacity of domestic production, the food self-sufficiency ratio does not fully reflect the food production potential of Japan's agriculture, forestry and fisheries.
- Therefore, the government has newly presented the “food self-sufficiency potential indicator,” which evaluates Japan's food production potential. By sharing recognition of the present and past trends of Japan's food self-sufficiency potential, the government intends to deepen national discussions on food security.

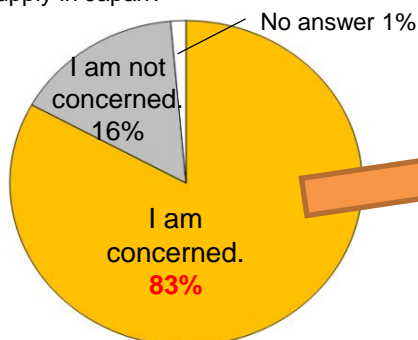
1. People's awareness of the future food supply in Japan

Since there are factors that can destabilize international food supply and demand, many people are concerned about a decline in the food supply capacity of domestic production.

Figure 10-1

People's awareness of future food supply in Japan

Are you concerned about the future food supply in Japan?



Reason for the concern

Among the respondents who answered “I am concerned”....

82% indicated

Because there is a risk that the food supply capacity of domestic production could decline

as the reason.

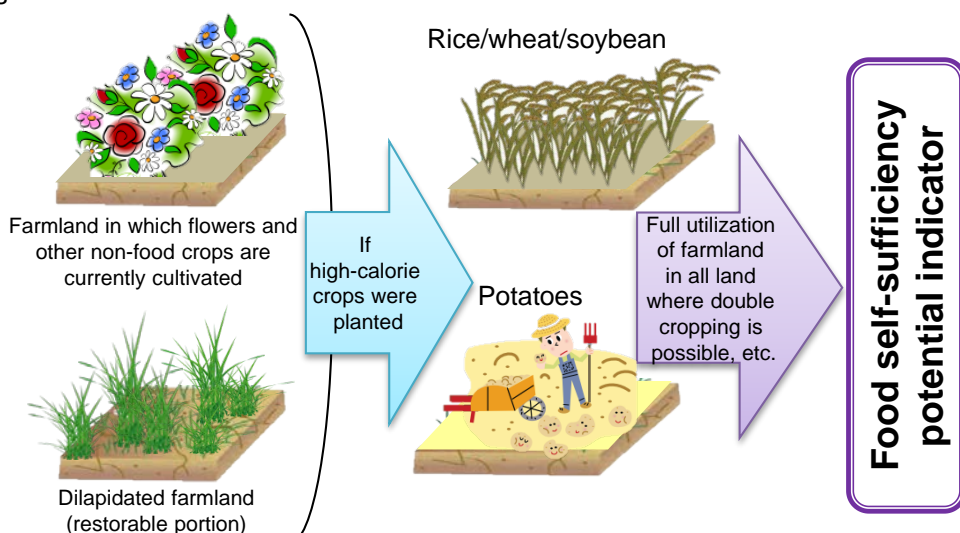
Source: Cabinet Office, “Special Public Opinion Poll on Supply of Food” (January 2014).

2. Food self-sufficiency potential indicator

The “food self-sufficiency potential indicator” estimates how much food can be produced at the most by domestic production alone (food production potential).

Figure 10-2

Concept of the “food self-sufficiency potential indicator”



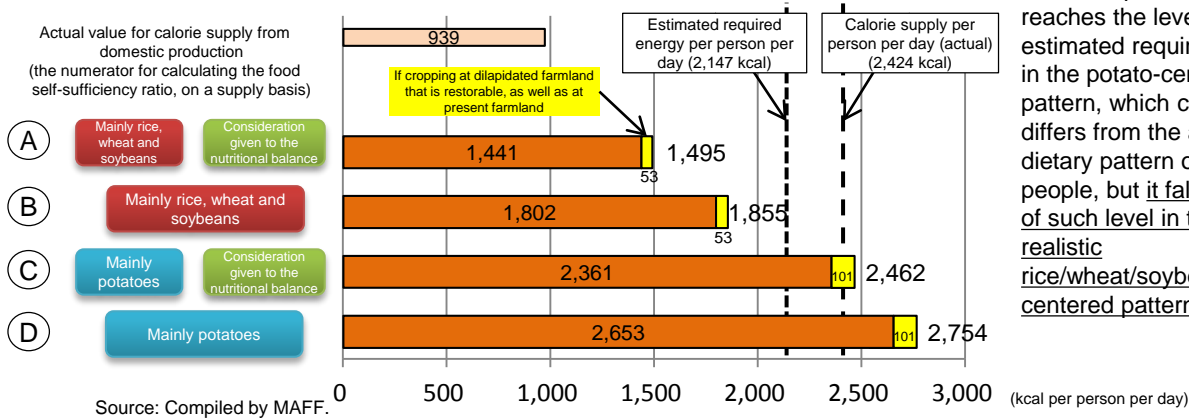
Source: Compiled by MAFF.

Supplementary information

- When trying to indicate the food production potential, the food self-sufficiency ratio has limits, since it does not count the potential of farmland in which flowers and other non-food crops are currently cultivated.

3. Current status of the “food self-sufficiency potential indicator” (FY2013)

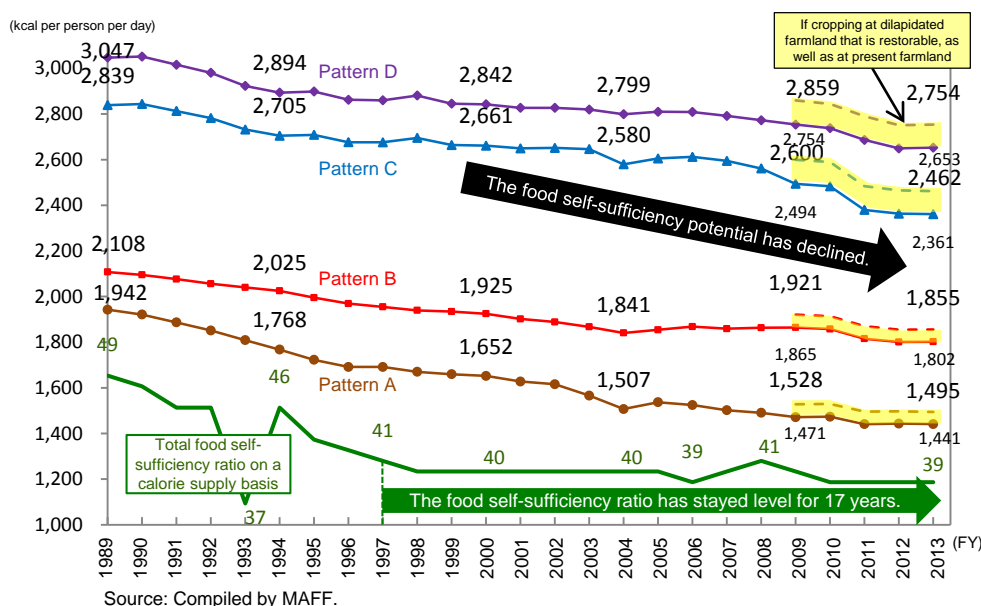
Figure 11-1 Current status of the “food self-sufficiency potential indicator” (FY2013)



The calorie supply from domestic production reaches the level of estimated required energy in the potato-centered pattern, which considerably differs from the actual dietary pattern of Japanese people, but it falls far short of such level in the more realistic rice/wheat/soybean-centered pattern.

4. Trend of the “food self-sufficiency potential indicator”

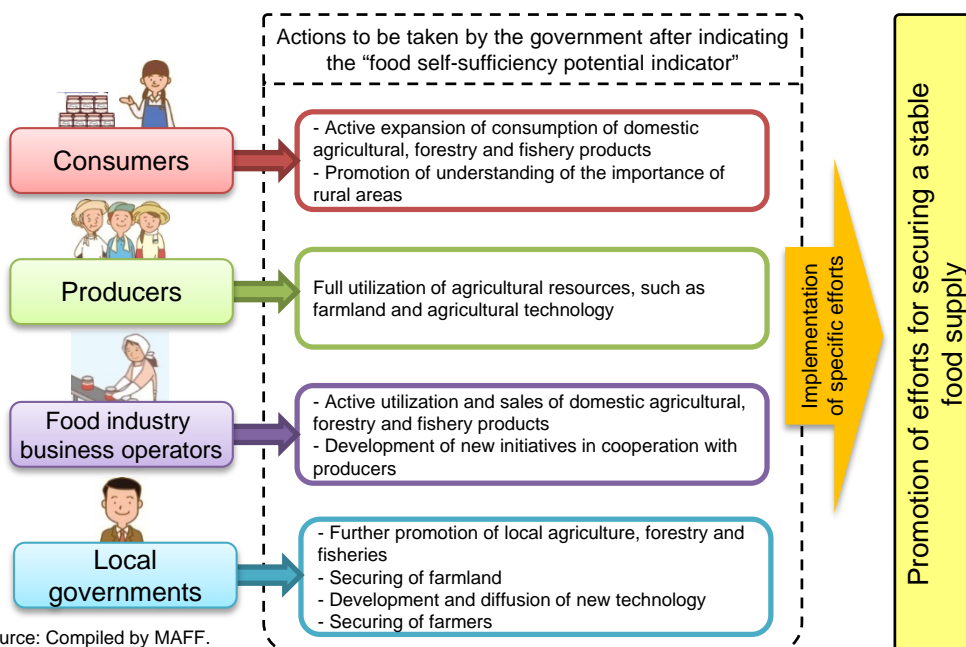
Figure 11-2 Trend of the “food self-sufficiency potential indicator”



While the food self-sufficiency ratio has stayed level at around 40% for the 17 years since 1997, the food supply capacity (Japan's food production potential) has been on a decline in recent years, raising concerns about the future food supply in Japan.

5. Message to the people

Figure 11-3 Government's actions to encourage people's efforts



The government hopes that people will learn about such actual conditions of Japan's food production potential, and deepen discussions on food security. On that basis, the government will promote efforts for securing stable food supply by taking actions to encourage people to make efforts to maintain and improve the food self-sufficiency potential from their respective positions.

Part 3

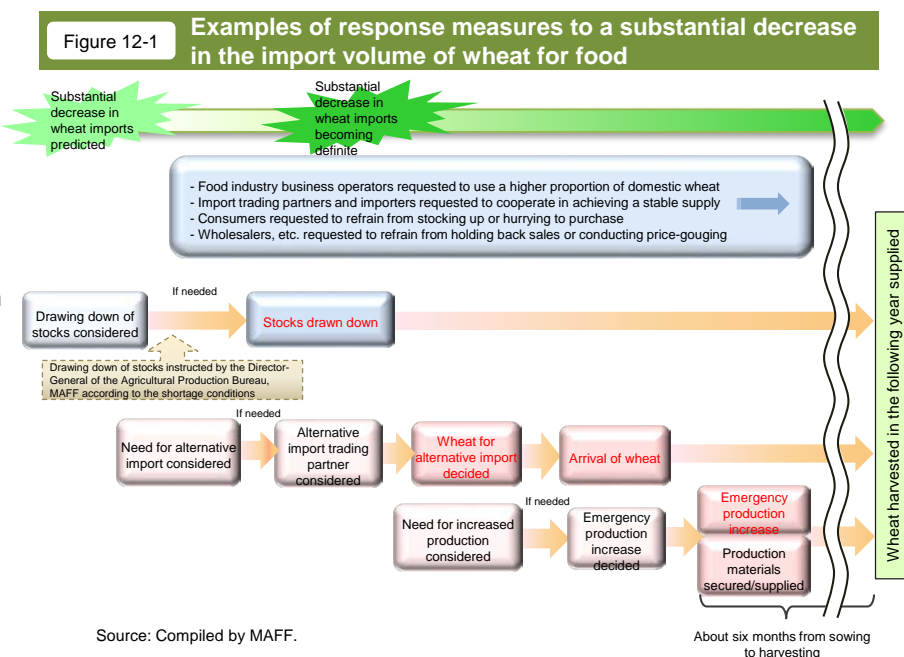
Establishment of comprehensive food security and strategic approach to international negotiations

Basic Plan p. 37–39

- If an unforeseeable event that affects food supply occurs, the government will take response measures and the like based on the Food Security Guideline in Case of Emergency (formulated in 2002, amended in 2012). The government has also compiled specific procedures to address such problems as poor domestic harvest or a substantial decrease of imports, and periodically analyzes and assesses risks that affect food supply.
- In negotiations for economic partnerships and on other occasions, the government will aim to establish trade rules that enable the mutual development of agriculture in each country.

Response measures in cases of unforeseeable events

For example, if a major import trading partner of wheat experiences a seriously poor harvest, and Japan's import volume of wheat substantially decreases, the government will strive to secure a stable supply of wheat by taking such measures as using wheat stocks, importing wheat from an alternative country, and conducting an emergency production increase of wheat to be harvested in the following year.



If an unforeseen event occurs and there is a risk of the food supply stagnating, we will need to implement efforts for securing a smooth food supply from our respective positions.

For example, the government requests producers to accelerate shipping, distributors to refrain from holding back sales, and consumers to refrain from excessive stocking up in such a case.

Figure 12-2 Efforts required in cases of unforeseeable events

Government (MAFF)

- Collecting and analyzing global food supply and demand trends
- Efforts to release stocks
- Implementation of additional (alternative) imports
- Survey and monitoring of food price trends
- Implementation of price/distribution measures based on law



Producers, agricultural organizations and private companies

- Shipping of nonstandard products or early shipping
- Refrainment from holding back sales or conducting price-gouging
- Refrainment from excessive cornering
- Import from an alternative country or import of alternative products



Consumers

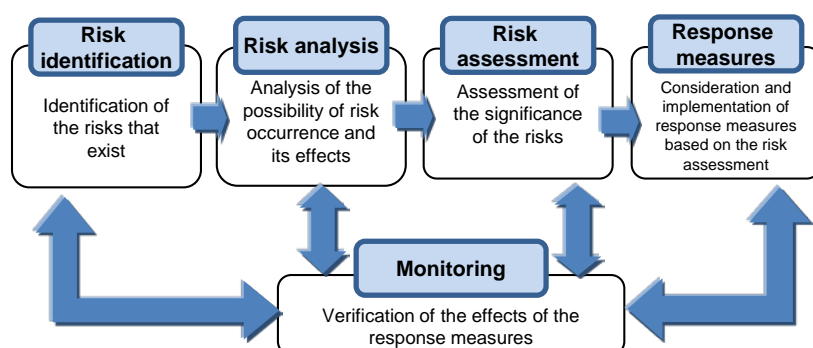
- Refrainment from excessive stocking up or cornering
- Purchase of nonstandard products
- Shifting of consumption (e.g., from eating bread to eating steamed rice)
- Reduction of food loss and food wastes



Source: Compiled by MAFF.

Analysis and assessment of risks that are expected to affect the food supply

Figure 13-1 Periodic analysis and assessment of risks



Source: Compiled by MAFF.

In order to accurately respond to unforeseeable events, it is necessary in normal times to periodically analyze and assess risks that are expected to affect food supply.

The government recently analyzed for the first time the frequency and impact of various risks in and outside Japan relating to major agricultural, livestock and fishery products, such as rice and wheat, and assessed their present and future effects.

In the future, the government will conduct such risk analysis and assessment and publish the results every fiscal year.

Figure 13-2 Outline of risk assessment results (example of livestock products)

Category		Probability of frequency	Impact	Assessment of the current status	Assessment of trends over approximately the past 10 years	Assessment of the status in 5 to 10 years (as of the time of assessing the effects)
Overseas risks	Temporary/short-term	Large-scale natural disasters and abnormal weather	Low	National	No effect	No change
		Infectious diseases for domestic animals	Medium	National	No effect	No change
		Incidents/accidents involving food safety	Low	Partial	No effect	No change
		Seaport traffic disturbances	Low	National	No effect	No change
		Political unrest and terrorism in export destination countries	Low	National	No effect	No change
		Export restrictions in export destination countries	Low	National	No effect	No change
		Exchange rate fluctuations	Medium	National	No effect	No change
		Oil, petroleum gas and other fuel supply shortages	Low	National	No effect	No change
	Emerging	Climate change including global warming	Emerging	National	No effect	Deteriorated
		Tightening supply-demand balance for fertilizers	—	—	—	—
		Difficult access to genetic resources	—	—	—	—
		Tightening supply-demand balance for water	—	—	—	—
		Yield growth deceleration	—	—	—	—
		Marine resources fluctuations	—	—	—	—
		Food demand growth accompanying population growth	Emerging	National	No effect	Deteriorated
		Growth in demand for farm products for biofuel	—	—	—	—
Domestic risks	Temporary/short-term	Competition with imports from emerging countries	Emerging	National	No effect	Deteriorated
		Large-scale natural disasters and abnormal weather	Low	Limited	No effect	No change
		Infectious diseases for domestic animals	Medium	National	No effect	No change
		Incidents/accidents involving food safety	Low	Partial	No effect	No change
	Emerging	Food and other supply chain disruptions	Medium	Regional	No effect	No change
		Climate change including global warming	Emerging	National	No effect	Deteriorated
						Deteriorate (2050 onward)

- **Probability of frequency, etc.:** "High" if occurring about once in three years, "medium" if occurring about once in 10 years, "low" if occurring about once in 30 years, and "emerging" if the risk is already emerging.

- **Impact:** "National" if the risk affects the food supply in all of Japan, "regional (or partial)" if the risk affects the food supply in part of Japan, and "local (or limited)" if the effect is more limited.

Source: Compiled by MAFF.

Strategic approach to international negotiations

Figure 13-3 EPA/FTA negotiations with various countries and regions

Partners, etc.		Partners, etc.		Partners, etc.	
Concluded/signed (14 countries and one region)	Singapore, Mexico, Malaysia, Chile, Thailand, Indonesia, Brunei, ASEAN, Philippines, Vietnam, India, Peru, Australia, Mongolia	Under negotiations	Canada	Under negotiations	TPP*2
			Columbia		Turkey
			Japan-China-South Korea		AJCEP*3
			EU	Negotiation postponed/suspended	GCC*4
			RCEP*1		South Korea

Source: Compiled by MAFF.

Notes: 1) RCEP: Comprehensive Economic Partnership for East Asia; a wide-area economic partnership participated in by the 10 ASEAN countries and six other countries (Japan, China, South Korea, India, Australia and New Zealand), which concluded EPAs or FTAs with ASEAN.

2) Countries negotiating the Trans-Pacific Partnership (TPP) Agreement: Singapore, New Zealand, Chile, Brunei, United States, Australia, Peru, Vietnam, Malaysia, Canada, Mexico and Japan.

3) AJCEP: ASEAN-Japan Comprehensive Economic Partnership Agreement (only fields of trade in services and investment).

4) Members of the Gulf Cooperation Council (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

The government will negotiate economic partnerships so as to enable sustainable production of key items, while giving due consideration to the sensitivities of Japan's agricultural, forestry and fishery products.

In order to secure a stable supply of grains and other items for which Japan relies on imports from overseas, it is also important to maintain and strengthen ties with trading partners from the viewpoint of food security.

As exemplified by the establishment of provisions for making efforts not to introduce export prohibiting measures and the like in the Japan-Australia EPA, the government will carry out negotiations in a manner that contributes to securing a stable food supply, including through strengthening disciplines of export prohibitions and regulations.

Part 3

Ensuring food safety and consumer confidence

Basic Plan p. 29–31

- In order to ensure food safety, the government conducts risk assessment,^{*1} risk management^{*2} and risk communication^{*3} based on sound science, consistent with the internationally agreed framework and the principle “prevention is better than cure.”

- In order to secure consumer confidence in food, the government will expand and ensure an appropriate indication of food labeling information and promote voluntary efforts by food industry business operators and other related people.

^{*1} Risk assessment: Scientifically based process assessing health risks caused by the intake of hazards in food

^{*2} Risk management: The process considering risk assessment and other relevant factors and implementing appropriate measures for the health protection of consumers

^{*3} Risk communication: The interactive exchange of information and opinions throughout the risk analysis process

Ensuring food safety and consumer confidence leading and/or following international trends

In order to improve food safety, the government investigates the occurrence of hazards in food and promotes scientific studies, e.g., development of suitable analytical methods.

Based on occurrence data and outcomes of scientific studies/research, the government elaborates, as necessary, codes of practice or appropriate guidelines to producers and/or manufacturers for reducing chemical/microbiological hazards in food.

The government also monitors the level of hazards in food to verify if the guidelines effectively reduce hazards in food and reviews the guidelines as necessary.

The government will promote the dissemination of GAP (Good Agricultural Practices) beyond a certain level in accordance with the MAFF guideline, among farmers and production areas.

In order to promote the introduction of HACCP (Hazard Analysis and Critical Control Point) by food manufacturers, particularly small and medium-sized manufacturers, the government will promote the development of a necessary environment and fostering of human resources.

What are Good Agricultural Practices (GAP)?

Continuous activities of improving agricultural production operations through the accurate implementation, recording, inspection and assessment of each process in agricultural production in line with checklists worked out according to relevant laws and regulations

Figure 14-1 Improving food safety

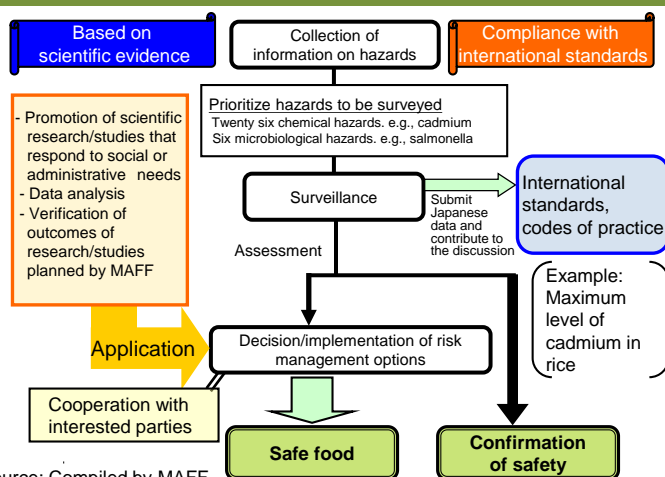


Figure 14-2 Number of production areas introducing GAP that is compliant with the Guideline

	Number of production areas introducing GAP that is compliant with the Guideline*1	Proportion to the number of production areas introducing GAP
Total for the five items	1010	37%
Vegetables	670	40%
Rice	96	36%
Wheat and barley	78	38%
Fruits	115	29%
Soybeans	51	32%

*1 Guideline on the Common Platform for Good Agricultural Practices (GAP)

*2 The survey targets are production areas of vegetables, rice, wheat and barley, fruits and soybeans that have introduced GAP

MAFF surveys
As of the end of
March 2014

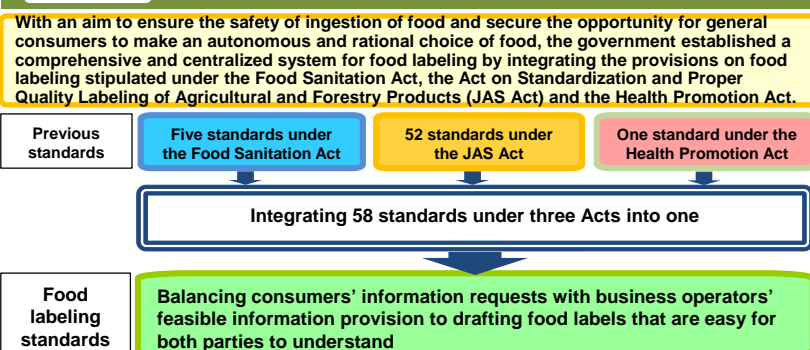
Securing of consumer confidence in food through such means as expansion and appropriate indication of food labeling information

Based on the Food Labeling Act, the government will strengthen cooperation between relevant ministries and conduct operations to execute on-site inspections and so on.

The government will also implement effective and efficient monitoring by using scientific analysis methods in processes including determination of the production area, and ensure proper food labeling.

The government will consider the adding of types of food products applicable for mandatory labeling of origin of ingredients, while ensuring its feasibility.

Figure 14-3 Outline of food labeling standards (Act No. 70 of 2013)



Part 3

Promotion of food education and expansion of consumption, and the preservation/succession of WASHOKU (traditional dietary cultures of the Japanese)

Basic Plan p. 31–32

- The government will categorize the diverse needs and attributes of the respective consumer segments and consider and implement specific policies to promote food education suitable for each category.
- Along with the promotion of the “Japanese dietary pattern,” the government will provide opportunities for agriculture, forestry and fisheries experiences to a wide range of generations, and promote people’s understanding about food, agriculture, forestry and fisheries.
- The government will push forward the full-fledged preservation/succession of WASHOKU.

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

Figure 15-1 Promotion of food education through agriculture, forestry and fisheries experience

Past initiatives

- Support has been provided for activities in agriculture, forestry and fisheries experience, such as on educational farms, in rural areas.



- A database of educational farms nationwide was developed, and it was provided as a list of spots for enjoying agriculture, forestry and fisheries experience.
- An educational farm operation guide for promoting effective agriculture, forestry and fisheries experiences was disseminated. An introductory manual for companies and school educational materials linked with school subjects were created.

Future direction

- Experience activities serve as an extremely important learning opportunity for deepening the understanding of food, agriculture, rural areas, the value of life, natural environments and traditional culture.
- Agriculture, forestry and fisheries experience and various experience activities in the processes from food production to consumption, such as factory tours, are extremely effective for promoting consumers’ understanding of food, agriculture, forestry and fisheries. Therefore, experience opportunities will not only be provided in school education, but also to a wide range of generations according to their life stages.

(Extract from the Future Measures for Promoting Food Education [Final Report] published on March 6, 2015)

Source: Compiled by MAFF.

In order to effectively and efficiently promote measures related to food education, the government will build a framework for encouraging proactive activities, by identifying the actual opinions of farmers, food industry business operators, educators, and others who provide food education.

For expanding the consumption of domestic agricultural products, the government will promote a national movement in concert with the private sector, in coordination with efforts to promote food education, preservation/succession of WASHOKU, collaboration between medical care, welfare, food and agricultural sectors, collaboration between agriculture and tourism, and expansion of demand for each item.

In addition, the relevant ministries will cooperate with each other to further promote local consumption of local produce.



What is the “Japanese dietary pattern”?

A nutritionally well-balanced dietary pattern, mainly eating rice, combined with various types of side dishes using fish, meat, milk/dairy foods, vegetables, seaweed, pulse, fruits and tea.

Preservation of WASHOKU and its succession to the next generation

In order to deepen people’s interest in and understanding of WASHOKU, the government will promote the scientific elucidation of how the nutritional balance of WASHOKU contributes to good health and dissemination of the findings. The government will also promote the expansion of opportunities for providing WASHOKU in school meals and homes, food education activities in local communities toward succession of WASHOKU, and transmission of the comprehensive attractiveness of Japanese culture by using Japanese-style rooms or other Japanese settings.

Figure 15-2 Registration of WASHOKU as UNESCO Intangible Cultural Heritage

What is UNESCO Intangible Cultural Heritage?

- “Intangible cultural heritage” refers to intangible culture such as performing art and traditional craft techniques, which is closely related to local history, lifestyles or customs. The UNESCO Convention for the Safeguarding of Intangible Cultural Heritage adopts a registration system for protecting such intangible cultural heritage and to build a momentum for mutual respect. The registered countries are required to protect the heritage.

Certificate awarding ceremony (November 9, 2014)



Proposed title

WASHOKU: Traditional Dietary Cultures of the Japanese—notably for the celebration of New Year—

Proposed description

A social practice relating to food, associated with Japanese people’s essential spirit of respect for nature

Characteristic (1): Use of the taste of various fresh ingredients and materials

- Due to Japan’s distinctive seasons and the geographic diversity of its national land, various fresh ingredients that are rooted in local communities are used.
- Cooking techniques and tools that make the most out of the taste of the materials have developed.



Characteristic (2): Nutritional balance that supports a healthy diet

- The use of *umami*, etc. enables the use of less animal oil and fat, and contributes to longevity and prevention of obesity.
- Meals are composed in a well-balanced manner by rice, soup, and side dishes made of fish, vegetables, etc.



Characteristic (3): Expression of the beauty of nature and changes of seasons

- The beauty of nature and changes of seasons are expressed in meals.
- The dishes are decorated with the season’s flowers or leaves, and furniture articles and tableware that suit the season are used.



Characteristic (4): Close association with seasonal events such as the New Year

- Seasonal events such as the New Year and food are closely associated with each other.
- The sharing of food and time strengthen family and community bonds.



Part 3

Exploration of demand through the creation of new value

Basic Plan p. 32–34

- By promoting AFFrinnovation and other measures which are voluntarily carried out by farmers under a clear business strategy, the government will accelerate the building of value chains and creation of new value through innovation.
- Through such initiatives, the government will promote the creation of farming organizations that can make flexible business judgments and other decisions based on consumer needs.
- The government will also push forward initiatives for enhancing the competitiveness of the food industry.

Strategic promotion for qualitative improvement and expansion of initiatives such as AFFrinnovation

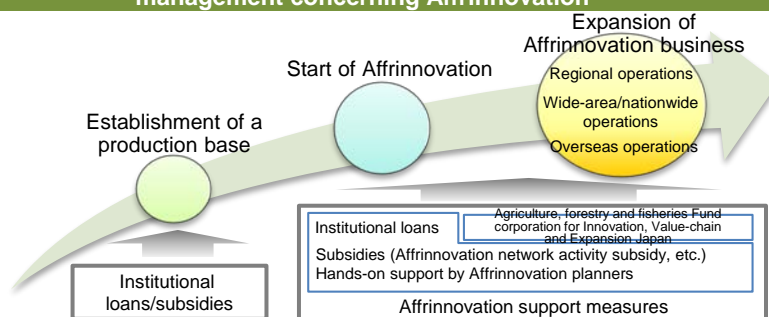
The government will promote the use of support measures according to the progress stage and implementing body of initiatives such as AFFrinnovation.

The government will encourage efforts at production sites based on the analysis results of such matters as success factors and future challenges of initiatives such as AFFrinnovation. The government will also promote further expansion and improvement of initiatives by enhancing the framework for providing timely and accurate support to farmers, including efforts to develop human resources who can coordinate initiatives such as AFFrinnovation

In order to promote AFFrinnovation and other initiatives on a community basis, the government will establish places for local collaboration, and promote the formulation of a local strategy or other arrangements.

Figure 16-1

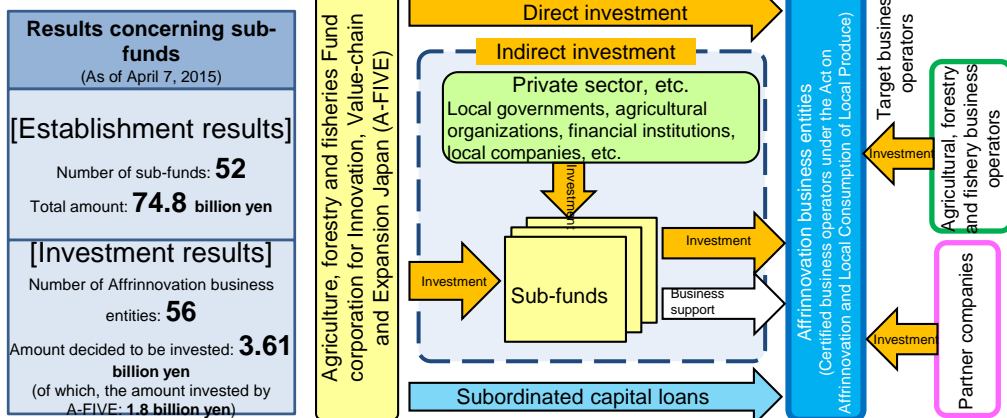
Support according to the progress status of business management concerning AFFrinnovation



Source: Compiled by MAFF.

Figure 16-2

Agriculture, forestry and fisheries Fund corporation for Innovation, Value-chain and Expansion Japan



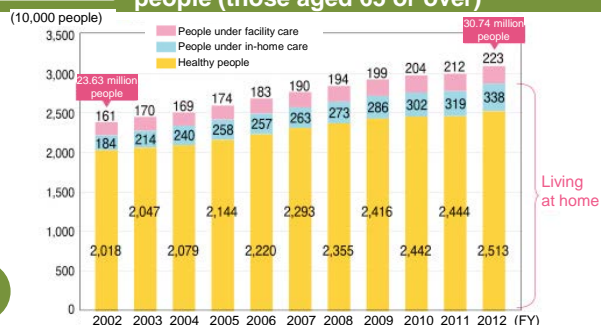
Source: Compiled by MAFF.

Enhancement of competitiveness of the food industry

Amid the intensifying competition with imported food, the government will encourage initiatives aimed at reinforcing the competitiveness of the entire food industry, including small- and medium-sized business operators, so that the food industry will be able to accurately respond to changes in the market environment such as (1) the population aging and decline and (2) the increase of working women, and continue to fully perform its role.

Figure 16-3

Changes in the population of elderly people (those aged 65 or over)



Source: For data of the population of elderly people, MIC, "Population Estimates" (as of October 1 each year) and National Institute of Population and Social Security Research, "Population Projections for Japan." For data of people under in-home care and facility care, MEXT, "Report Survey on Situation of Long-term Care Insurance Service."

Figure 16-4

Smile Care Foods (Home Care Foods)



Source: Compiled by MAFF.

Part 3

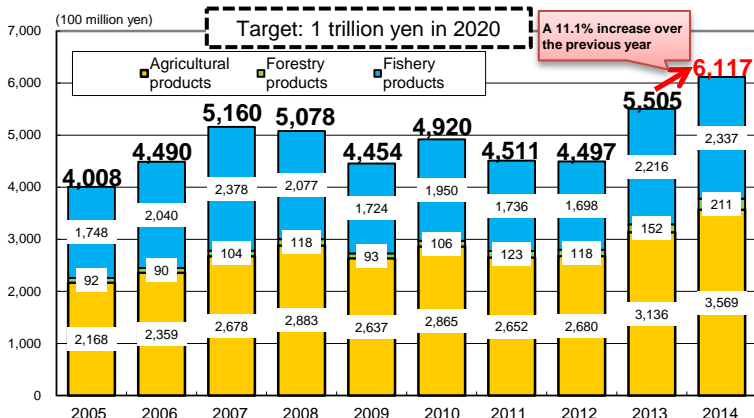
Strategic exploration of the global market

Basic Plan p. 34-37

- Aiming to acquire the world's food-related markets that are expected to grow in the future, the government will push forward exports of Japanese agricultural, forestry and fishery products and global expansion of the food industry, while placing emphasis on not only Asian markets, but also the large European and US markets.
- The government will promote initiatives to strategically create intellectual property (creation), produce economic value based on them (exploitation) and protect them from imitation and piracy (protection) in Japanese and overseas markets.

Joint efforts to promote exports of agricultural, forestry and fishery products and food by the public and private sectors

Figure 17-1 Changes in the export values of agricultural, forestry and fishery products and food



Source: Compiled by MAFF based on Ministry of Finance, "Trade Statistics."

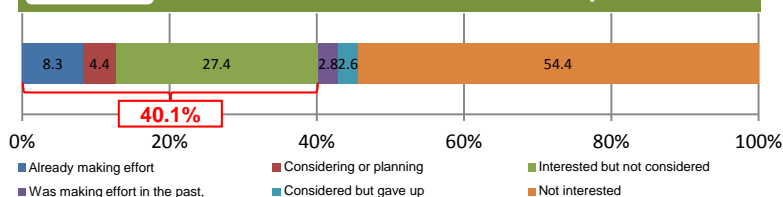
Past export promotion initiatives were made mainly on a production area basis or prefectural basis, and there were problems such as exports concentrating in specific destination countries or in specific seasons.

Therefore, the Executive Committee for Export Promotion Strategy, which serves as the control tower for promoting exports on an all-Japan basis, will study the direction for responding to item-specific problems and problems facing all items, and the relevant ministries and other bodies will cooperate with each other to promote export-expanding initiatives by the nationwide export promotion institutions established for seven major products.

In terms of exports of farm and livestock products, the government will develop an export environment within Japan, such as conducting export inspections at wholesale markets or production areas and providing information on exportable items, and will strategically conduct consultations on quarantine requirements based on science mainly for priority export destinations and priority export items.

Global expansion of the food industry

Figure 17-2 Status of efforts for "overseas expansion"

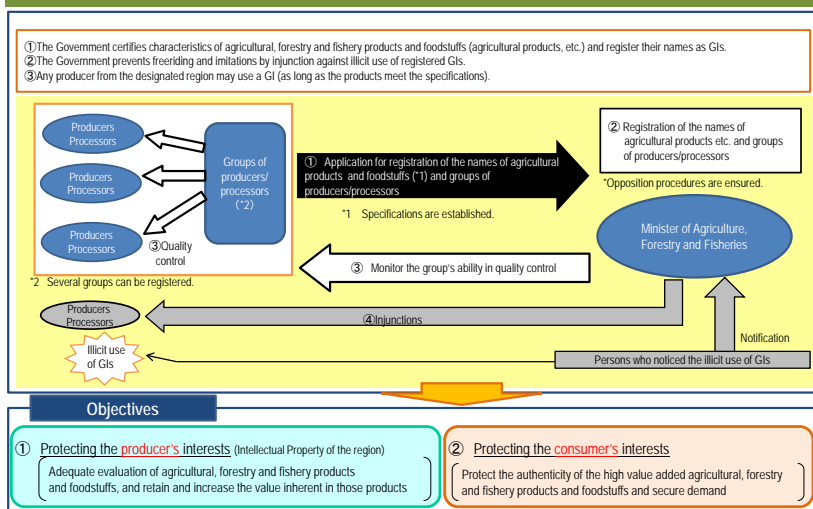


Source: Compiled by MAFF based on Japan Finance Corporation "Results of Survey on Export/Overseas Expansion of the Food Industry (first-half term of 2014)."

In order to facilitate overseas expansion of the food industry, the government will promote the development of an environment including participation in formulation of international standards and utilization of internationally viable standards on food safety management, and implement the "The Global Food Value Chain Strategy."

Strategic creation, exploitation and protection of intellectual property

Figure 17-3 Outline of the geographical indication protection system



The government will encourage people to utilize the geographical indication protection system, which protects the names of products whose characteristics such as quality and reputation are essentially attributable to their production area.

The government will also promote initiatives to strategically utilize intellectual property, such as combination of intellectual property rights having different characteristics (e.g., a breeder's right and a trademark right), by disseminating and raising public awareness of the Manual for Strategic Utilization of Intellectual Property.

Source: Compiled by MAFF.

Part 3

Support for management development through incorporation, etc.

Basic Plan p. 40–41

- In order to foster efficient, stable farm management and to have such farm management constitute a considerable portion of agricultural production in the agricultural structure, the government will provide intensive support to business farmers such as certified farmers for their effort toward management development.
- Also, the government will promote the incorporation of farm management due to its various advantages in conducting advanced business management and in other aspects.

Provision of intensive support to business farmers

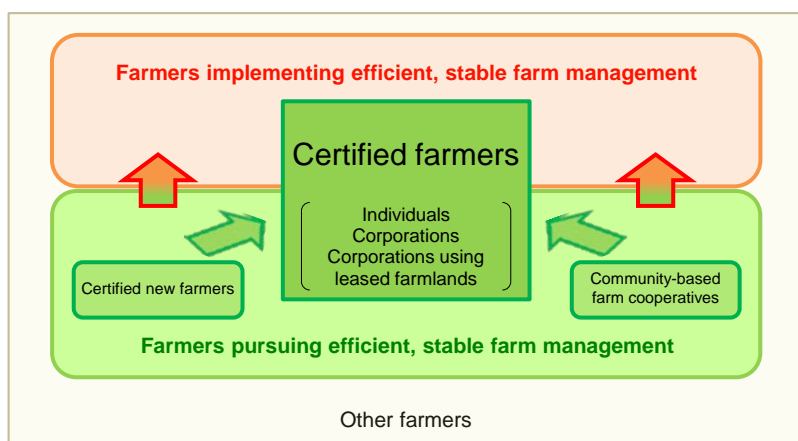
"Farmers that implement efficient, stable farm management" and "farmers that pursue such management" are collectively referred to as "business farmers."

Here, farmers that pursue efficient, stable farm management are the following farmers:

- (1) "certified farmers" (farmers whose management improvement plan for achieving efficient, stable farm management has been certified by a municipal government);
- (2) "certified new farmers" who are expected to become certified farmers in the future; and
- (3) "community-based farm cooperatives" that are expected to be incorporated and become certified farmers in the future.

The government will intensively implement Farming Income Stabilization Measures and policies relating to loans and taxation for these farmers.

Figure 18-1 About "business farmers"



Source: Compiled by MAFF.

Acceleration of incorporation of farm management and other measures

With an aim to accelerate the incorporation of farm management, the government will disseminate information including the following to raise awareness of mainly large-scale family farm management entities and community-based farm cooperatives:

- (1) advantages of and procedures for incorporation; and
- (2) information and know-how on financial and labor management.

In addition, it will promote the development of a framework for consultation/guidance by experts on business management, such as tax accountants.

As an effort to respond to the labor shortage and to ensure the use of human resources from a wide variety of age groups and those from other industries in agricultural corporations, the government will promote measures including the following:

- (1) development of an environment for employment comparable to other industries; and
- (2) efforts to provide a career path for employees to become an independent manager of another agricultural corporation.

Figure 18-2

Advantages of incorporation and policies for promoting incorporation

Advantages of incorporation		Policies for promoting incorporation
Business management	- Business can be managed thoroughly and can be separated from family finances.	- Financing through the Super L Loan (the loan limit is remarkably higher for corporations)
Framework for making business judgments	- Organized business judgments can be made by officers and employees.	- Investment by the Agribusiness Investment & Consultation Co., Ltd.
Succession of business	- Smooth business succession is possible by electing the next president, etc. at an early stage.	- Special tax measures relating to the reserve for bolstering the base for agricultural businesses .
Securing of financial resources for investment	- Appropriate investment is possible by using funds and loans and special tax measures.	- Support for incorporation of community-based farm cooperatives and individual farmers
Securing of employment	- The production scale can be expanded and entry into sales/processing sectors is possible by using employed workers, etc. - The age groups of officers and employees can be balanced by employing young workers.	- Support for efforts of agricultural corporations to have their employees become independent as separate corporations (so-called norenwake [a practice of setting an employee up in one's own business]) - Promotion of activities by non-agricultural corporations or their subsidiary companies to enter the agricultural sector by leasing farmland

Source: Compiled by MAFF.

- Efficient, stable farm management: Management under which principal employees can secure a level of lifetime income comparable to that of employees of other industries in the region for annual working hours equivalent to those of workers in other industries (here, "efficient" means high productivity and profitability; "stable" means being able to develop continuously for the medium to long term)

Part 3

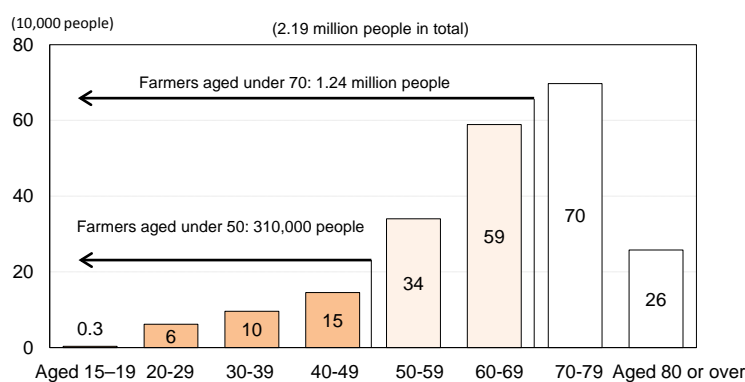
Development/securing of business farmers and development of environment for women farmers

Basic Plan p. 41–42

- In order to achieve an agricultural employment structure with a good generation balance in the future, the government will promote the recruitment of new young farmers from in and outside the agricultural sector.
- In addition, the government will encourage efforts to develop/secure human resources with a business mind and promote smooth business succession to the next generation of business farmers and entry of companies into the agricultural sector.
- The government will push forward the development of an environment wherein women farmers can more actively participate.

Promotion of activities such as recruitment of new farmers, development/securing of human resources, business succession

Figure 19-1 Number of farmers (2010)



Source: Compiled based on MAFF "Census of Agriculture and Forestry" (aggregate calculation after reclassification) and MIC "Population Census" (data were aggregated by MAFF based on survey slips).

In order to achieve an agricultural employment structure with a good generation balance in the future, it is an urgent task to increase the number of young farmers.

Therefore, the government will promote the recruitment of new young farmers from in and outside the agricultural sector.

The government will also promote the business succession and entry of companies into the agricultural sector so as to steadily pass on farmland and other resources to the next generation.

Entry of companies into the agricultural sector will contribute to the development of regional agriculture through collaboration between the agricultural sector and industrial sector. In addition, such companies are expected to serve as receivers of farmland particularly in regions facing a shortage of business farmers.

Accordingly, the government will promote the entry of companies into the agricultural sector by leasing farmland mainly through Public Corporations for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Banks).

Figure 19-2 Companies entering the agricultural sector

	Before the revised Agricultural Land Act came into effect (Apr. 2003–Dec. 2009)	After the revised Agricultural Land Act came into effect (Dec. 2009–Jun. 2014)	Number of increases	Increase rate
Number of corporations entering the agricultural sector	436	1,712	1,276	393%
Of which, stock companies	250	1,060	810	424%
Average annual number of corporations entering the agricultural sector	65	342	278	530%

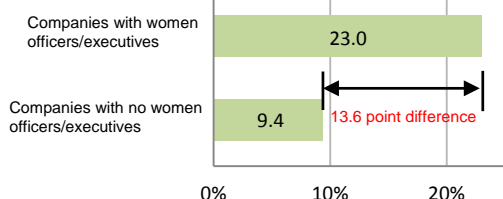
Source: Compiled by MAFF.

Development of an environment wherein women farmers can fully exert their potential capacity

Figure 19-3 Contribution of women officers/executives to business management

Sales increase rate over three years following the provision of a loan

Changes in the recurring profit margin over three years following the provision of a loan



Companies with women officers/executives	2.0 point rise Before the loan → After the loan 0.9% → 2.9%
Companies with no women officers/executives	0.1 point fall Before the loan → After the loan 1.5% → 1.4%

Women farmers constitute 40% of all farmers, and play an important role in the promotion of regional agriculture, development of farm management and development of Affrinnovation.

In order to develop an environment wherein women farmers can make more active participation, the government will promote initiatives to incorporate the opinions of women farmers and other related people in policies concerning regional agriculture.

Part 3

Consolidation of farmland to business farmers

Basic Plan p. 42–43

- The government will promote the consolidation of farmland to business farmers through full-capacity operation of the Public Corporations for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Banks).
- In order to solve problems concerning farmers and farmland in each region, the government will promote the creation and periodic review of the Farmers and Farmland Plan.
- The government will also strive to prevent farmland dilapidation and clear dilapidated farmland by, for example, promoting farmers' efforts to restore dilapidated farmland.

Development/securing of business farmers for realizing a strong and sustainable agricultural structure

The government will achieve full-capacity operation of the Farmland Banks established in each prefecture, and promote the consolidation of farmland to business farmers.

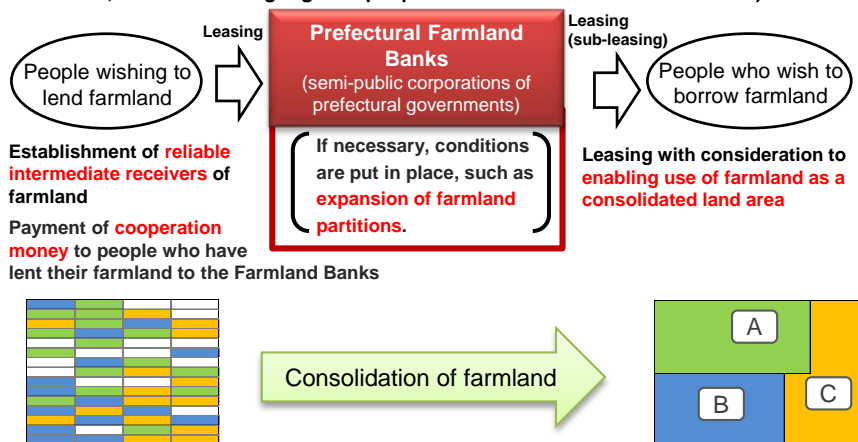
In doing so, the government will promote the following four approaches according to regions, to achieve full-capacity operation of the Farmland Banks:

- (1) initiatives linked with the Farmers and Farmland Plan of each region;
- (2) initiatives that respond to the needs of receivers who applied for public invitation, such as companies newly entering the agricultural sector;
- (3) initiatives for agricultural corporations, etc. to consolidate scattered farmland by exchanging farmland; and
- (4) initiatives linked with infrastructure improvement projects.

Figure 20-1

Mechanism of Farmland Banks

Establishment and use of Farmland Banks (promotion of development of laws, budgetary measures, and talks among regional people concerned in a combined manner)



Source: Compiled by MAFF.

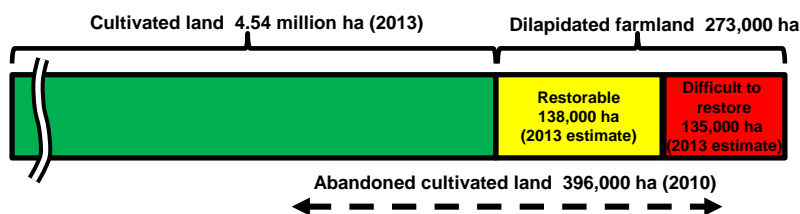
Promotion of such measures as preventing farmland dilapidation and clearing dilapidated farmland

The government will strive to prevent farmland dilapidation and clear dilapidated farmland by promoting farmers' efforts to restore dilapidated farmland and establishing land-utilization rights on restorable dilapidated farmland for Farmland Banks.

Also, in order to promote countermeasures against dilapidated farmland effectively and in a sustainable manner, the government will comprehensively study how such countermeasures should be coordinated with other related measures, and implement any necessary measures.

Figure 20-2

About farmland and dilapidated farmland



Source: Statistics Department, Minister's Secretariat, MAFF "Statistics on Cultivated Area and Planted Area (2013)" and "2010 World Census of Agriculture and Forestry in Japan" and Rural Development Bureau, MAFF "2013 Survey on the Status of Generation and Clearing of Dilapidated Farmland."

Note: Data of cultivated land includes temporarily fallow land and unplanted land.

- Dilapidated farmland	Farmland that has been left uncultivated and dilapidated due to the abandonment of cultivation and is viewed objectively as unable to be used for growing crops with conventional farming methods
- Restorable dilapidated farmland	Dilapidated farmland that is expected to become usable for cultivation with conventional farming methods by restoring the land through stump pulling, soil preparation, farmland partition adjustment, soil dressing, etc.
- Dilapidated farmland that is expected to be difficult to restore	Dilapidated farmland which is equivalent to land that is extremely difficult to be physically conditioned to be restored into farmland, such as in the form of a forest, or is not equivalent to land that is continuously usable even if the land was restored into farmland in light of the conditions of the surrounding area

- Abandoned cultivated land refers to "land that was cultivated in the past, but has not been planted for the past one year or more, and is not planned to be planted again in the next few years" (area subjectively derived by farmers, etc.), which is identified once every five years by Statistics Department, MAFF "Census of Agriculture and Forestry." (396,000 ha in 2010)

Part 3

Promotion of Farming Income Stabilization Measures and consideration of income insurance

Basic Plan p. 43–44

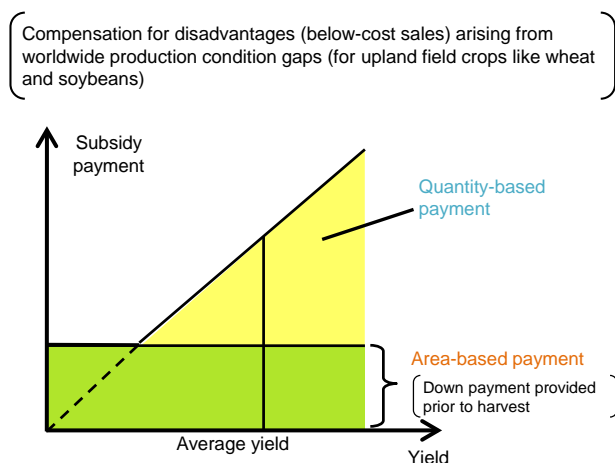
- The government will implement Farming Income Stabilization Measures for business farmers without imposing a scale requirement.
- The government will also consider the introduction of income insurance that focuses on the income of the entire farm management toward legislating the system.

Steady promotion of the Farming Income Stabilization Measures for business farmers

From the viewpoint of ensuring the stability of farm management by business farmers and further advancing the structural reform of Japan's agriculture, the government will implement the “direct payment for upland field crops” and “the payment to mitigate impact of reduced income for rice and upland field crops” for certified farmers, certified new farmers and community-based farm cooperatives without imposing a scale requirement, from production in 2015.

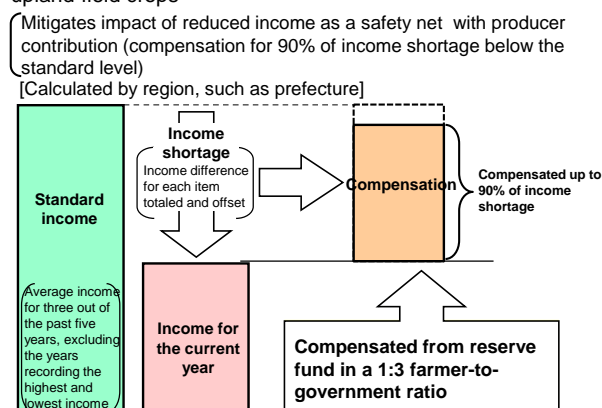
Figure 21-1 Farming Income Stabilization Measures in 2015 onward

Direct payment for upland field crops



Source: Compiled by MAFF.

Payment to mitigate impact of reduced income for rice and upland field crops



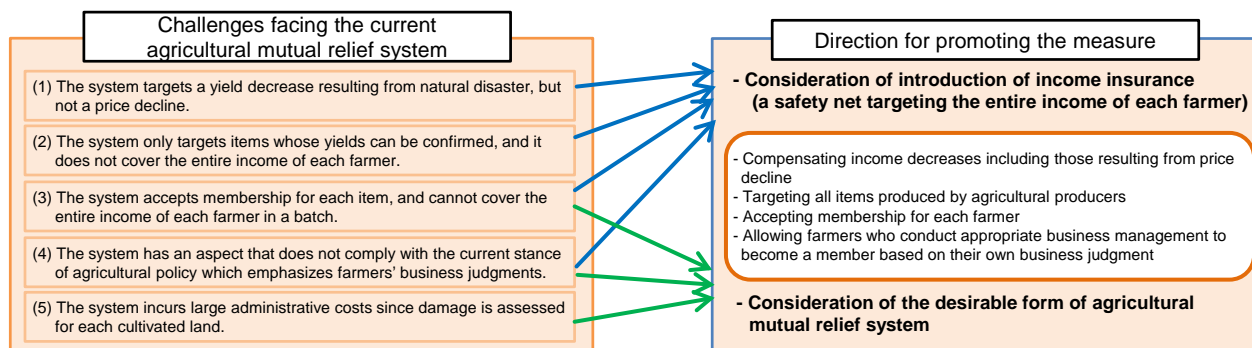
Source: Compiled by MAFF.

Consideration of income insurance as a new safety net for agricultural producers

The government will consider the introduction of income insurance that focuses on the income of each farmer toward legislating the system, such as conducting a feasibility study to verify the mechanism of the system.

In that process, the government will sort out the relationship between the new system and existing systems, so as to prevent any overlapping between them, including a study on the desirable form of existing systems. Along with the study on income insurance, the government will also consider the desirable form of the agricultural disaster compensation system.

Figure 21-2 Consideration of a new safety net for agricultural producers



Source: Compiled by MAFF.

Part 3

Promotion of development of an agricultural production base

Basic Plan p. 44–45

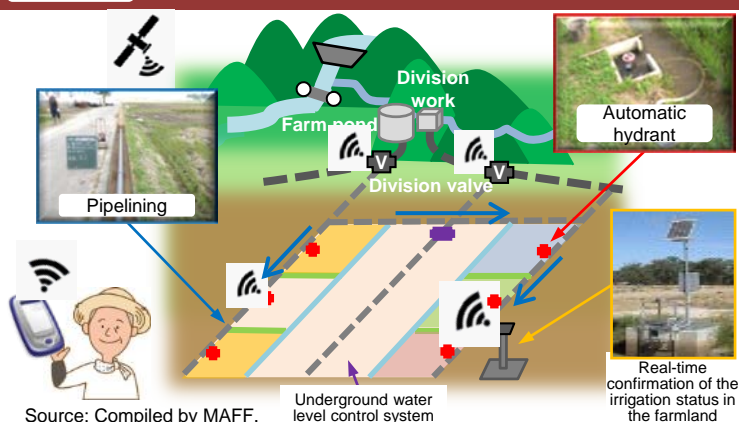
- With the aim of maintaining and improving the food self-sufficiency ratio and potential, the government will promote the expansion of farmland partitions, creation of multi-purpose paddy fields, establishment of irrigation facilities for upland fields, etc. according to regional characteristics.
- The government will promote the strategic preservation and management of farm irrigation facilities for extending their lifetime and reducing their life cycle cost.
- Based on the Fundamental Plan for National Resilience, etc., the government will promote disaster prevention/mitigation measures toward building the resilience of rural areas.

Agricultural production infrastructure development that supports robust agriculture

While securely working on the consolidation of farmland to business farmers and reduction of production costs, the government will promote the expansion of farmland partitions, creation of multi-purpose paddy fields and establishment of irrigation facilities for upland fields in cooperation with Farmland Banks, in order to realize highly profitable farm management.

In addition, for the purpose of saving labor for water management and sophisticating water use in response to changes in the agricultural structure and farming styles, the government will promote the construction of new farm irrigation systems through the introduction of new technology, such as ICT and an underground water level control system, and pipelining.

Figure 22-1 Construction of a new farm irrigation system



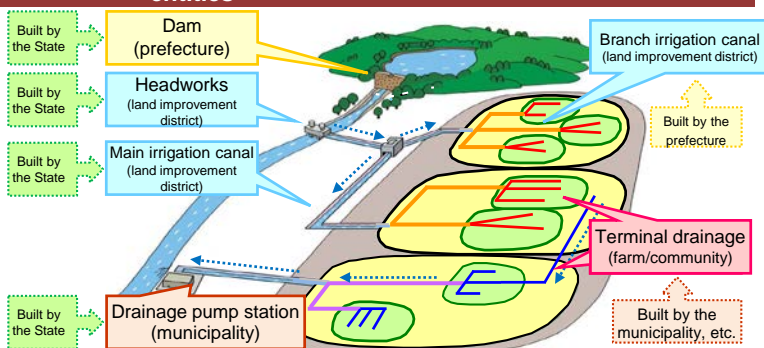
Source: Compiled by MAFF.

Sustainable preservation and management of farm irrigation facilities in response to such issues as aging

In order to ensure that farm irrigation facilities perform their functions in a stable manner into the future while aging, the government will promote their strategic preservation and management of the facilities for radically extending their lifetime and reducing their life cycle cost.

Toward enhancing and strengthening the preservation and management of a series of facilities from the main to terminal facilities, the government will promote the construction of an integrated preservation and management framework by people concerned through the use of the multifunctional payment system and other means.

Figure 22-2 Management of farm irrigation facilities by various entities



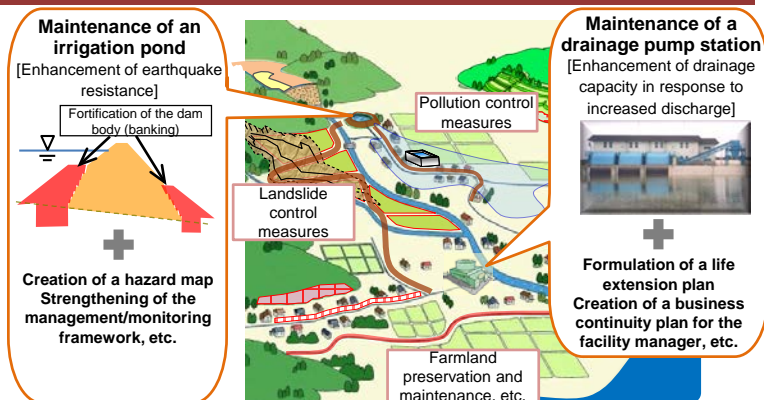
Source: Compiled by MAFF.

Disaster prevention/mitigation measures toward building the resilience of rural areas

In order to realize stable farm management as well as safe and secure life in rural areas that are becoming urbanized and seeing an increasing mix of farm and non-farm households, the government will promote disaster prevention/mitigation measures in rural areas based on the Fundamental Plan for National Resilience and other guidelines by appropriately combining tangible and intangible measures.

In that process, it will intensify or prioritize measures according to regional circumstances or risk assessment, and promote the measures efficiently through the effective use of existing facilities and performance of local community functions.

Figure 22-3 Disaster prevention/mitigation measures in rural areas



Source: Compiled by MAFF.

Part 3

Reform of the production/supply systems

Basic Plan p. 45–47

- The government will promote the development of production/supply systems that are compatible with substantial changes in the demand structure and the like and expansion of exports.
- The government will also steadily promote rice policy reform and the expansion of production of rice for feed and other strategic crops.
- The government will work on enhancing the competitiveness of the livestock industry by such means as establishing and developing “livestock clusters” and enhancing the supply capability of items including horticulture products, organic farm products and medicinal plants according to user needs or other demand.

Steady promotion of rice policy reform and expansion of production of rice for feed and other strategic crops

Figure 23-1

Initiatives toward expanding the production of major strategic crops

Rice for feed [1.1 million t]



- Promotion of initiatives toward resolving various issues, such as connecting rice production areas with livestock producers
- Promotion of development/introduction of high-yielding varieties and demonstration of new cultivation technology
- Promotion of reorganization/restructuring of facilities, streamlining of distribution, development of a framework for supplying products through compound feed factories and a framework for using products at livestock farms, for reducing production/distribution costs

Rice for flour [100,000 t]



- Promotion of initiatives including reduction of processing costs through improvement, development and diffusion of processing technology in response to diverse uses, development of new rice flour products

Wheat and barley, soybeans

[wheat: 950,000 t;
barley/naked barley: 220,000 t;
soybeans: 320,000 t]



- Development and introduction of new varieties with growth characteristics suitable for local conditions or with high processability and high yielding property
- Promotion of development and introduction of cultivation technology, such as a crop rotation system, that contributes to drainage measures or to maintenance of soil fertility

The government will promote demand-based production that does not rely on the target volume of rice production allotted by administration.

For strategic crops, the government will improve productivity and promote expansion of their production through support by direct payment for the utilization of paddy fields and the initiatives listed on the left.

Toward secure achievement of the production effort target for each item, the government will ensure the expansion of production while constantly conducting inspections.

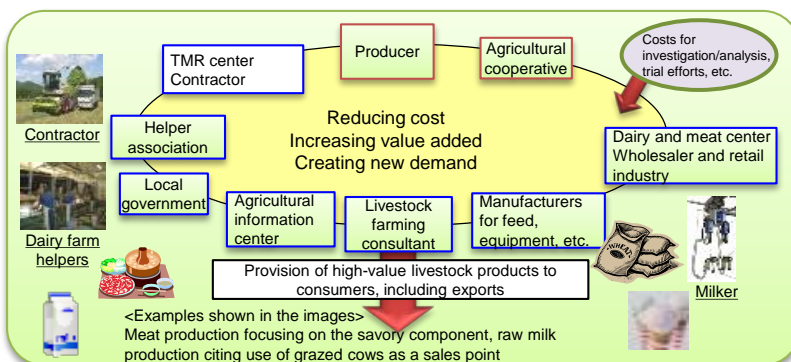
Source: Compiled by MAFF. Note: Figures in square brackets denote production effort targets.

Enhancement of the competitiveness of the livestock industry by establishing and developing “livestock clusters”

Figure 23-2

Construction of a highly profitable livestock production system

- The government will support the trial efforts of new initiatives (livestock clusters) for improving profitability on a regional basis through the cooperation/gathering of relevant business operators, and nationwide development of such initiatives, etc.
- It will promote the establishment and development of “livestock clusters” and improvement of profitability on a regional basis.



- In light of the recent decrease in the number of farm households and livestock animals raised, the government will promote initiatives including the following:
- enhancement of competitiveness and the production base through promotion of “livestock clusters”;
 - reduction of work load through the use of milking robots, external support organizations, and so on;
 - securing of high-quality cattle through the use of sexed embryos and semen; and
 - promotion of use of domestic feed through use of rice for feed, eco-feed, and promoting grazing.

Source: Compiled by MAFF.

Enhancement of the supply capability of items including horticulture products, organic farm products and medicinal plants

Figure 23-3

Introduction of new varieties and technology required for vegetables for processing/industrial use

Introduction of new technology/integrated mechanization system



Cabbage harvester <mechanization>

Introduction of new varieties for processing/industrial use



An oblong variety with high processing yield

In order to respond to needs for vegetables for processing/industrial use which are facing growing demand, the government will promote initiatives including the following:

- development and introduction of varieties dedicated to processing/industrial use;
- establishment of integrated mechanization systems; and
- improvement of distribution efficiency.

For organic farm products, the government will promote the expansion of production by establishing/disseminating cultivation technology systems and promoting matching between users and producers.

With regard to medicinal plants, it will promote the efforts of contract culture, and promote such activities as the establishment of cultivation technology.

Part 3

Promotion of technological innovation on production/distribution

Basic Plan p. 47–49

- The government will promote the establishment of a new R&D system for promptly solving problems faced by the producers and distributors.
- In order to realize expansion of the scale of activities, labor saving, and cost reduction for business farmers, the government will promote initiatives including smart agriculture using robots and ICT and next-generation greenhouse horticulture.
- The government will also push forward more effective farming safety measures for preventing farming accidents.

Strategic R&D and acceleration of technology transfer

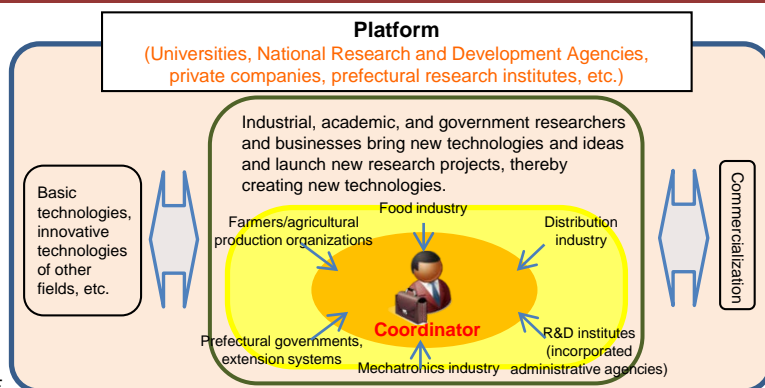
In order to promote R&D for promptly solving problems faced by the producers and distributors, the government will strategically promote R&D that directly links to the needs of farmers and other related people through efforts including the following:

- participation of such entities as farmers, food industry business operators, and extension systems in the R&D phase; and
- application of most advanced technology such as robot technology, ICT and genomic technology to agriculture.

The government will also connect universities and research institutes that have innovative technology or other valuable assets with private companies and financial institutions, and promote the creation of platforms for accelerating joint research and commercialization.

Source: Compiled by MAFF.

Figure 24-1 Platform



Innovation of production/distribution systems through such means as use of advanced technology

In order to realize expansion of the scale of activities, labor saving, and cost reduction for business farmers amid the progression of aging and labor shortage, the government will promote initiatives including the following:

- initiatives for realizing smart agriculture and next-generation greenhouse horticulture centers;
- development and introduction of labor-saving cultivation technology suitable for large-scale farm management; and
- development of an environment that facilitates the outsourcing of farm work.

At the same time, the government will promote the introduction of technology for advancing demand-based production and addition of high value to products and establishment of technology for mitigating risks such as abnormal weather.

Figure 24-2 Introduction of robot technology that uses advanced technology



Lessening of the burden of heavy labor that is difficult to mechanize, such as transporting agricultural products on a slope, by using a power assist suit

Source: Compiled by MAFF.



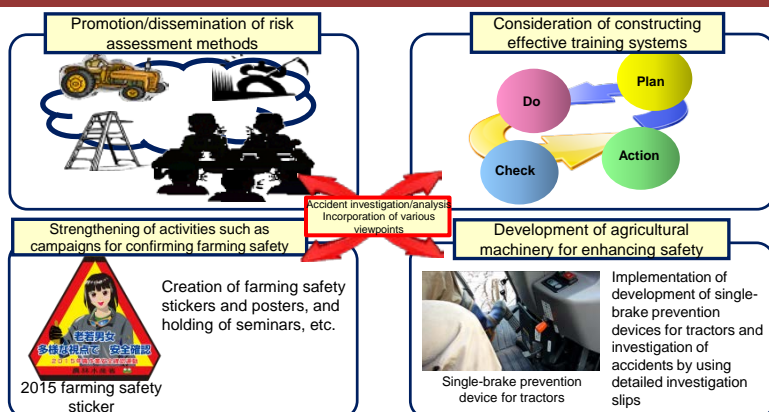
Expansion of the scale of work that can be done during the limited cropping season by operating multiple tractors under a human-robot collaboration system

Promotion of effective farming safety measures

For preventing farming accidents, the government will push forward the following initiatives:

- introduction of risk assessment methods;
- review of training frameworks and the like; and
- development/dissemination of high-safety agricultural machinery.

Figure 24-3 Promotion of effective farming safety measures



Source: Compiled by MAFF.

Part 3

Promotion of environmental policy

Basic Plan p. 49–50

- Since agriculture, forestry and fisheries are considerably affected by climate change, the government will formulate an adaptation plan for the agriculture, forestry and fisheries sector, coupled with the formulation of an adaptation plan for the whole government.
- The government will also promote the conservation and sustainable use of biodiversity through agricultural production activities.
- The government will maintain and enhance the natural cyclical function of agriculture and establish sustainable agriculture.

Promotion of mitigation/adaptation measures for climate change

Figure 25-1 Effects of global warming on agriculture and development of adaptation technology



[Poor coloring of grapes due to high temperature]



[Addressing poor coloring by using the girdling technique]



[Normal]

Source: Compiled by MAFF.

The government will promote efforts including the following to reduce the emission of greenhouse gases:

- energy-saving measures for greenhouse horticulture and agricultural machinery;
- optimization of fertilization; and
- promotion of use of livestock excrement.

The government will formulate a climate change adaptation plan for the agriculture, forestry and fisheries sector and promote such activities as impact assessment and development of adaptation technology.

Conservation and sustainable use of biodiversity

Figure 25-2 Case examples of “Ikimono Marks”

	Mark title: <i>Kōnotori no Mai</i> (flying stork) Region: Toyooka City	Outline: The mark has been certified for agricultural products such as rice which have been cultivated by an environmentally friendly method in order to restore a rich natural environment where storks can live.
	Mark title: <i>Fuyumizu Tambo Mai</i> (rice grown on winter-flooded paddy fields) Rice Region: Osaka City	Outline: Rice cultivated in paddy fields that are flooded in winter to provide resting sites for waterfowl such as white-fronted geese that fly over in a large number to areas around Kabukuri wetlands is sold as <i>Fuyumizu Tambo Mai</i> .
	Mark title: <i>Toki to Kurasu Sato Zukuri</i> (development of countryside where <i>toki</i> and people can live together) Region: Sado City	Outline: The mark has been certified for rice cultivated in paddy fields where special cultivation and agricultural methods for fostering living creatures are implemented to secure feeding sites for <i>toki</i> (Japanese crested ibis) that were released in 2008.

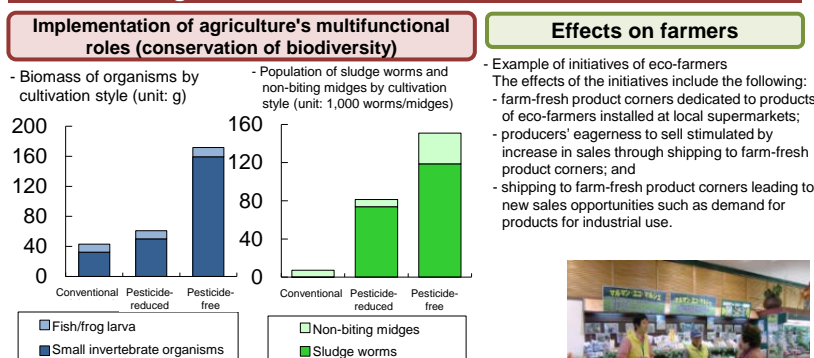
Source: Compiled by MAFF.

The government will send out information on the verification results of the effects of “Ikimono Marks” (such as labeling on a biodiversity-friendly agricultural product) and case examples of progressive efforts being made, and promote exchanges between urban areas and rural areas, such as green tourism, initiatives toward increasing systems that are selected as Globally Important Agricultural Heritage Systems (GIAHS), and biodiversity conservation initiatives in collaboration with corporate activities.

The government will also promote the conservation and use of genetic resources based on international frameworks.

Maintenance and enhancement of the natural cyclical function of agriculture and its communication

Figure 25-3 Effects of initiatives of environmentally friendly agriculture



Source: Paddy field organism monitoring report of the project to support the creation of paddy fields that coexist with storks.



The government will establish sustainable agriculture by maintaining and enhancing the natural cyclical function of agriculture through promoting agricultural production in harmony with the environment in various regions by way of making cyclic use of resources, such as livestock excrement and rice straw, and appropriate use of pesticides and fertilizers.

The government will verify the effects of agriculture on the environment and promote communication between people concerned.

Part 3

Steady promotion of the multifunctional payment system and performance of local community functions

Basic Plan p. 51–53

- The government will promote the maintenance and management of local resources through joint activities by the whole area, including family management entities, corporation management entities, and local residents.
- The government will also support the continuance of farming in hilly and mountainous areas, etc. with disadvantageous production conditions.
- The government will promote the networking of neighboring communities through the development of “small hubs” and traffic networks.

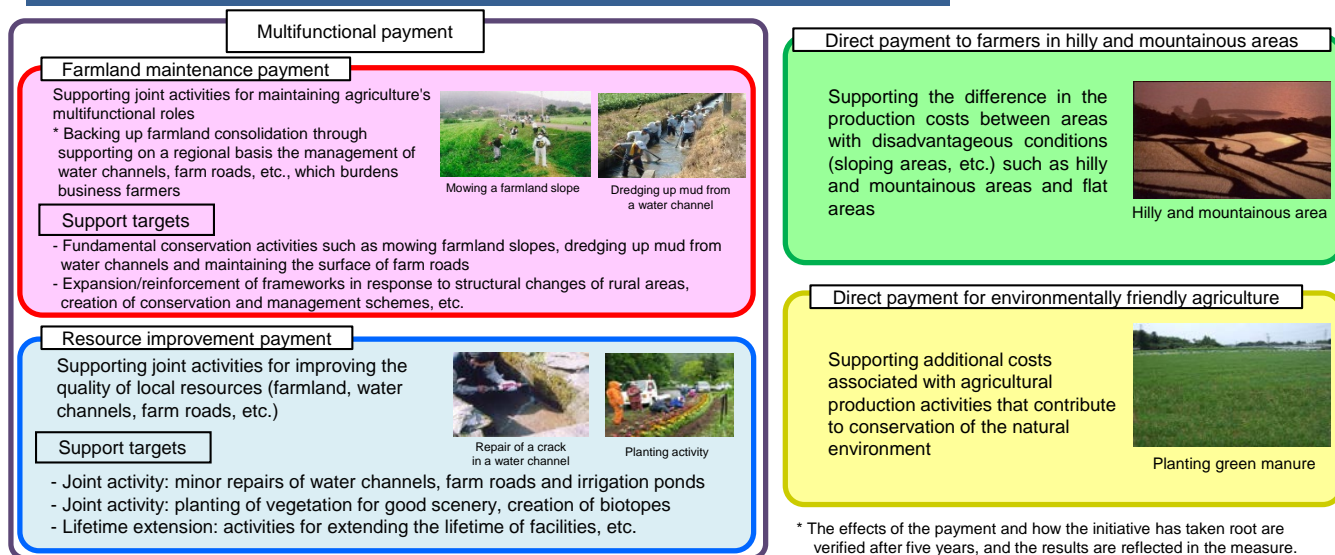
Initiatives for promoting the implementation of agriculture's multifunctional roles

In order to ensure the maintenance/implementation of agriculture's multifunctional roles into the future and back up structural reform including consolidation of farmland to business farmers, the government will support fundamental conservation activities (farmland maintenance payment) and qualitative improvement activities (quality improvement payment) of resources such as farmland, irrigation systems and farm roads by local communities. (Multifunctional payment system)

By continuing to implement the direct payment system to farmers in hilly and mountainous areas for offsetting disadvantageous agricultural production conditions in hilly and mountainous areas, the government will maintain agricultural production activities in areas under disadvantageous conditions, and thereby secure agriculture's multifunctional roles. (Direct payment system to farmers in hilly and mountainous areas)

Figure 26-1

Outline of the Japanese agricultural direct payment system



Source: Compiled by MAFF.

Maintenance of community functions through “integration and networking”

The government will promote the creation of a future vision for the region under the initiative of local residents.

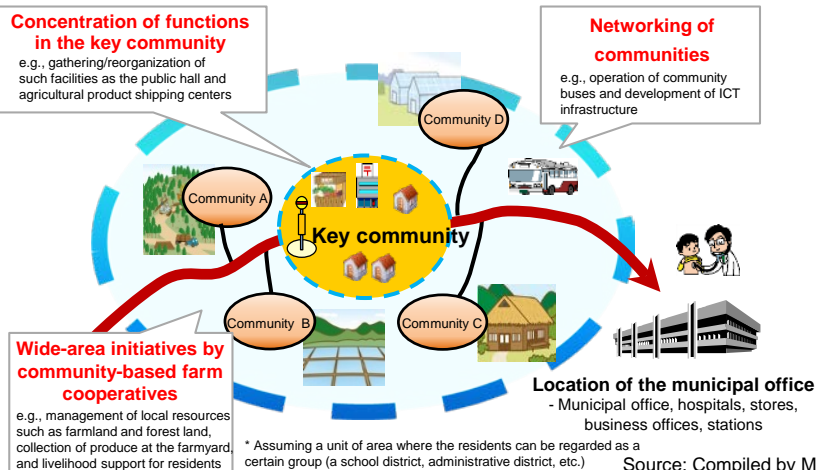
It will enhance the support framework for such efforts, and promote the conservation of farmland, reorganization/development of facilities related to agriculture and daily life and the development of an environment for realizing well-planned land use.

Further, the government will consider the desirable form of role-sharing between diverse people concerned, among other aspects, in the maintenance and management of farmland and agricultural facilities.

The government will further accelerate initiatives for supporting local livelihood, and promote the launching of organizations and development of business that can flexibly respond to region-specific needs.

Figure 26-2

Networking of communities



Part 3

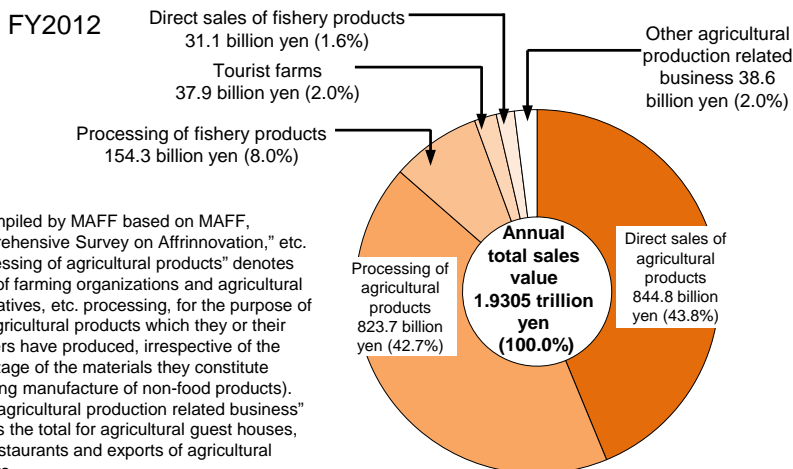
Creation of employment and income through active utilization of various local resources

Basic Plan p. 53–54

- The government will accelerate the securing of employment and increase of income in the entire rural area through the creation of new value by fully using the abundant local resources of the rural area and introduction of agriculture-related industries.
- While enhancing economic circulation within the region whereby economic value that had flowed out of the rural area in the past is circulated within the area, the government will aim to strengthen economic networks between regions and develop the regions into wide-area economic zones in the future.

Creation of new value by using local agricultural products and other assets

Figure 27-1 Breakdown of the annual total sales value of agricultural production related business, etc.

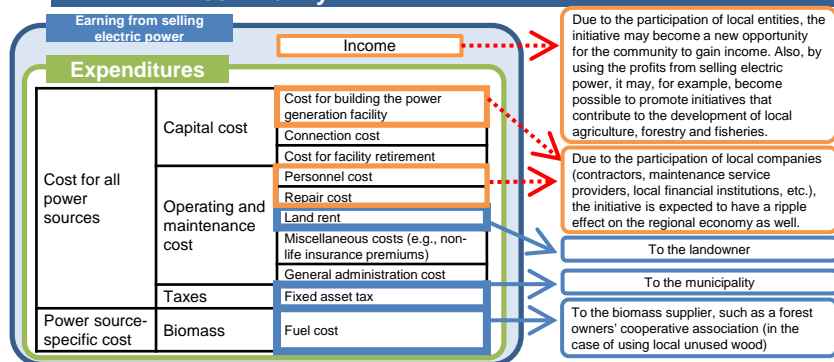


Source: Compiled by MAFF based on MAFF, "Comprehensive Survey on Affrinnovation," etc.
Note: "Processing of agricultural products" denotes an act of farming organizations and agricultural cooperatives, etc. processing, for the purpose of sale, agricultural products which they or their members have produced, irrespective of the percentage of the materials they constitute (including manufacture of non-food products). "Other agricultural production related business" denotes the total for agricultural guest houses, farm restaurants and exports of agricultural products.

The government will promote Affrinnovation whereby local farmers create new value based on agriculture by fully using local resources, such as not merely shipping their agricultural products as they are, but adding high value to such products as well as their by-products through processing or direct sales in response to consumer and user needs, and developing business integrated with diverse initiatives such as tourist farms, farm restaurants and agricultural guest houses, according to the regional characteristics.
In promoting such initiatives, the government will invigorate rural communities by accelerating not only initiatives led by farmers, but also community-based initiatives implemented in collaboration with various people concerned, and spreading the synergy effect to the entire community.

Production/use of renewable energy led by communities in rural areas

Figure 27-2 Return of profits made by renewable energy to the community



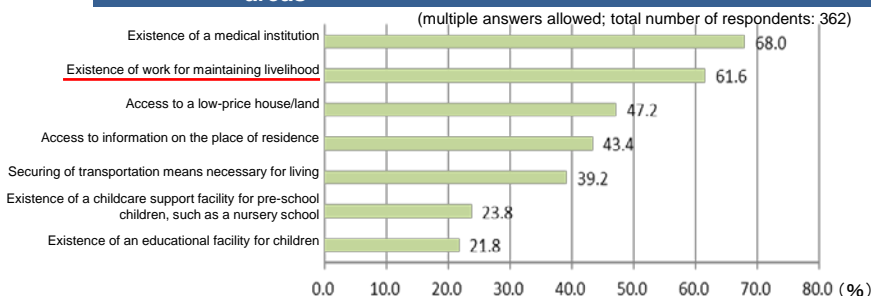
* Typical expenditures are shown as examples.

Source: Compiled by MAFF.

Rural areas have abundant resources such as biomass, water and land. By using these resources as renewable energy sources in biomass power generation and small hydropower generation, etc., and expanding the initiatives of local entities such as farmers, the government will promote the improvement of farm management and return of profits to the community and vitalize rural areas.

Creation of employment and income through the introduction of agriculture-related industries to rural areas and other means

Figure 27-3 Elements required for realizing hopes to settle in rural areas



Source: Cabinet Office, "FY2014 Poll on Rural Areas."

The government will develop an environment for accelerating the creation of employment and income in rural areas through the introduction of agriculture-related industries, such as the food manufacturing industry, to rural areas and other means.
The government will also consider the desirable form of comprehensive measures for expanding employment opportunities by such means as attracting agriculture-related industries to rural areas under cooperation among relevant ministries.

Part 3

Promotion of exchanges between urban and rural areas and migration/settlement to rural areas

Basic Plan p. 54–56

- In light of such trends as the growing public interest in agriculture and rural areas, the government will deepen collaboration among various sectors, such as tourism, education and welfare, with agriculture at the core, and strategically promote exchanges between urban and rural areas.
- The government will promote initiatives for drawing the increased number of visitors to rural areas to migrate/settle to these areas.
- The government will also push forward initiatives for achieving sustainable promotion of urban agriculture.

Exchanges between urban and rural areas in collaboration with tourism, education, welfare, and other sectors

The government will work to explore new tourist demand by combining green tourism with wide-area tourist excursion routes, and the like.

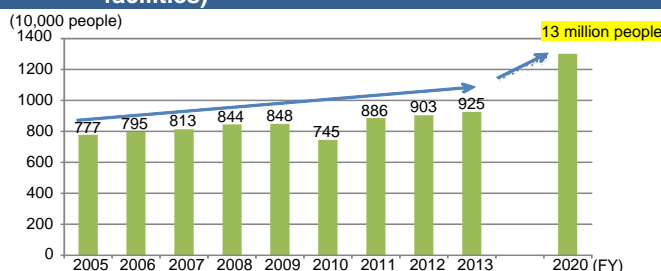
The government will construct a framework for accepting tourists from abroad and carry out promotional activities.

It will advance the development of facilities for accommodation and hands-on experience, a framework for accepting tourists, and human resources who will support the experience activities, among other activities.

The government will promote initiatives for expanding welfare farms, which are for health improvement and the development of life motivation for elderly people and self-reliance support for people with disabilities and people struggling financially, and having such farms become firmly established.

Figure 28-1

Number of visitors from urban areas to rural areas (the total annual number of lodgers at green tourism facilities)



Source: Surveys by Rural Development Bureau, MAFF.

Note: The figure for FY2010 excludes the figures for the three prefectures affected by the Great East Japan Earthquake (Iwate, Miyagi and Fukushima).

Migration/settlement of various human resources from urban areas to rural areas

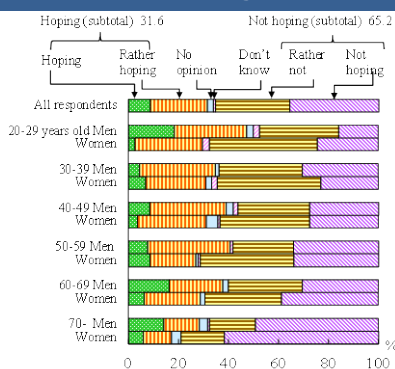
The government will promote initiatives for enhancing information provision and consultation support that will be required for migration/settlement to such places as rural areas.

It will work on creating a framework that allows people to live in rural areas on a trial basis, promoting the style of having a residence in an urban area as well as one in a rural area, and developing a framework for providing detailed consultation service before and after migration. At the same time, it will promote initiatives including the development of training facilities for people who want to engage in farming by using such a building as an empty house or a closed school and formulation of a comprehensive support plan packaging "farming" and "residing" in a rural area.

The government will drive forward collaborative activities among local governments, agricultural organizations, educational institutions, companies, and other entities.

Figure 28-2

Are urban residents hoping to settle in rural areas?



Source: Cabinet Office, "Poll on Rural Areas" (released in August 2014)

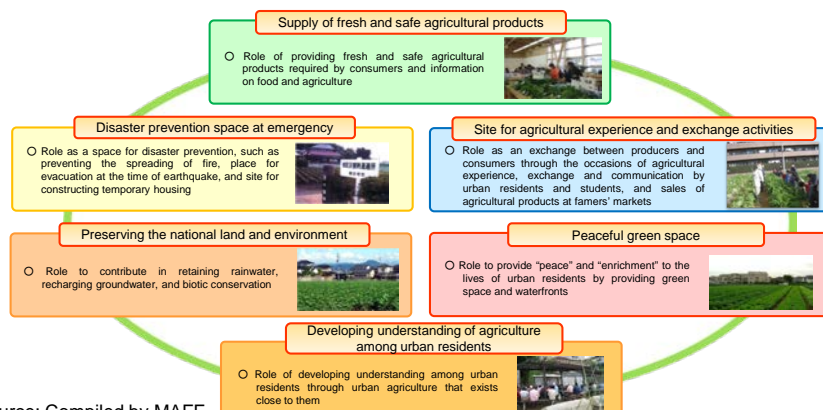
Promotion of urban agriculture playing multifunctional roles

The government will work to promote urban residents' understanding of the functions of urban agriculture, and, through appropriate sharing of roles with local governments, it will further initiatives for maintaining and developing farm management, promoting local consumption of agricultural products, encouraging farming experiences and interchange activities at such places as allotment gardens and experience farms, and enhancement of the disaster prevention function of urban farmland.

The government will consider reviewing systems relating to the promotion of urban agriculture and conservation of urban farmland, while making effort to increase the people's understanding to a sufficient level.

Figure 28-3

Multifunctional roles of urban agriculture



Source: Compiled by MAFF.

Part 3

Restoration/reconstruction from the Great East Japan Earthquake

Basic Plan p. 56–57

- The government will continue to promote steady restoration of farmland and agricultural facilities, etc. toward early resumption of farm management by affected farmers.
- The government will respond to the Fukushima Daiichi Nuclear Power Plant accident and promote initiatives to ensure food safety and remove harmful rumors.

Restoration/reconstruction from the earthquake/tsunami disaster

Toward early resumption of farm management by farmers affected by the Great East Japan Earthquake, the government will continue to promote the steady restoration of farmland, agricultural facilities, and the like in such areas as where damage was enormous. The government will promote the improvement of productivity through such measures as the expansion of farmland partitions, and, by conducting large-scale empirical research using advanced technology, push forward analysis of the effects of technology introduction and dissemination of the technology to affected areas.

Figure 29-1 Areas of tsunami-affected farmland that are available for resuming farming

Item	Damage details	Progress in restoration (%)					Remarks
		0	20	40	60	80	
Farmland (as of the end of Jan. 2015)	Tsunami-affected farmland in six prefectures (Aomori, Iwate, Miyagi, Fukushima, Ibaraki and Chiba) →21,480 ha	70% (About 15,060 ha available for resuming farming)					Under the Basic Guideline for Reconstruction of Agriculture and Rural Communities after the Great East Japan Earthquake, farmland restoration and salt removal are under way in tsunami-affected farmland toward resuming farming there. The government will aim to make an additional farmland area of about 820 ha (4%) available for resuming farming within FY2015.
Farms (as of Feb. 1, 2014)	Tsunami-damaged farms (six prefectures in Tohoku and Kanto regions) →10,100 farms	55% (About 5,610 farms resumed farming*)					The approximately 5,610 farms that have resumed farming include those that have resumed part or all of the target agricultural production processes or preparations for them. (As of Feb. 1, 2014; six prefectures in the Tohoku and Kanto regions)

* The farms' resumption status was estimated based on the results of MAFF officials' interviews with people concerned about the extent (proportion) of damage and restoration and on the number of farms as indicated in the 2010 Census of Agriculture and Forestry, for each affected rural community or municipality.

Restoration/reconstruction from the nuclear accident

Figure 29-2 Key points of "Principles for strengthening countermeasures against harmful rumors"
(compiled by the Reconstruction Agency on June 23, 2014)

Principle 1. Remove the source of harmful rumors

- (1) Implementation of radioactive substances inspection for the products of affected areas
- (2) Understanding and announcement of the radiation dosage within the environment

Principle 2. Provide accurate and plain information to prevent rumors

Providing information on radioactivity and reinforcement of communication with the public

Principle 3. Support industries that suffered from harmful rumors

- (1) Expansion of the sales channel of products of affected areas, development of new products, etc.
- (2) Promotion of inviting visitors to affected areas from other parts of Japan and from abroad

Figure 29-3 Monitoring results in FY2014 (as of March 30, 2015)

Category	Number of samples	Number of samples above the maximum levels	Percentage of samples above the maximum levels
Rice	109.8 million	0	0%
Wheat and barley	383	0	0%
Pulse	2,579	2	0.1%
Vegetables	16,712	0	0%
Fruits	3,302	0	0%
Tea	206	0	0%
Raw milk	1,846	0	0%
Meat and eggs (excluding wild meat)	188,304	0	0%
Mushrooms and wild edible plants	8,557	103	1.2%
Fishery products	20,910	100	0.5%

Toward the resumption of farming in the evacuation areas and other affected areas, the government will continue to provide support for the conservation, maintenance of decontaminated farmland, and farming demonstrations according to the progress of farmland decontamination and the return of farmers.

The government will maintain its efforts to provide consumers, on the basis of scientific evidence, with accurate and plain information on monitoring results and farm-level measures for reduction of radioactive substances in agricultural products.

The entire government will also continue to provide scientific data to countries and areas that impose import restrictions, and negotiate to resume import.

Source (Figure 29-2): Prepared by MAFF based on materials from the Reconstruction Agency.

Source (Figure 29-3): Compiled based on data released by MHLW and local governments. Data are those of the 17 prefectures targeted by "Concepts of Inspection Planning and the Establishment and Cancellation of Items and Areas to which Restriction of Distribution and/or Consumption of Foods concerned Applies" (Nuclear Emergency Response Headquarters). However, data for fishery products are those for the whole of Japan.

Part 3

Reorganization/ restructuring of relevant bodies

Basic Plan p. 57–58

- The government will carry out reform to allow local agricultural cooperatives to focus on the improvement of farmers' income by actively engaging in such activities as profit-boosting sales of agricultural products in concert with farmers through original and creative efforts.
- The government will also carry out reform concerning agricultural committees so that farmland uses in the region will be optimized from the viewpoint of farmers, particularly business farmers.

Hierarchical organization of agricultural cooperatives, hierarchical organization of agricultural committees

Figure 30-1 Outline of the Bill for Partial Amendment of the Agricultural Cooperatives Act

Purpose

In order to make agriculture a growth sector, it is necessary to develop an environment where economic entities that utilize the policies for Affrinnovation, overseas exports and farmland consolidation, etc. can conduct vigorous activities. Therefore, agricultural cooperatives, agricultural committees and agricultural production corporations will be integrally revised.

Outline of the amendment

Amendment of the Agricultural Cooperatives Act

- ◎ Local agricultural cooperatives will be allowed to freely conduct economic operations and focus on the improvement of farmers' income.
[Clarification of the management objective]
 - ✦ Stipulating that the cooperatives should realize high profitability through appropriate business activities and endeavor to distribute the surplus in accordance with the amount of use of businesses to farmers, among other matters, while giving the maximum consideration for increasing agricultural income
- [Thorough effort to become a cooperative chosen by farmers]
 - ✦ Providing that cooperatives must not force farmers to use their business
- [Responsible business management framework]
 - ✦ Providing that a majority of directors should be composed of certified farmers and people who have practical skills to sell, etc. agricultural products, in principle.
- [Provision of services to local residents]
 - ✦ Providing that a local agricultural cooperative may choose to partially reorganize a part of its organization into a stock company or co-op, etc.
- ◎ Federations and the central union will appropriately support the free economic activities of local agricultural cooperatives.
[National federation of agricultural cooperative associations]
 - ✦ Providing that the national federation of agricultural cooperative associations may choose to reorganize into a stock company
- [Prefectural central unions]
 - ✦ Shifting prefectural central unions to agricultural cooperative federations that will carry out management consultation, audits, representation of opinions and comprehensive adjustments
- [National central union]
 - ✦ Shifting the national central union to a general incorporated association that will carry out representation of opinions of cooperatives and comprehensive adjustments; abolishing the obligation on agricultural cooperatives to receive audits by the national central union, and instead requiring them to receive audits by certified public accountants

Amendment of the Act on Agricultural Committees, etc.

Amendment will be made to promote the optimization of farmland use (consolidation to business farmers, prevention of cultivated land abandonment and promotion of new entry to the agricultural sector).

- ✦ Changing the selection method of committee members from the public election to appointment by the head of the municipality
- ✦ Newly establishing a Farmland Utilization Optimization Promotion Commissioner
- ✦ Appointing the agricultural committee network organizations at the prefectural and national levels to support agricultural committees

Amendment of the Agricultural Land Act

- ✦ Reviewing the requirements for agricultural production corporations (requirements for board members and voting rights) in order to promote management development through Affrinnovation

Effects

- Local agricultural cooperatives will be able to actively engage in profit-boosting sales, etc. of agricultural products in concert with farmers through original and creative efforts.
- Agricultural committees will be able to better achieve the optimization of farmland use.
- The amendment will contribute to the management development of agricultural production corporations, which are business farmers.

Source: Compiled by MAFF.

Agricultural mutual relief organizations, land improvement district

Due to the aging of farmers, it has become difficult for farmers themselves to operate the agricultural disaster compensation system. The system also has problematic differences in the service levels between the agricultural mutual relief associations.



The government will consider the desirable form of agricultural mutual relief organizations in the process of considering the desirable form of the agricultural disaster compensation system as well as the introduction of income insurance.

It is expected that the organizational operation of land improvement districts will become affected by changes in the agricultural structure and rural areas.



The government will continue to further the strengthening of the organizational operation base of the districts. At the same time, it will also consider the desirable form of land improvement districts in the process of verifying and considering the desirable form of the land improvement system, after identifying and analyzing the current status of land improvement districts, in the future.

Agriculture structure outlook

Drafted along with the Basic Plan

- The outlook describes business farmers and clarifies the desired form of agricultural structure as a future vision for comprehensively promoting development/securing of business farmers, consolidation of farmland to business farmers, and other activities under the Food, Agriculture and Rural Areas Basic Act.
- The government also presents prospects for the agriculture labor force since it is important to achieve an agricultural employment structure with a good generation balance in order to realize sustainable, robust agriculture.
(For a description of business farmers, see Figure 18-1 on p. 18.)

Desired Agricultural Structure and prospects of agriculture labor force

The ratio of farmland used by business farmers has risen from 30% to 50% in the past decade.

The government pursues an agriculture structure in which the ratio will rise to 80% in the next decade.

Figure 31-1

Ratio of farmland used by business farmers

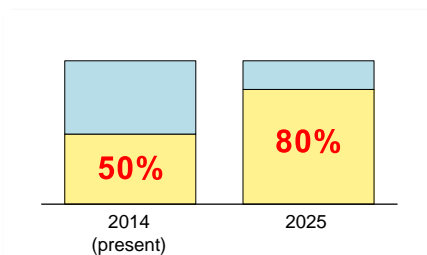
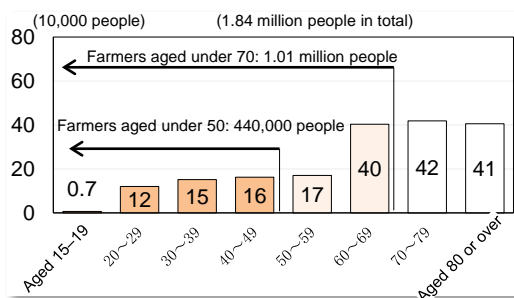


Figure 31-2

Estimation of the number of farmers 2025 (outlook)



(Note for the left figure) Surveys by Management Improvement Bureau, MAFF.

(Notes for the right figure) 1. Compiled based on MAFF "Census of Agriculture and Forestry" (aggregate calculation after reclassification) and MIC "Population Census" (data were aggregated by MAFF based on survey slips).

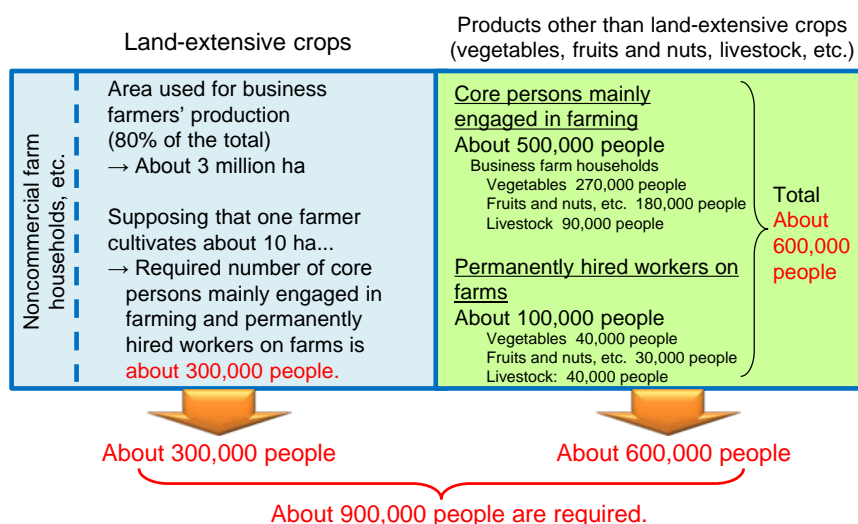
2. Premises for the estimation are as below:

Outlook: Supposing that the increase or decrease of each age group (and the number of people who will join the youngest age group [aged 15-19]) during the five year period from 2005 to 2010 will continue to apply in the future, but only that the number of increase of farmers aged under 50 will double

(Reference) Required number of farmers

Figure 31-3

Required number of farmers



At present, the number of core persons mainly engaged in farming and permanently hired workers on farm producing products other than land-extensive crops (such as vegetables, fruits and nuts, and livestock) is about 600,000 people. About the same number of people will be required in order to maintain the same level of production in the future.

For land-extensive crops, on the other hand, supposing that farmland consolidation has shown progress and one farmer can cultivate about 10 ha, the number of such farmers required is estimated to be about 300,000 people.

Combining them together, at least about 900,000 farmers will be required.

Farm management outlook

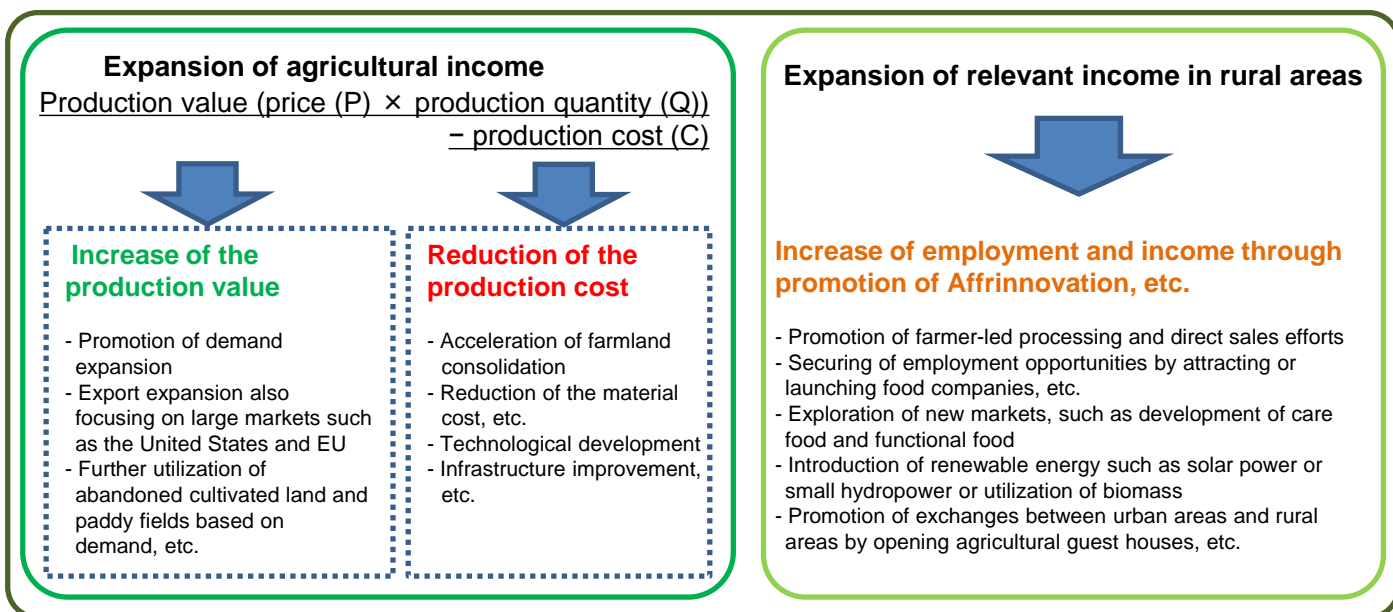
Drafted along with the Basic Plan

- Toward expanding agricultural income and relevant income in rural areas, the outlook indicates macro paths for such incomes.
- The government also indicates micro paths to enable people at agricultural production sites to more specifically envisage what kinds of efforts they should make according to regional conditions and crops.

Paths for expanding agricultural income and relevant income in rural areas (macro paths)

Toward expanding agricultural income and relevant income in rural areas, the outlook presents the following as macro paths: with regard to agricultural income, the direction of efforts for increasing the production value and reducing the production cost for each item; with regard to relevant income in rural areas, the direction of efforts for increasing employment and income for seven fields that are expected to grow in the future, such as processing/direct sales, export, and exchanges between urban areas and rural areas.

Figure 32-1 Expansion of agricultural income and relevant income in rural areas



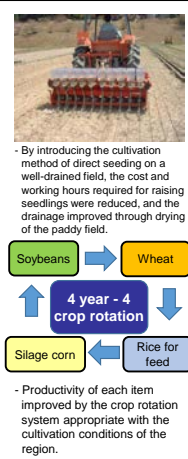
Source: Compiled by MAFF.

Exemplification of farm management models (micro paths)

The farm management outlook exemplifies descriptions of “effective and stable farm management” and their paths of management development and income increase for major farming management types and regions. The examples are presented in a manner that will serve as useful reference according to the actual conditions of each region when creating or reviewing basic indicators, etc. of farm management which are created by prefectural or municipal governments.

Figure 33-1 Farm management model types and an example of a model

Below is an example of paddy farming management. Examples of other farm management types can be viewed at the following URL (Japanese version only). (http://www.maff.go.jp/j/keikaku/k_aratana/pdf/8_keiei.pdf)

Farm management type	Farming system (number of models)	Farm management type	Paddy farming	Target region	Hokkaido/Northern Tohoku
Paddy farming	Land-extensive crops (3) Land-extensive crops/vegetables (4)	Model's key point	Family farm management in a cold region aiming to expand the scale by saving labor for paddy farming and achieving a stable, high level of yield for wheat and barley, soybean and rice for feed		
Upland farming	Hokkaido upland crop rotation system (1) Sweet potato/composite vegetable cultivation (1) Sugar cane cultivation (1) Tea cultivation (2)	Outline of techniques/actions	<p>>For paddy rice, they succeeded in expanding their management scale by making thorough labor-saving efforts including shortening of the time required for raising seedlings by introducing the cultivation method of direct seeding on a well-drained field (working hours shortened by about 50%), and reduction of spring work by tilling and preparing soil in the autumn of the previous year.</p> <p>>For wheat, barley and soybean, they corrected the amount of fertilizers applied by introducing a crop rotation system combined with rice for feed and silage corn. By improving drainage through the introduction of an underground water level control system and improving soil through injecting organic matter, etc., they also succeeded in achieving stable and improved yield and quality (yield: a 40% increase for wheat and barley, and a 50% increase for soybeans. In addition, they increased their revenue by introducing outstanding varieties through collaboration with a processor in the production area. They further realized a soybean-wheat relay intercropping system to avoid conflict of the cropping seasons.</p> <p>>For silage corn, they expanded their management scale through reduction of their workload at peak time by outsourcing the harvesting work. They achieved stable supply of silage corn and rice for feed in cooperation with the local TMR center, etc.</p> <p>>They succeeded in reducing the management cost by consolidating farmland, making more efficient use of machinery through expansion of farmland partitions, and making general-purpose use of machinery for multiple items.</p>		
Vegetable farming	Outdoor vegetable farming (4) Indoor vegetable farming (2)	Description of management development	<p>[Type of management] Family management (two people; one person temporarily hired)</p> <p>[Management scale/cropping pattern] Cultivated land under management 30 ha Table rice (for household consumption) 5 ha (transplantation) Table rice (for industrial use) 5 ha (direct seeding) Rice for feed 5 ha (direct seeding) Soybeans 5 ha Wheat 5 ha Silage corn 5 ha</p> <p>[Estimated result] Gross income 32.2 million yen Operating cost 21.3 million yen Of which, employment/labor cost 200,000 yen Agricultural income 10.9 million yen Income of primary workers (per person) 6.8 million yen Working hours of primary workers (per person) 1,390 hr</p>		
Fruit farming	Citrus fruits (1) Apple (1) Pear (1) Composite fruit production/grape (1)	(Reference) Description of an average business farm household	<p>[Type of management] Family management (two people)</p> <p>[Management scale/cropping pattern] Cultivated land under management 13.1 ha Table rice 8.4 ha (transplantation) Wheat and barley 1.3 ha Soybean 1.2 ha Others 2.2 ha</p>		
Flower farming	Cut flowers (2) Potted plants (1)	Production technique topic			
Dairy farming					
Beef cattle farming	Breeding (2) Integrated breeding and fattening				
Hog farming					
Organic farming					

Source: Compiled by MAFF.

Exemplification of regional strategies (micro paths)

The farm management outlook exemplifies regional strategies for enabling people to envisage increasing of the total of agricultural income and relevant income in the region as a result of creation of employment and income through development of regional agriculture as well as such business development as Affrinnovation in collaboration with related industries.

It is expected to serve as a useful reference for each region in considering future actions for increasing income. For example, it is assumed to be used as a reference when local governments and production areas formulate a plan or strategy for agricultural promotion.

Figure 33-2 Exemplification of regional strategies and an example of a strategy

Below is an example of a livestock cluster. Examples of other cases can be viewed at the following URL (Japanese version only). (http://www.maff.go.jp/j/keikaku/k_aratana/pdf/8_keiei.pdf)

Demonstrating/creating regional agriculture strengths	Regional strategy	(1) Improving profitability through livestock cluster
(1) Improving profitability through forming livestock clusters	Basic strategy	Improving profitability in the whole of the local area through collaboration of local livestock farms with external support organizations and food-related industries
(2) Developing greenhouse horticulture areas with a focus on next-generation greenhouses	Outline of actions	<p>1. Management development of dairy farms and beef cattle farms through use of a new breeding technique</p> <ul style="list-style-type: none"> Improving profitability by efficiently securing high-quality successor cattle through use of sexed semen, and increasing income from by-products through production of wagyu calves by using an embryo transplanting technique Increasing profitability as a result of beef cattle fattening farms carrying out integrated management from rearing to fattening by using wagyu calves produced by local dairy farms <p>2. TMR center's support for management development of dairy farms</p> <ul style="list-style-type: none"> As a result of dairy farms using a newly established TMR center: <ul style="list-style-type: none"> (1) saving labor of feed production and preparation, and expanding the management scale; and (2) increasing the milk yield per cow and increasing the shipping quantity of raw milk and income through focus on feeding and management work and supply of high-quality TMR. Also creating employment for operation of the center <p>3. Increase of the value added to livestock products in collaboration with other industries</p> <ul style="list-style-type: none"> Opening gelato plants and shops at roadside stations, and selling gelato by processing raw milk produced by local dairy farms and increasing the added value Also selling beef and processed products of fattened cattle produced by local beef cattle farms at restaurants, etc. in roadside stations These efforts contributing to increasing income, creating employment, increasing tourists, etc.
(3) Utilizing outstanding new varieties and technologies for cooperation with users	Description of regional actions	<p>Example of an assumed region: Municipality in a livestock production area where dairy farms and beef cattle farms exist (related farms: 25 livestock farms)</p> <p>Before the actions</p> <p>[Management scale] Dairy farms: 25 farms, 773 cows Beef cattle fattening farms: 5 farms, 540 cattle Employment: 8 people</p> <p>[Agricultural income] 193 million yen (1) [Agricultural income] 10 million yen (2)</p> <p>After the actions</p> <p>Dairy farms [Agricultural income] 200 million yen (3) [Employment] 8 people</p> <p>Beef cattle fattening farms [Agricultural income] 10 million yen (4) [Employment] 3 people</p> <p>TMR center [Agricultural income] 7.9 million yen (5) [Employment] 3 people</p> <p>Food-related industries [Agricultural income] 26 million yen (6) [Employment] 2 people</p>
(4) Utilizing advantages of production areas for attracting food companies	Estimated result of the region's relevant income	Agricultural income + relevant income: 190 million yen ((1) + (2)) → 370 million yen (a 180 million yen increase) ((3) + (4) + (5) + (6)) Employment: Increase of 7 people
(5) Launching businesses by Affrinnovation (adding value to agriculture, forestry and fisheries products in an innovative way)		
(6) Utilizing local agriculture, forestry and fisheries products for cooperation with food companies		
(7) Providing vegetables for processing and other food industries		
(8) Developing production areas for exports		
(9) Exporting high-quality agricultural products under an intellectual property right strategy		
(10) Developing medicinal plant production areas		
(11) Developing organic farming areas		
(12) Developing processing at community-based farm cooperatives		
(13) Utilizing special local products for unique processed goods with higher value added		
(14) Developing farm products utilizing regional characteristics		
(15) Establishing distribution systems including farm stands for local consumption of local produce		
(16) Utilizing farm stands for farming experiences and rural restaurants		
(17) Utilizing tourist farms and other facilities for exchanges between urban and rural residents		
(18) Implementing farming experience farms and other projects meeting urban resident needs		
(19) Utilizing exchanges for promoting regional agriculture		
(20) Taking advantage of renewable energy for promoting agriculture		

Source: Compiled by MAFF.

