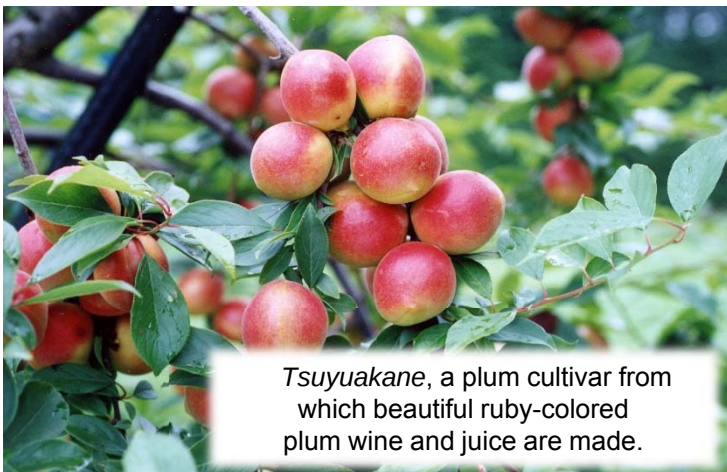


FY2016

Summary of the Annual Report on Food, Agriculture and Rural Areas in Japan



Tsuyuakane, a plum cultivar from which beautiful ruby-colored plum wine and juice are made.



Students of a weekend agricultural school in the Tokyo area learning farming techniques



Elementary school students from urban areas experiencing rice planting in a rural area for a school trip



"Shishimai Frit"
using boar legs and *maitake* mushroom
(Grand Prize in Gibier Food Competition)

Ministry of Agriculture, Forestry and Fisheries

May 2017

- Numbers in figures and tables are rounded in principle and may not add up to the total.
- Maps in this report may not necessarily indicate Japan's territories comprehensively.

<Contents>

FY2016 Annual Report on Food, Agriculture and Rural Areas in Japan

Special Topic 1	The Policy Package for Enhancing Competitiveness of Japan's Agriculture	...	1
Special Topic 2	Fluctuating agriculture in Japan: From 2015 Census of Agriculture and Forestry	...	5

Chapter 1

Efforts for Securing Stable Food Supply

Topics	Providing "Made in Japan" products which are trusted around the world - The 2020 Tokyo Olympic and Paralympic Games will be a big step -	...	9
1	Objectives and present situation of Basic Plan for Food, Agriculture and Rural Areas	...	10
2	Strategic exploration of global market	...	11
3	Global food supply and demand, and efforts for establishing food security	...	12
4	Food consumption trends and promotion of Shokuiku (food and nutrition education)	...	13
5	Ensuring food safety and consumer confidence	...	13
6	Trends of food industry	...	15
7	Exploring new demand for agriculture, forestry and fisheries products and food	...	15

Chapter 2

Efforts for Creating Strong Agricultural Structure

Topics	Improving productivity by applying innovative AI, IoT and robot technologies	...	16
1	Promoting structural reform of agriculture	...	17
2	Developing and conserving agricultural production infrastructure	...	19
3	Production trends for major farm and livestock products	...	19
4	Promoting technological innovation on production/distribution field	...	22
5	Promotion of environmental policy such as responses to climate change	...	23
6	Agriculture-related organizations supporting agriculture	...	23

Chapter 3

Taking Advantage of Local Resources to Promote and Vitalize Rural Areas

Topics	Bringing a brighter future for the agriculture in hilly and mountainous areas: a new challenge using local "treasures"	...	24
1	New trend of visit to rural areas toward regional empowerment	...	25
2	Maintaining and demonstrating multifunctional roles of agriculture and rural areas	...	25
3	Responding to wildlife damage	...	26
4	Proactive utilization of local resources	...	26
5	Promotion of urban agriculture	...	27
6	Coordination between agriculture and various other field	...	27

Chapter 4

Restoration/Reconstruction from Large-scale Natural Disasters

Topics	Natural disasters that left ravages of destruction: efforts that contributed to early restoration	...	28
1	Restoration/Reconstruction from natural disasters (Kumamoto Earthquakes, etc.) occurred in FY 2016	...	29
2	Restoration/Reconstruction from the Great East Japan Earthquake	...	31

Summary of FY2017 Measures for Food, Agriculture and Rural Areas	...	32
---	-----	----

Special Topic 1

To improve agriculture in Japan: The Policy Package for Enhancing Competitiveness of Japan's Agriculture

In November 2016, government formulated the Policy Package for Enhancing Competitiveness of Japan's agriculture. This is to develop an environment which allows farmers to take free business actions, and at the same time, to solve the structural problems, which farmers cannot solve by their own efforts. The program is aiming to promote agriculture as further growth industry.

In the future, the government will develop legal systems, improve operations of the related systems to the program, and provide support for the voluntary efforts of private businesses to realize these reforms.



About the Policy Package for Enhancing Competitiveness of Japan's agriculture

- It is probable that the domestic food market will shrink due to the aging and decreasing population. On the other hand, the world food market is expected to expand as the world population and economy grows.
- Under these circumstances, it is necessary to strengthen the competitiveness of agriculture and capture the domestic and foreign demands in order to realize the sustainable development of agriculture and promotion of rural areas in Japan.
- The government has provided support for farmers' efforts including farmland concentration and intensification, export of agricultural products and the primary producers' diversification into processing and distribution (AFFrinnovation). At the same time, it is also necessary for the government to develop an environment where farmers can take free business actions and solve structural problems that are unable to be solved by themselves.
- For this reason, the government formulated "The Policy Package for Enhancing Competitiveness of Japan's agriculture" that incorporates the direction of new agricultural administration reforms including the reduction of farming input costs, structural reforms of distribution and processing of agricultural products, introduction of the revenue insurance system, revision of the land improvement system, reform of dairy, etc.

13 reforms incorporated in the program

1. Reducing costs of farming inputs
2. Structural reform of distribution and processing
3. Development of manpower
4. Development of strategic export system
5. Indication of country of origin of ingredients
6. Study of introduction of check-off program
7. Introduction of revenue insurance system
8. Revision of land improvement system
9. Improvement of employment structure in farm villages
10. Promotion of feed rice
11. Reinforcement of production structure for beef cattle and dairy farming
12. Steady management of the compound feed price stabilization system
13. Reforming of raw milk distribution system



Reducing costs of farming inputs and structural reforms of distribution and processing of agricultural products

Issues concerning farming input costs

- The proportion of the sum of fertilizers and manure cost, agricultural chemicals cost and agricultural implements cost to the production cost of rice per 10a is 30% to 40%. It is necessary to reduce production material costs in order to increase agricultural income.
- However, the production materials industry has a structure with high production costs due to unreasonable regulations not based on the latest scientific knowledge, an excessive number of makers and brands, and inappropriate competitions caused by oligopoly.
- There is also inadequate information on prices, quality, etc. when purchasing production materials. Therefore, it is difficult for farmers to choose who to purchase materials from to benefit them.

Industrial structure and laws and regulations on production materials

Agricultural chemicals

- With the advance of science, new safety evaluation methods for agricultural chemicals have been introduced in many other countries.
- In Japan, to implement a system for the prompt supply of safe and high quality agricultural chemicals, it is necessary to review the agricultural chemicals registration system.

Farm machinery

- The sales of three major models in Japan are monopolized by four companies, accounting for 97% of the total. This structure in which the principle of market mechanism does not work results in higher costs.
- Each farming pattern requires various types of farm machinery and it is necessary to develop innovative technology using Information and Communication Technology (ICT), etc.

Fertilizer

- Small scale businesses make up 93% of all fertilizer manufacturers. The production of major manufacturers per description is also small, less than about 5% of that of Korea, which results in higher costs.

Compound feeds

- The operation rate of factories is less than half of that of Korea. The production per description is also small, less than about a third of that of Korea, which results in higher costs.

	Production and export status	Industrial structure, etc.	Laws and regulations, etc.
Agricultural chemicals	[Active ingredient] Domestic production About 60,000 t Export About 30,000 t [Formulation] Domestic production About 220,000 t Export About 15,000 t (FY 2014)	- Number of producers: 169 - Active ingredients used for production of formulation in Japan are mainly supplied by some 10 producers (domestic(*) and multinational) that are capable of developing new agricultural chemicals. * Companies in Japan are more capable of developing new agricultural chemicals than those in Europe and the US.	Agricultural chemicals registration system Laws and regulations in Japan are almost the same as those in the US and the EU. There are, however, differences in the implementation (e.g. registration for crop group, management of composition). - The percentage of generic pesticides to the total agricultural chemical shipment is 5%. Pest control standards, etc. - Additional tests are often necessary to add to the pest control standards in each prefecture or the pest control history of agricultural cooperatives.
Farm Machinery	Domestic shipment About 280 billion yen Export amount About 250 billion yen (FY 2015)	Lack of competitiveness due to monopoly - Shipment by four domestic leading companies accounts for 80%, which is a fixed share. - The four domestic leading companies monopolize import by forming a network. - Only 3% of the three major machinery models are imported.	Agricultural Mechanization Promotion Act The requirement for subsidized projects and financial support is to pass an evaluation (optional) based on laws.
Fertilizer	Domestic production About 3 million t Export About 700,000 t (FY 2012)	Low productivity due to the excessive supplying structure - The number of manufacturers increased and factories are scattered throughout Japan. - Production of a small quantity of products in many descriptions.	Standard levels of fertilization, etc. - The standard level of fertilization in each prefecture is subdivided and a description is designated based on the cultivation history developed by agricultural cooperatives. - Half the number of descriptions listed on the pre-order form of agricultural cooperatives is the original description managed by one agricultural cooperative only.
Compound Feeds	Production 23.08 million t Export Almost none (FY 2014)	Low productivity due to the excessive supplying structure - There are many manufacturers and factories are scattered throughout Japan. - Production of a small quantity of products in many descriptions.	

Issues concerning distribution and processing of agricultural products

- The more businesses that are involved in the distribution process, the higher the distribution costs of agricultural products become.
- Therefore, it is necessary to streamline intermediate distribution systems such as wholesale markets, etc. and expand direct sales routes from farmers and agricultural organizations to consumers.
- There is also inadequate information on sales through farmer's markets, on-line sales and wholesale markets. Therefore, it is difficult for farmers and agricultural organizations to choose sales methods that would benefit them and operate their businesses.

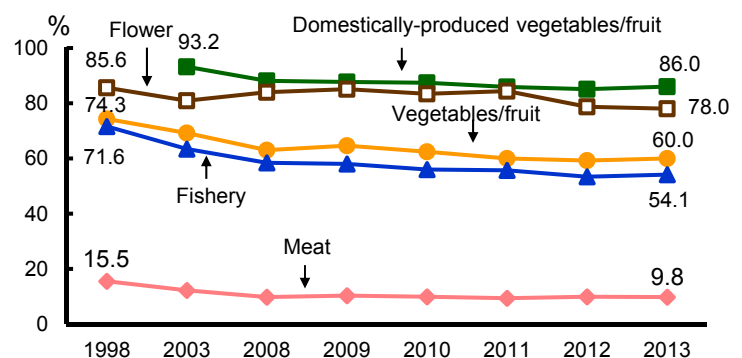
Intermediate marketing

- Wholesale markets contribute to the smooth distribution of fresh food, etc. As diverse marketing styles advance, the rate of going through a wholesale market is declining.
- In the rice wholesalers industry, the demand for rice as a staple food is decreasing and around 20 to 40% of the wholesale businesses suffer a deficit every year. It is difficult to propose sales methods based on the needs of the market and consumers.

Retail

- Producers are unable to reproduce high quality agricultural products if they are only in a price cutting competition. This will then make it difficult for retailers to continuously stock high quality agricultural products, leading to the impoverishment of both producers and retailers.

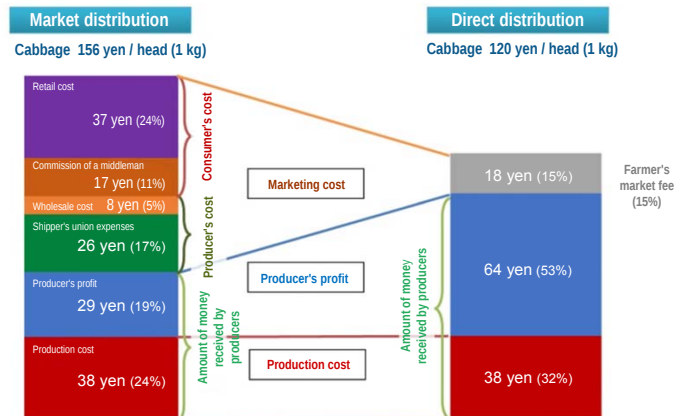
The rate of going through a wholesale market (on a weight basis, estimate)



Diversification of marketing routes

- Efforts for direct sales including sales in farmer's markets and on-line are being made as the AFFrinnovation and the use of ICT is advanced, but further promotion is necessary. As the percentage of money received by producers is higher in a direct sales distribution than that in a market distribution, and shipment operations are carried out by producers themselves, producers are able to grasp the preferences of consumers directly.
- It is important to increase the added value of products and income of farmers by using non-standard agricultural products as process materials.

Difference in amount of money received by producers by marketing style of agricultural products.

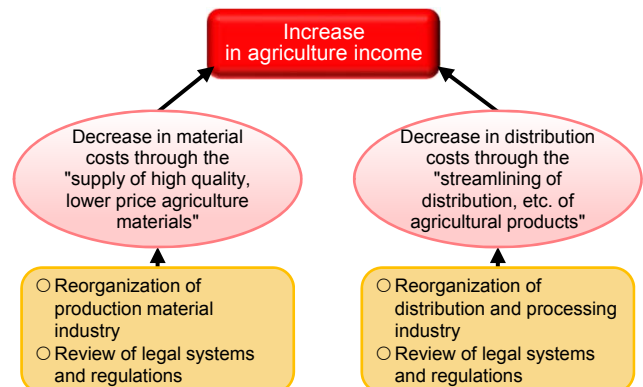


Addressing issues concerning material prices and distribution and processing of agricultural products

Development of legal systems

- In order to address issues concerning material prices and distribution and processing of agricultural products and enhancing competitiveness of agriculture, it is necessary to reform measures and regulations on the distribution of materials and agricultural products, and promote the voluntary reorganization of the industry by businesses.
- In order to support government responsibilities and measures to be taken by the government as well as efforts for the business reorganization and entering into new businesses through business's voluntary decisions, the bill for Agricultural Competitiveness Enhancement Support setting measures, such as the subscription from the Agriculture, Forestry and Fisheries Fund Corporation for Innovation Value-Chain and Expansion Japan was submitted to the Diet.

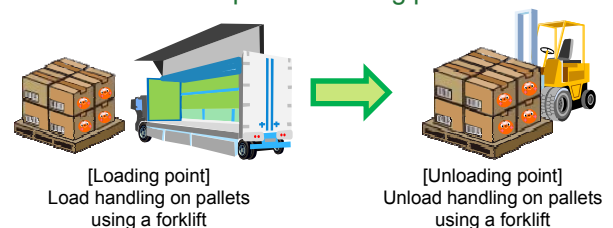
Purpose of the bill for the Agricultural Competitiveness Enhancement Support



Improving transparency of information and distribution efficiency

- Using know-how of the private sector, a website will be developed in which farmers can view information and compare and choose where to buy materials from and distribution routes of agricultural products in a way that benefits them.
- Reducing distribution costs by promoting modal shift to joint delivery and railway transport using pallet transportation and ICT

Transportation using pallets



Reviewing the method of purchasing production materials and selling agricultural products through the National Federation of Agricultural Cooperative Associations (ZEN-NOH).

- The shares of ZEN-NOH in production material distribution are about 50% in fertilizer, about 40% in agricultural chemicals and about 30% in compound feeds. The shares of ZEN-NOH in agricultural distribution are about 30% both in rice and vegetables/fruits.
- In order to transform the organization so that it maximizes the benefits of joint purchase from the viewpoint of actual farmers and strengthens the sales system of agricultural products, ZEN-NOH is working toward the reform of the organization.

Share of ZEN-NOH in production material distribution, etc.

	Share
Fertilizer	About 50%
Agricultural chemicals	About 40%
Compound feeds	About 30%

	Share
Rice	About 30%
Vegetable and fruit	About 30%



Direction of the reform for other items

Reforming raw milk distribution system

- It is extremely important for agricultural cooperatives and the Federation of Agricultural Cooperative Associations (FACA), which are designated in the raw milk producer group, to improve efficiency and continue to use the function appropriately.
Besides this, in order to increase producers income with inventive ideas under the environment in which they can freely choose where to ship their products, it is necessary to expand the scope of businesses covered by the subsidy to manufacturing milk producers, and secure the stable supply of dairy products depending on the supply and demand status (submitting the bill to the Diet).

Development of strategic export system

- Promoting measures based on the "Strategy to Strengthen Export Capabilities of the Agricultural, Forestry and Fisheries Industries" in order to achieve the goal of 1 trillion yen export by 2019. A new organization which is in charge of promotion as a whole country will be established.
- Expanding the scope of establishing the JAS standards in order to strengthen international competitiveness in agriculture, forestry and fisheries industry (submitting the bill to the Diet).

Study of introduction of check-off program

- Legal force is given to the check-off (to collect contributions from producers and use them for sales promotion, etc.) system when it meets certain requirements in a desired industry.

Revision of land improvement system

- Establishing a land improvement program in which farmers are not expected to pay costs for the farmland rented by the Farmland Intermediary Management Institutions in order to accelerate farmland concentration and intensification to core farmers through renting and subleasing (submitting the bill to the Diet).

Promotion of feed rice

- Promote reducing the production cost by introducing high-yielding feed rice and adding value of livestock products by cooperation between crop farmers and livestock farmers.

Development of manpower

- The "agricultural management seminar" will be launched in each prefecture for farmers to improve their management skills while engaging farming.
- Providing support for engagement in farming including corporate employment.
- Considering to introduce a scheme to utilize foreign human resources, which is separate from the Technical Intern Training Program.

Introduction of country of origin of ingredients

- To ensure that consumers have the opportunity to choose food, the heaviest ingredient of all processed foods will be required to label the country of origin, in descending order by weight as a general rule. The new labeling system will also be set in consideration of its feasibility.

Introduction of revenue insurance system

- An income insurance system, which can provide a comprehensive service to the entire income of an agricultural business owner regardless of product category, will be established as a safety net for agricultural business owners who work on their management development based on a free management decision (submitting the bill to the Diet).

Improvement of employment structure in farm villages

- Expanding the scope of new industry types whose introduction is promoted in rural areas in order to secure employment in rural areas (submitting the bill to the Diet).

Reinforcement of production structure for beef cattle and dairy farming Steady management of the compound feed price stabilization system

- Promotion of increase in the number of breeding cattle, securing the number of descendant dairy cattle for beef, increase in productivity and the production of self-supplied feed, etc.



Development of legal systems to implement the Agricultural Competitiveness Enhancement Program

- The following 8 bills have been submitted to the Diet in order to carry out the reforms in the program.

- [1] Bill for the Agricultural Competitiveness Enhancement Support
- [2] Bill for the repeal of the Agricultural Mechanization Promotion Act
- [3] Bill for the repeal of the Main Crop Seed Act
- [4] Bill for the partial amendment of the Land Improvement Act
- [5] Bill for the partial amendment of the Act for the Promotion of Industry in Rural Areas

- [6] Bill for the partial amendment of the Act on Standardization and Proper Quality Labeling of Agricultural and Forestry Products and the Act on the Food and Agricultural Materials Inspection Center
- [7] Bill for the partial amendment of the Act on the Stability of Livestock Farming and the Act on the Agriculture & Livestock Industries Corporation, Independent Administrative Agency
- [8] Bill for the partial amendment of the Act on Compensation for Agricultural Loss

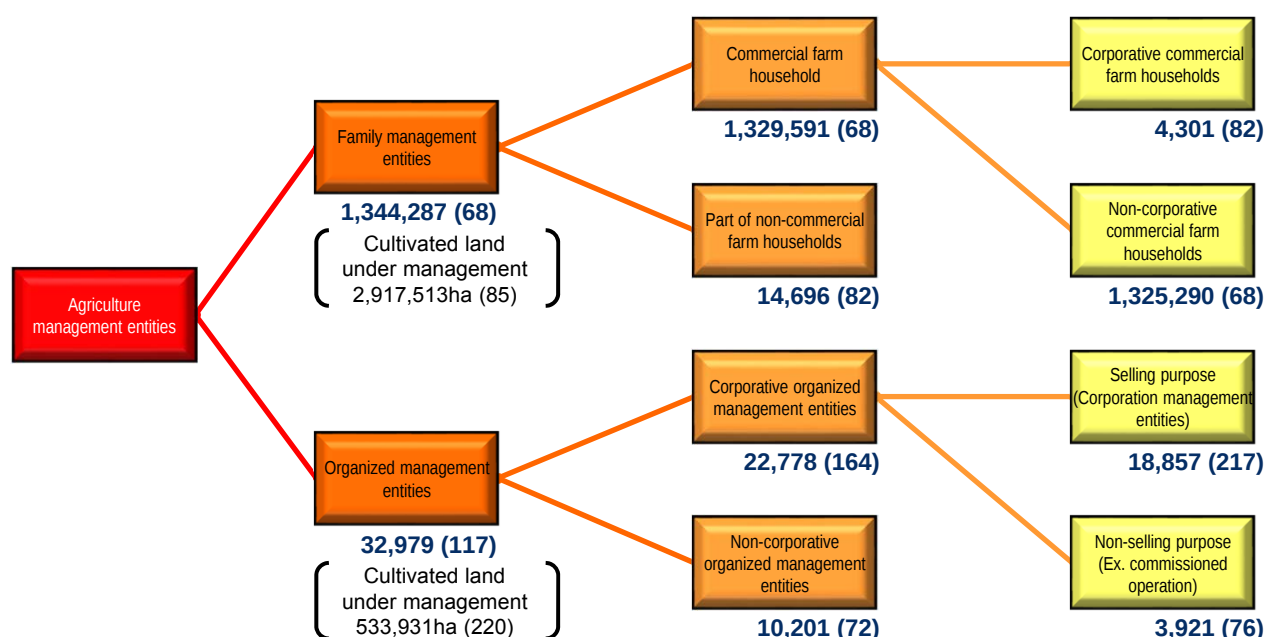
Special Topic 2

Fluctuating agriculture in Japan: From 2015 Census of Agriculture and Forestry

In the past decade, farmers born during the mid-1920s and 1930s, who have supported agriculture have retired, while agriculture has changed as a result of various efforts made by enthusiastic farmers. This part reveals the state of agriculture during these years through the analysis of management structure from the quinquennial complete survey, the Census of Agriculture and Forestry, and the trend and direction of related measures.

It also views the state of agriculture which has changed on a municipality level and introduces agriculture in municipalities with large agricultural productions and their characteristic efforts.

Breakdown of agriculture management entities from the 2015 Census of Agriculture and Forestry



Note: Figures are the number of management entities in 2015. Figures in brackets are the index number set as 2005 = 100.

Trends of agriculture management entities

Management status of agriculture management entities

- The number of commercial farm households decreased by 32% in 10 years (from 1.96 million to 1.33 million). In the past five years, however, the number increased in the classes with sales value of agricultural products of more than 50 million yen.
- A high percentage of commercial farm households ship their agricultural products with No.1 sales to agricultural cooperatives mainly for commissioned sales. However, they tend to spread the shipment destinations of agricultural products with No.1 sales to retailers other than agricultural cooperatives as the sales value of agricultural products will increase. Larger sales lot of agricultural products will promote direct transactions with food processors and food service industries (figure on right).
- The higher percentage of commercial farm households which sell products directly to consumers use self-owned farm stands or on-line sales as the amount of sales become larger (figure on right).

Percentage of shipment destinations of
agricultural products with No.1 sales
(2015 Commercial farm households)

(Unit: %)

Sales of agricultural products Scale	Agricultural cooperatives	Shipper's unions other than agricultural cooperatives	Wholesale markets	Retailers	Food processors, food service industry	Direct sales to consumers	Other
Less than 3 million	67.0	8.2	4.4	5.1	1.3	9.5	4.4
3 - 7 million	64.6	9.6	11.9	3.3	1.5	7.6	1.5
7 - 15 million	64.6	9.8	12.9	3.1	1.6	6.4	1.6
15 - 30 million	67.7	11.0	11.2	3.1	1.4	4.0	1.7
30 - 50 million	71.7	10.7	9.2	2.8	1.7	2.3	1.6
50 - 100 million	67.5	13.4	9.6	3.3	2.9	1.4	1.9
100 - 300 million	56.6	16.8	13.3	5.1	4.8	0.6	2.8
300 - 500 million	45.7	18.9	20.0	5.1	5.7	1.1	3.4
More than 500 million	44.0	16.0	24.0	4.0	4.0	4.0	4.0

Percentage of direct sales to consumers by sales method
(2015 Commercial farm households)

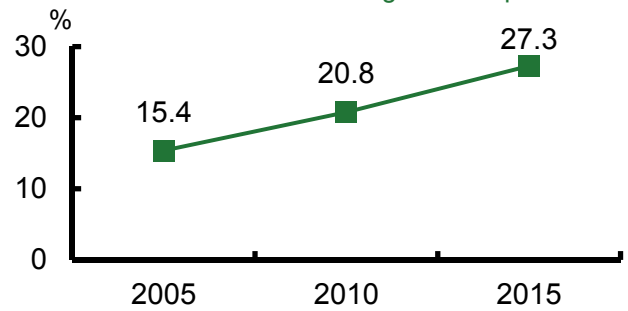
(Unit: %)

Sales of agricultural products Scale	Direct sales to consumers			
	Self-owned Farm stand	Other Farm stand	Online	Other methods
Less than 3 million	16.0	40.5	1.9	47.7
3 - 7 million	27.7	55.1	4.8	27.6
7 - 15 million	31.7	54.9	6.9	26.4
15 - 30 million	33.3	54.3	10.0	25.5
30 - 100 million	35.1	54.1	14.1	25.1
More than 100 million	42.0	47.3	23.2	23.7

*Multiple answers

- The number of corporation management entities increased by 220% in 10 years (from 8,700 to 18,857). The share of corporation management entities in the total sales value of agricultural products increased significantly from 15% to 27%, strengthening their presence in agricultural production (figure on right).
- Training and recruitment of farmers are promoted through measures such as informing the lease method of agricultural land and the development of a promotion system to establish new corporations with participation of external experts.

Share of corporation management entities in the total sales value of agricultural products

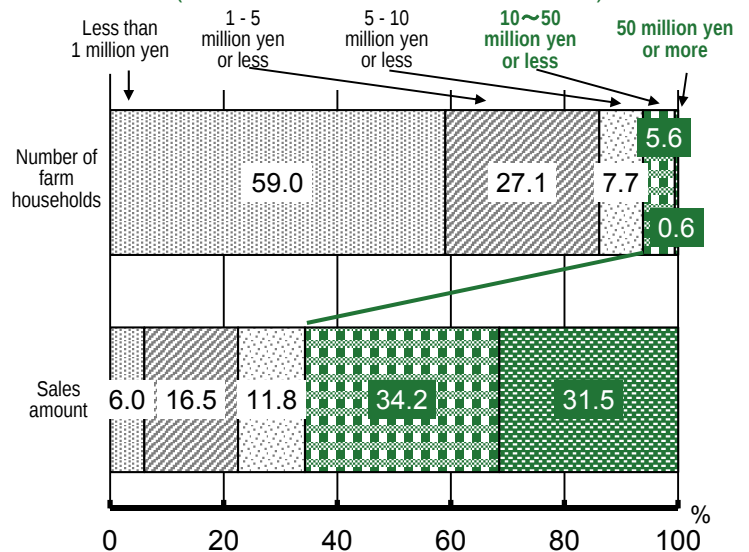


Efforts toward related businesses of agricultural production

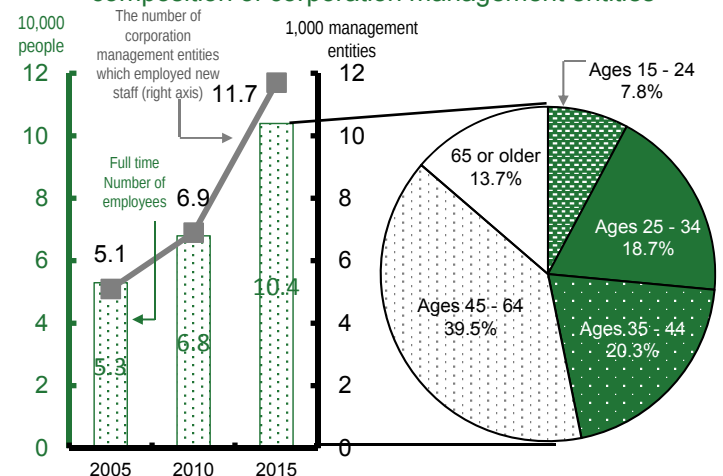
- Commercial farm households with sales of more than 10 million yen in related business of agricultural production have only a 6% share in the number of farm households (1,880/30,123). On the contrary, their share in sales is 66% (97.3 billion yen/148.1 billion yen), more than half of the total, increasing the percentage of commercial farm households with high sales (figure on right).
- Corporation management entities with sales of more than 10 million yen in related business of agricultural production remained only at a 36% share in the number of entities (1,547/4,250). On the contrary, their share in sales is 97% (274.4 billion yen/282.1 billion yen), accounting for the majority. This shows that a few management entities with high sales are engaged in related businesses.
- Sales are promoted through measures such as the development of efforts in the entire community based on the AFFrinnovation strategy and the establishment of AFFrinnovation businesses through the subscription and financing of Agriculture, Forestry and Fisheries Fund Corporation for Innovation Value-chain and Expansion Japan.

Share in the sales of related businesses of agricultural production.

(2015 Commercial farm households)



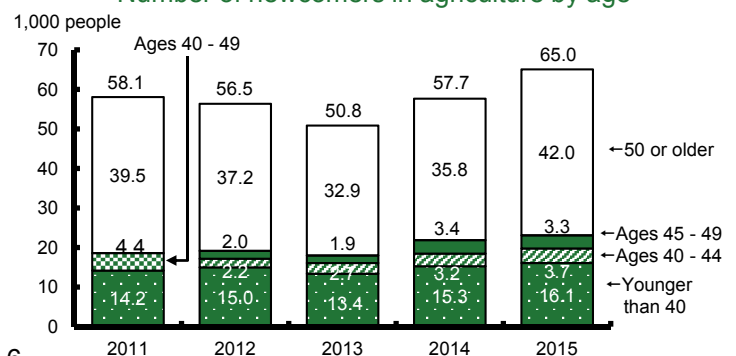
The number of full-time employees and age composition of corporation management entities



Agricultural labor force

- The number of core persons mainly engaged in farming in commercial farm households decreased by 22% in 10 years (from 2.24 million to 1.75 million). On the other hand, the number of full-time employees in farming increased by 60% (from 61,094 to 99,393), showing an advance in the shift of labor force from household members to employees. The number of full-time employees in corporation management farm doubled (from 52,888 to 104,285), and 47% of full-time employees are aged 44 or younger, playing a significant role as a working platform for young farmers (figure on right).
- The number of newcomers in agriculture surpassed 60,000 for the first time in 6 years, an increased of 13% compared to the previous year (65,030). Among them, the number of those aged 49 or younger was 23,030, the largest since 2007 when the survey in this age group started (figure on right). Many new self-employed farmers are engaged in rice cultivation, while more new employed farmers are engaged in domestic livestock or vegetables.
- Securing the number of young newcomers in agriculture is promoted through measures such as the use of the program for the investment in next generation human resources in agriculture (farming grant for young farmers before 2016) and the agriculture employment program, establishment of a full-time counseling service for those who wish to engage in farming, and the provision of farming workshops in agricultural corporations.

Number of newcomers in agriculture by age

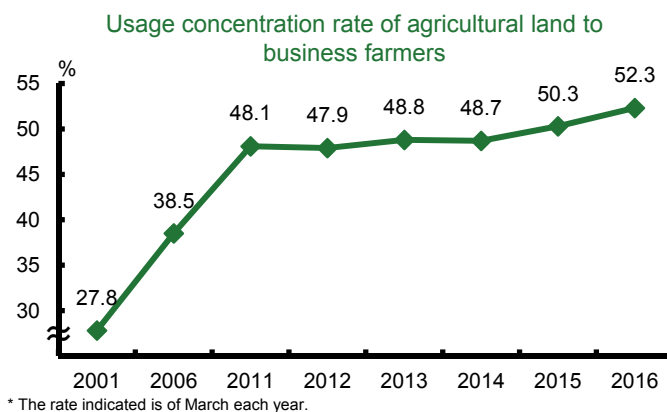




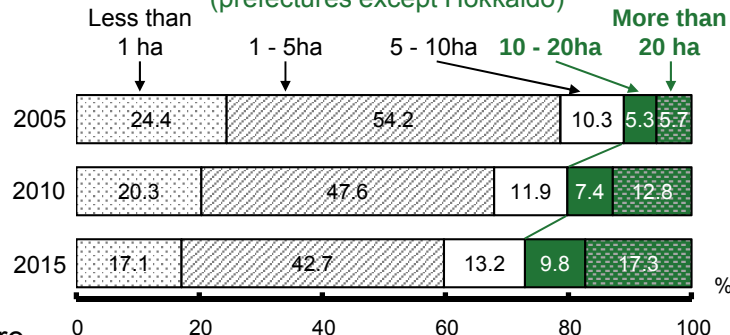
Trends in agricultural land

Usage concentration to farmers

- The usage concentration rate of agricultural land to business farmers increased between 2001 and 2011 and then stagnated. It started to increase again from 2014 and the usage concentration of agricultural land is steadily increasing through the development of the Farmland Intermediary Management Institutions (figure on right).
- The percentage of areas with 10 ha or larger land owned by agriculture management entities excluding those in Hokkaido increased from 11% to 27% in 10 years (figure on right). It is necessary to continue to concentrate farmland to farmers.
- The share of areas owned by corporation management entities increased from 2.5% to 7.2% in 10 years, strengthening their presence in agricultural land use.
- Measures include the acceleration of consolidation in farmland use to business farmers by prefectural governments through the regular reviews of personnel and farmland plans and the use of Farmland Intermediary Management Institutions and the All Japan Farmland Navigator.



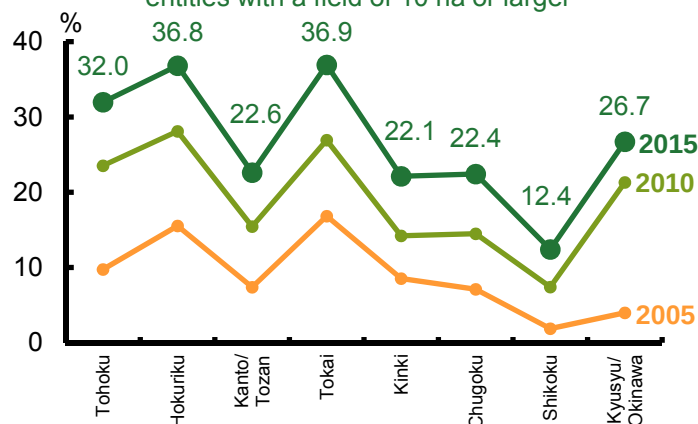
Share of areas owned by agriculture management entities (prefectures except Hokkaido)



Usage accumulation by region in each prefecture (except Hokkaido)

- Share of areas owned by agriculture management entities with a field of 10 ha or larger is high because of the establishment, etc. of community-based farm cooperatives in the Tohoku and Hokuriku regions and the increase in the number of large-scale corporation farms in the Tokai region. Paddy fields in these three regions have been parceled into larger blocks and the development of requirements for usage accumulation plays an important role.
- Measures include the acceleration of the development of requirements in which farmers can take agricultural land more easily through coordination with the Farmland Intermediary Management Institutions and the larger parcellation of agricultural land and its multipurpose use.

Share of areas owned by agriculture management entities with a field of 10 ha or larger



Trends in the management structure of paddy farming

- The number of commercial farm households in paddy farming decreased by 35% in 10 years (from 1.73 million to 1.13 million). In Hokkaido, the number of households with a 15 ha or larger paddy field is increasing (3,702 to 4,599) and those with a 5 ha or larger paddy field is increasing (31,798 to 42,806) in other prefectures, showing the growing scale in paddy farming (figure on right).
- The number of corporation management entities has tripled in 10 years (from 3,154 to 10,062 entities). The increase rate is higher in larger areas.

The number of commercial farm households in paddy farming

Area of cultivated land under management Area size	Hokkaido				Other prefectures			
	2005	2010	2015	Rate of change (2005-2015)	2005	2010	2015	Rate of change (2005-2015)
Total	28,466	22,710	18,811	-33.9	1,706,114	1,393,878	1,107,843	-35.1
Less than 1ha	3,089	2,574	1,806	-41.5	1,166,393	940,362	719,603	-38.3
1-5ha	9,396	6,597	5,122	-45.5	507,923	415,905	345,434	-32.0
5-10ha	7,892	5,472	4,359	-44.8	24,913	27,842	29,994	20.4
10-15ha	4,387	3,607	2,925	-33.3	4,188	5,845	7,180	71.4
More than 15ha	3,702	4,460	4,599	24.2	2,697	3,924	5,632	108.8

* Commercial farm households in paddy farming refer to commercial farm households who own the paddy farms

The state after 5 years of single-farming (rice cultivation)

(Unit: Management entity)

- Looking at the state of management of 772,785 management entities in 2015, which were single farming (rice cultivation) in 2010, the number of those who changed to multiple farming was 38,749. The percentage of entities shifting to multiple farming is higher in those with a larger cultivated land under management. This shows that there is a trend of trying to increase income by shifting to multiple farming.

	Number of management entities that were single-farming in 2010	Total status in 2015 (1)	Continued agriculture management entities	Single-farming (rice)	Single-farming (others)	Multiple-farming (2)	[2]/[1] (%)	No sales	Other than agriculture management entities
Total	772,785	739,040	601,624	507,961	8,443	38,749	5.2	46,471	137,416
Less than 1ha	435,758	416,725	317,562	258,912	5,028	15,869	3.8	37,753	99,163
1 - 5	305,791	292,841	255,913	225,673	3,083	18,723	6.4	8,434	36,928
5 - 10	18,995	18,103	17,136	14,583	214	2,156	11.9	183	967
10 - 20	7,858	7,424	7,162	5,885	72	1,141	15.4	64	262
More than 20ha	4,383	3,947	3,851	2,908	46	860	21.8	37	96



Agricultural output and municipal efforts

Trends in total agricultural output

- The total agricultural output has been declining after its peak of 11,700 billion yen in 1984 but increased to 8,800 billion yen in 2015, a 400 billion yen increase from the previous year due to the increase in the price of agricultural products. The agricultural income produced increased to 3,300 billion yen, a 500 billion yen increase from the previous year, reaching 3,000 billion yen for the first time in 8 years.

Agricultural output by municipality and municipal efforts

- The Ministry of Agriculture, Forestry and Fisheries (MAFF) re-published estimated agricultural output of municipalities in 2014 for the first time in 8 years to support the planning of agricultural measures by local governments.

- In 2015, the majority of the top 20 municipalities are those which set vegetables and livestock production as No.1 sectors (figure on right).

More than half of the total area in 8 cities is in hilly and mountainous areas. In spite of having many disadvantaged regions, they maintain high outputs mainly in livestock and fruit farming.

Moreover, the average age (63.7) of core persons mainly engaged in farming in these municipalities is younger than the national average (67.0). This shows that young farmers play a significant role in agricultural production in these areas compared to the nationwide production.

- Tahara City of Aichi prefecture is ranked No.1 and the city maintains high output in flowers and vegetables by introducing new technology and new varieties as well as implementing mutual training among farmers.
- Kanoya City of Kagoshima prefecture is ranked No.11 and the city maintains the production structure for beef cattle through large breeding farms centered in the division management system implemented by agricultural organizations.

Top 20 municipalities in agricultural output (2015)

Ranking	Municipality		Agricultural output (100 million yen)	No.1 sector		Percentage of hilly and mountainous areas in total area (%)	Average age of core persons mainly engaged in farming
1	Aichi	Tahara City	820.4	Flowers	313.2	0.0	59.8
2	Ibaraki	Hokota City	720.3	Vegetables	395.7	0.0	59.4
3	Miyazaki	Miyakonojo City	719.7	Pigs	195.4	66.1	66.8
4	Niigata	Niigata City	572.1	Rice	284.2	4.5	65.6
5	Hokkaido	Betsukai Town	570.6	Dairy cattle	547.6	0.0	50.9
6	Chiba	Asahi City	548.0	Vegetables	195.7	1.1	61.3
7	Shizuoka	Hamamatsu City	510.4	Fruits	163.9	67.0	68.3
8	Kumamoto	Kumamoto City	461.0	Vegetables	257.5	5.9	62.4
9	Aomori	Hirosaki City	435.8	Fruits	373.4	53.7	62.9
10	Aichi	Toyohashi City	413.4	Vegetables	205.4	16.3	63.9
11	Kagoshima	Kanoya City	400.8	Beef cattle	127.7	50.8	66.6
12	Gunma	Maebashi City	391.1	Pigs	95.3	38.1	68.0
13	Kagoshima	Minamikyushu City	389.2	Hen eggs	106.3	25.8	61.8
14	Kumamoto	Kikuchi City	384.8	Beef cattle	102.6	72.2	64.3
15	Miyazaki	Miyazaki City	383.8	Vegetables	207.3	56.0	63.0
16	Chiba	Katori City	379.2	Vegetables	85.0	0.0	66.7
17	Kagoshima	Shibushi City	371.2	Pigs	146.5	69.5	64.5
18	Kumamoto	Yatsushiro City	370.6	Vegetables	269.5	80.9	60.0
19	Ibaraki	Omitama City	354.0	Hen eggs	167.1	0.0	65.3
20	Saitama	Fukaya City	349.3	Vegetables	207.0	0.0	65.4

Source: MAFF, Agricultural Output by Municipality (Estimate), Census of Agriculture and Forestry

Topics

Providing "Made in Japan" products which are trusted around the world - The 2020 Tokyo Olympic and Paralympic Games will be a big step -

The 2020 Tokyo Olympic and Paralympic Games will be a golden opportunity to transmit the appeal of Japanese food and food culture to foreign visitors. The GAP efforts in agricultural production has been accelerated toward the provision of high quality and safe Japanese food materials in the games. Setting the slogan "the establishment of the trust of the world in 'Made in Japan' products" for the 2020 Tokyo Olympic Games to further expand exports.

Procurement standards for agricultural and livestock products

- Since the London Olympic and Paralympic Games in 2012, the idea of "sustainability" is adopted in the management of the games. In the 2020 Tokyo Olympic and Paralympic Games, procurement standards which take sustainability into account will be formulated, which will be applied to agriculture, livestock and fishery products for food and beverage service provided by the organizing committee in the Olympic and Paralympic village.
- The GAP certification is approved as a means to show that agriculture and livestock products meet the requirements. Furthermore, organic farming and livestock products as well as products made through the independent efforts to increase engagement of persons with disabilities in the production are promoted. Domestic products are chosen as a priority out of products which meet the requirements.

Efforts for the supply of agricultural and livestock products

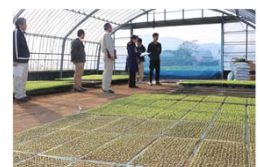
- A brochure for farmers explaining in detail the advantages of acquiring a GAP certification and various characteristics of GAP has been developed to promote the acquisition of the certificate.
- The acquisition of an international-standard GAP (JGAP Advance, GLOBAL G.A.P.) by farmers for agricultural products is supported.
- For livestock products, GAP for livestock production (Japanese version) started operation in 2017. Support is provided for the acquisition of an international-standard GAP (Japanese version of GAP for livestock production, GLOBAL G.A.P.) and the development of the GAP acquisition challenge system in which farmers make efforts toward the acquisition of the certification.

Divisions of agricultural cooperatives have acquired the GLOBAL G.A.P. certificate with a view of expanding sales routes (Fukuoka).

Looking ahead to the 2020 Tokyo Olympic and Paralympic Games, the members of the JA Kurume Salad Group in Kurume City, Fukuoka have acquired the GLOBAL G.A.P. group certificate in February 2017.

All the members have conducted study sessions together, which was a big incentive to the acquisition.

Ikedo, Chairman of the group said, "We have reviewed many points in hygiene which we thought we were satisfying. It revealed our awareness, pride and attitude that show everyone involved is working with international standards."

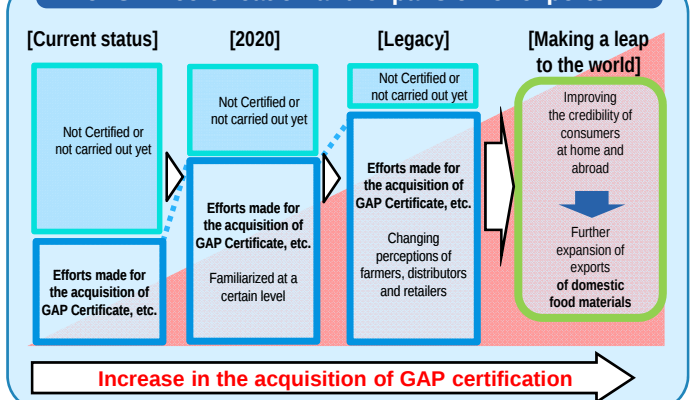


Inspection of GLOBAL G.A.P.

Establishing the trust of the world and further expand exports.

- It is necessary to generalize the acquisition of international-standard GAP in order to make Japan's agricultural and livestock products recognized around the world. By seeing 2020 Tokyo Olympic and Paralympic Games as a step, it is important to change perceptions of farmers, distributors and retailers and raise awareness of consumers.
- Japan should promote GAP, organic farming and independent efforts toward the engagement of persons with disabilities in production in terms of sustainability. Passing the ideas of "the establishment of the trust of the world in 'Made in Japan' products" and "realization of sustainable agriculture through the use of international-standard GAP certification" down the generations as legacies of the 2020 Tokyo Olympic Games to further expand exports.

Increase in the acquisition of GAP certification and expansion of exports.

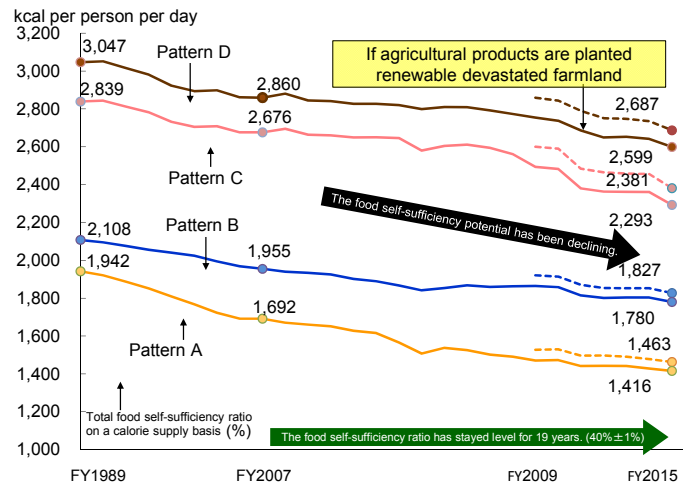


1. Objectives and present situation of Basic Plan for Food, Agriculture and Rural Areas

Food self-sufficiency potential and food self-sufficiency ratio

- The food self-sufficiency potential index, which shows the potential food production capability, has been declining due to the shrinkage of agricultural areas and stagnated average yields.
- On the other hand, the food self-sufficiency ratio has been around 40% in recent years on a supply heat quantity basis, and 39% in FY 2015 (same as the previous year). On a production value basis, the ratio has been between 60 - 69% in recent years, and 66% in FY 2015 (2 points up from the previous year).
- The government will continue to improve food self-sufficiency potential and the food self-sufficiency ratio through efforts such as the increase in the demands of domestic agricultural products at home and abroad including exports, farmland consolidation and intensification, and efforts toward the training and recruitment of farmers.

Food self-sufficiency potential index and food self-sufficiency ratio



Note 1: Values of the food self-sufficiency potential index are the maximum value of the food supply heat quantities calculated based on the agricultural land and average yields at that time.

Note 2: Calculation is carried out on the assumption that: Pattern A mainly cultivates rice, wheat and soy beans taking nutritional balance into account, Pattern B mainly cultivates rice, wheat and soy beans, Pattern C mainly cultivates potatoes taking nutritional balance into account, and Pattern D mainly cultivates potatoes.

Agricultural income and related income in rural areas

- In 2015, agricultural output in Japan increased to 8.8 trillion yen, a 5.2% increase from the previous year and the agricultural income produced increased to 3.3 trillion yen, a 16.1% increase from the previous year as a result of the rise in the prices of rice, vegetables and livestock.
- Agricultural income per management entity, calculated by deducting agricultural expenditure from agricultural gross income, increased from the previous year in major farming types.
- The market size of AFFrinnovation in FY 2014 increased to 5.1 trillion yen, a 400 billion yen increase from the previous year. Related income in rural areas calculated from the market size increased to 1.3 trillion yen, a 100 billion increase from the previous year.

Agricultural income by major farming type

(Unit: ha, 10,000 m², numbers, 10,000 yen)

		2014	2015
Paddy farming	Total area of paddy farming	1.67	1.72
	Agriculture incomes	27.2	52.6
	More than 10.0ha		
	Total area of paddy farming	19.12	20.88
Vegetable grown in facilities	Agriculture incomes	681.3	947.6
	More than 20.0ha		
	Total area of paddy farming	31.20	36.73
	Agriculture incomes	1,087.1	1,522.3
Fruit farming	Total area of vegetable grown in facilities	0.43	0.43
	Agriculture incomes	423.8	496.6
	More than 10,000m ²		
	Total area of vegetable grown in facilities	2.14	2.16
Dairy cattle	Agriculture incomes	1,064.3	1,303.1
	Total area of fruit planting	0.98	0.99
	Agriculture incomes	187.6	207.9
	More than 3.0ha		
Fatting cattle	Total area of fruit planting	4.20	4.13
	Agriculture incomes	694.3	700.9
	Number of cattle farmed for milking	43.9	44.2
	Agriculture incomes	832.5	1,054.2
Dairy cattle	Number of cattle farmed for milking	159.8	165.6
	Agriculture incomes	2,235.2	2,924.3
	More than 100		
	Number of fatting cattle farmed	107.5	103.2
Fatting cattle	Agriculture incomes	671.2	1,243.2
	Number of fatting cattle farmed	375.4	423.2
	More than 200		
	Agriculture incomes	1,572.4	5,432.6

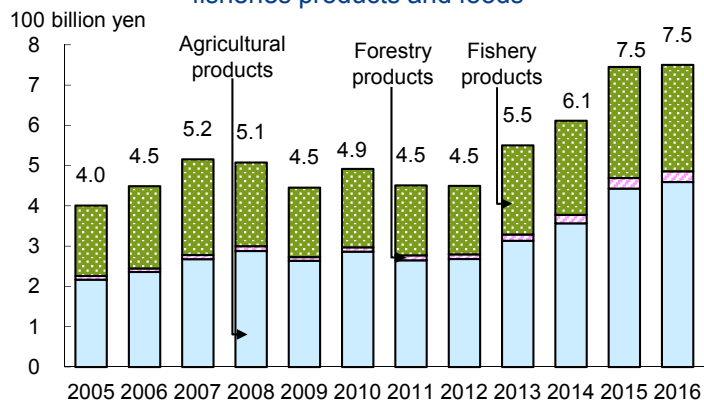
Source: MAFF, Management Statistics by Farming Type (Individual Management)

2. Strategic exploration of global market

Promoting the export of agricultural, forestry and fisheries products and foods

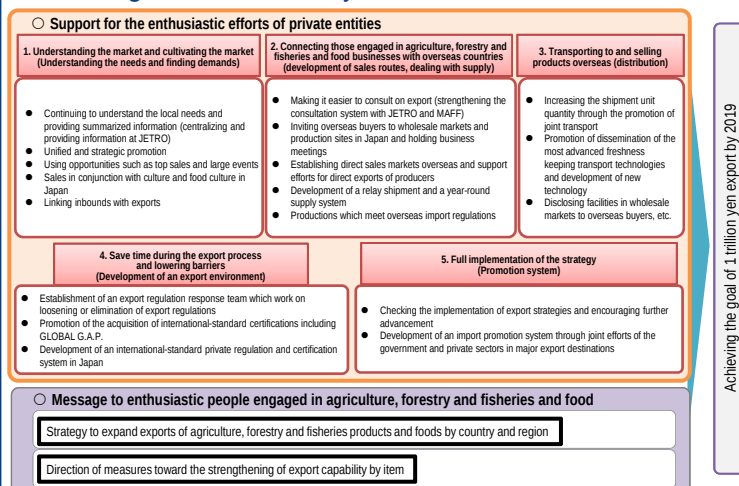
- Japan's agricultural, forestry and fisheries products and food exports totaled 750.2 billion yen (2016), a 0.7% increase from the previous year.
- The targeted year of achieving 1 trillion yen export is moved forward by 1 year to 2019 in the "economic measures to realize future investment" (decided on by the Cabinet in August 2016).
- In May 2016, the "Strategy to Strengthen Export Capabilities of the Agricultural, Forestry and Fisheries Industries" was formulated in order to support enthusiastic efforts of private entities toward the achievement of export of 1 trillion yen.
- In November 2016, the "infrastructure development program for the export of agriculture, forestry and fisheries products" was formulated in order to develop infrastructure in a consistent and planned manner both in tangible and intangible aspects, which are necessary to implement this strategy.
- Promoting measures listed in the "Agricultural Competitiveness Enhancement Program" such as the establishment of a new organization which is in charge of promotion and branding of "Made in Japan" products.
- The meeting on animal and plant quarantine for the export of agriculture and livestock products lifted a ban on the export of pears to Vietnam, apples to Canada, brown rice to Australia, and hen eggs (as personal effects) to Singapore in FY 2016. The limit in the age of beef cattle exported to Thailand was also eliminated (a total of 11 ban removals and relaxation was achieved in 8 countries).

Export of agricultural, forestry and fisheries products and foods



Source: Prepared based on MOF, Trade Statistics

About the Strategy to Strengthen Export Capabilities of the Agricultural, Forestry and Fisheries Industries

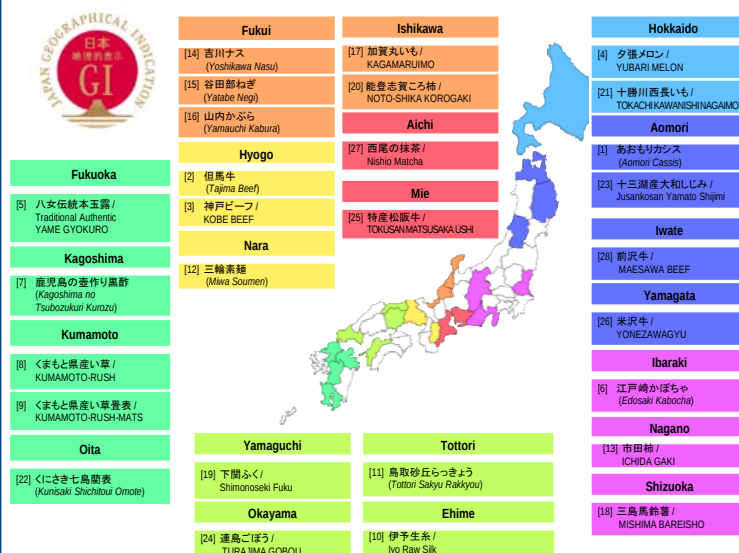


Source: Materials developed by the Headquarters on Creation of Regional Vitality in Agriculture, Forestry, and Fisheries

Overseas expansion, etc. of Japanese food culture

- The following institutions have been promoted from FY 2016: an institution to certify foreign chefs of Japanese food with a certain level of knowledge and cooking skills in Japanese cuisine, and an institution to certify overseas restaurants which actively use ingredients from Japan as a "supporter restaurant."
- Setting new JAS standards which showcase Japan's strength and promoting their application. Submitting the bill for the Act on Standardization and Proper Quality Labeling of Agricultural and Forestry Products to the Diet.
- 28 products have been registered as geographical indication (GI) under Japan's GI protection system. These registered products carry characteristics that are linked to their geographical origin such as mountainous areas. The GI Act was amended (came into effect on December 26, 2016) in order to realize GI protection pursuant to international agreements.

Products registered as geographical indication (As of March 2017)



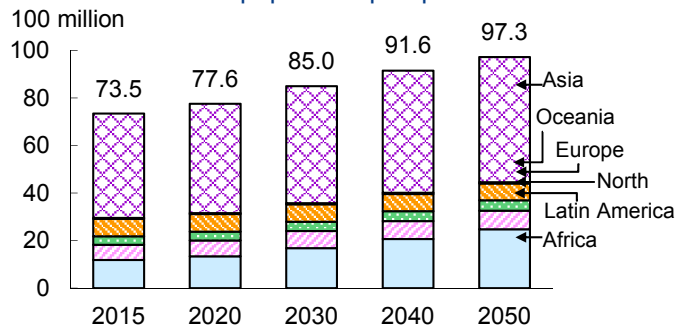
Note: Italic characters in column of "Name" is a reference information.

3. Global food supply and demand, and efforts for establishing food security

Global food supply/demand trends

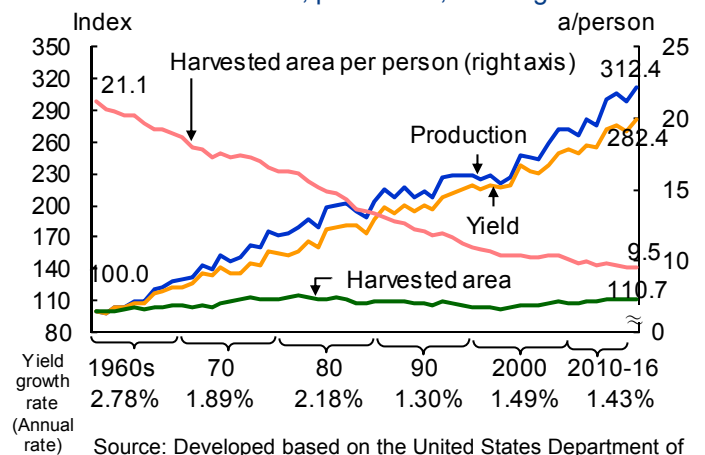
- The world population reached 7.4 billion (2015) and continues to increase mainly in developing countries, and is expected to be 9.7 billion in 2050.
- It is estimated that demands for grain and meat around the world will rise in the future due to the population increase.
- On the contrary, production of grain for food and feed has slowed down with stagnated yields which have helped production growth. There are some unstable factors which could affect the production such as climate changes including global warming and tight water supply and demand. In the medium to long term, tightening of supply and demand of grain around the world will be a concern.

World population prospects



Source: Developed based on the United Nations, World Population Prospects: The 2015 Revision

Harvested area, production, etc. of grain



Source: Developed based on the United States Department of Agriculture, PS&D; United Nations, World Population Prospects: The 2015 Revision

Efforts for establishing comprehensive food security

- In preparation for unforeseeable events, the government regularly analyzes and assesses the impacts of risks associated with the stable food supply and considers and implements measures.
- The top three exporters of corn, wheat, soy bean, beef and chicken account for more than 90% of the total imports for Japan. Japan thus depends heavily on a limited number of specific countries for farm imports.
- Discussions on food security were held in the G7 Niigata Agriculture Ministers' Meeting in April and the sixth Tokyo International Conference on African Development (TICAD VI) in August 2016.

G7 Niigata Agriculture Ministers' Meeting, one of the related Ministerial meetings of the G7 Ise-Shima Summit

Strengthening of global food security was discussed in the G7 Niigata Agriculture Ministers' Meeting held in April 2016, and the "G7 Niigata Agriculture Ministers' Meeting Declaration" was adopted.

The declaration includes "Increasing farmers' income and Revitalizing rural areas focusing on innovation and food value chains", "Improving sustainable agricultural production/productivity" and "Implementing four joint actions by G7 to hold international forums, such as international forum for empowering women and youth in agriculture and food system".



G7 Niigata Agriculture Ministers' Meeting

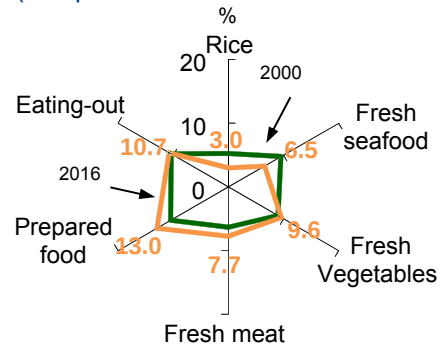
Trends of countries on the TPP Agreement

- The TPP Agreement was approved by the Diet on December 9, 2016. In January 2017, the Japanese Government notified New Zealand, the Depositary of the Agreement, of the completion of Japan's domestic procedures for the TPP. In the same month, the U.S. sent a notification of withdrawal from the agreement. Japan will discuss what can be done in the future with related countries.

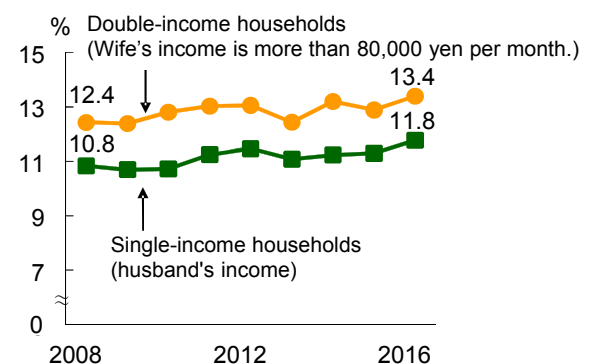
4. Food consumption trends and promotion of Shokuiku (food and nutrition education)

- Food consumption expenditure in households with two or more members, whose head is aged 65 or older, decreased in fresh seafood and rice and increased in prepared food and fresh meat in the last 16 years.
- Food consumption expenditure in double-income households is high in prepared food compared to single-income households (husband's income) due to the limited time spent on household chores.
- The government promotes Shokuiku (Food and nutrition education) through the introduction of the Japanese dietary pattern and the provision of Japanese food lunch in elementary and junior high schools. It also promotes the consumption expansion of domestic agriculture, forestry and fishery products.

Percentage by expense in households whose head is aged 65 or older (comparison between 2000 and 2016)



Percentage of expenditure on prepared food in double-income households



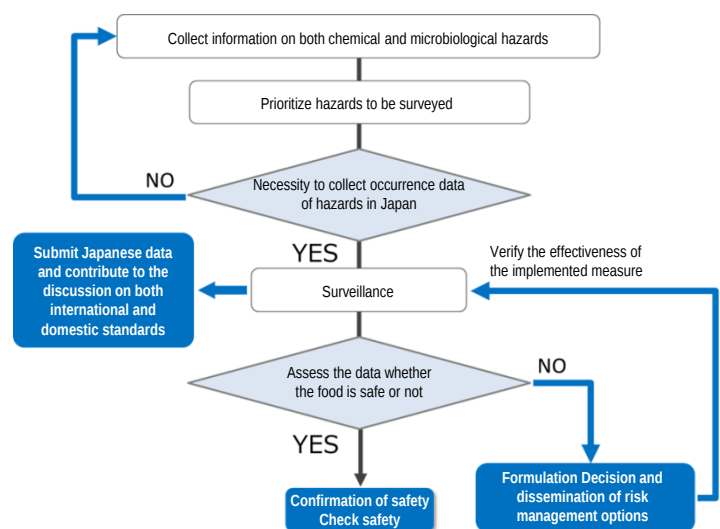
Source: Ministry of Internal Affairs and Communications (MIC), Family Income and Expenditure Survey (households with two or more members)
Note: Percentage in food consumption expenditure

5. Ensuring food safety and consumer confidence

Efforts for improving food safety

- It is important to take measures throughout the food chain from production to consumption in order to ensure food safety, based on both the idea of "prevention is better than crisis management" and scientific evidences.
- In 2016, the priority lists of both chemical and microbiological hazards in food and feed were reviewed and new Mid-term plans were developed.
- The government promoted awareness raising in decreasing the intake of chemical hazards that might affect health and actions that can be taken at home to prevent food poisoning.
- For the introduction of HACCP in food production procedures, training for HACCP team leaders and training on how to respond to HACCP required by importers are provided and support the development of facilities using policy loans.

Flow of risk management on food safety



Animal epidemic prevention and phytosanitary measures

- The following three measures are taken to prevent outbreak and spread of infectious diseases of livestock in Japan.
 - [1] International cooperation to decrease outbreak level of epidemics in overseas countries.
 - [2] Quarantine at airports and seaports to prevent overseas infectious diseases of livestock from entering Japan.
 - [3] Development of a system to prevent infectious diseases outbreak of livestock and to provide prompt responses at a time of outbreak.
- In FY 2016, 12 Highly Pathogenic Avian Influenza cases occurred in Japan followed by a case in Aomori in November. Livestock was killed and facilities were disinfected immediately, and movement restriction areas opened within a month in all cases.
- An emergency control for *Globodera pallida* found in Hokkaido in 2015 started in October 2016. Oriental fruit flies found in Kagoshima in 2015 were eliminated in July 2016 after an emergency control.

Outbreak of Highly Pathogenic Avian Influenza and response state

Outbreak outline		
Case	Date of outbreak – date of opening movement restriction areas	Number of poultry/type
[1] Aomori City, Aomori	11/28-12/27	About 18,000 / duck
[2] Sekikawa Village, Niigata	11/29-12/27	About 310,000 / layer chicken
[3] Joetsu City, Niigata	11/30-12/28	About 240,000 / layer chicken
[4] Aomori City, Aomori	12/2*-12/27	About 4,700 / duck
[5] Shimizu Town, Hokkaido	12/16-1/15	About 280,000 / layer chicken
[6] Kawaminami Town, Miyazaki	12/19-1/12	About 120,000 / broiler chicken
[7] Nankan Town, Kumamoto	12/27-1/19	About 92,000 / layer chicken
[8] Yamagata City, Gifu	1/14-2/8	About 81,000 / layer chicken
[9] Kijo Town, Miyazaki	1/24-2/17	About 170,000 / broiler chicken
[10] Kohoku Town, Saga	2/4-2/28	About 71,000 / broiler parent stock
[11] Kurihara City, Miyagi	3/24-4/18	About 220,000 / layer chicken
[12] Asahi City, Chiba	3/24-4/18	About 62,000 / layer chicken

Notes:

- 1) The date of outbreak is the date when suspected animals were proved positive for Influenza A virus subtype H5 or they were proved positive for a simple testing*.
- 2) The number of domestic poultry is the number of infected poultry or poultry with a pseudo infection.
- 3) As of April 18, 2017

Expansion of country of origin labeling system for ingredient of processed food

Efforts to ensure consumers' confidence

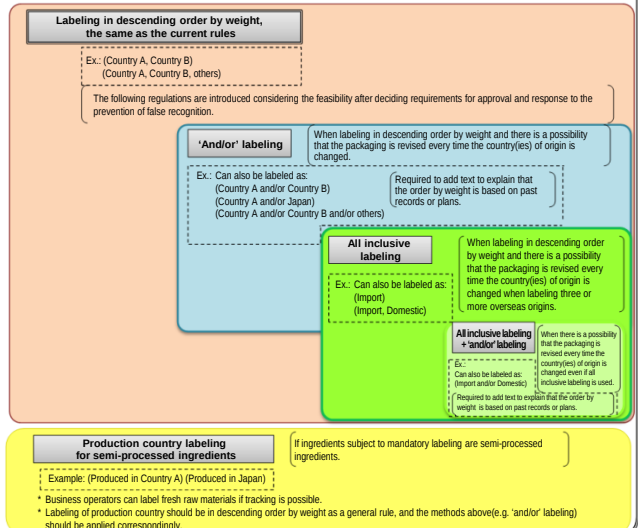
- While consumers take a growing interest in country of origin labeling for ingredient, the Consumer Affairs Agency and MAFF jointly held a "meeting on the country of origin labeling system for ingredient of processed food." In the meeting, discussions were held toward the expansion of country of origin labeling system for ingredient of processed food and the interim report was published in November 2016.
- The details of the report are as follows:
 - [1] The heaviest ingredient of all processed foods produced in Japan should be required to label the country(ies) of origin.
 - [2] Mandatory labeling should be made in descending order by weight as a general rule, and the new labeling system should include feasible labeling methods such as 'and/or' labeling(e.g. 'Country A and/or Country B') and all inclusive labeling(e.g. 'Import').

Based on the report, the Food Labeling Standards will be revised in the future.
- Promoting research and development for the acquisition of scientific evidence on functionality and the development of healthy cities using local functional agricultural products for the expansion of production and consumption of functional agricultural products.

Processed food subject to mandatory labeling: all processed food produced in Japan (Excluding restaurant/in-store processed food, etc., the same as the current rules)

Ingredient subject to mandatory labeling: the heaviest ingredient in the final product

Labeling method:



Others:

- Mandatory labeling must be on the package of food.
- When 'and/or' labeling or all inclusive labeling is applied, it is desirable to disclose supplementary information on a voluntary basis using the Internet.
- A certain period of transitional measures should be set before labeling is required.
- The government should promote consumers' awareness of the contents of the new labeling system and meaning of terms.

Source: The interim report of the meeting on the country of origin labeling system for ingredient of processed food

[Example of labeling based on the current labeling rules]

Name:
Pork Sausage
Ingredients:
pork, pork fat, protein hydrolysate, reduced starch syrup, salt, spices

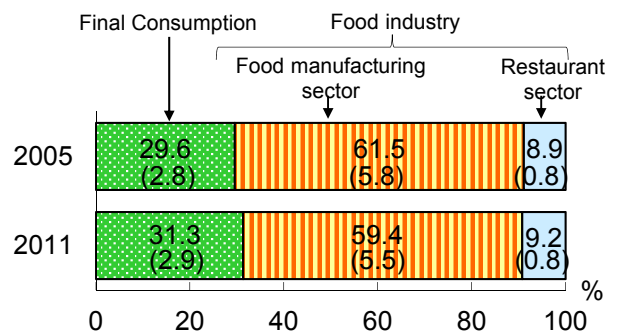
[Example of labeling based on the new labeling rules]

Name:
Pork Sausage
Ingredients:
pork (U.S.), pork fat, protein hydrolysate, reduced starch syrup, salt, spices

6. Trends of food industry

- Small and tiny companies make up the majority of the food industry, which account for 70% of the destinations of domestic agriculture, forestry and fishery products.
9.5% of the total domestic production and 12% of the total number of employees are from the food industry. As one of the major industries in rural areas, it is an essential industry for the regional empowerment for Japan's growth and the revitalization of regional economy.
- The market size of e-commerce transactions for consumers is expanding. E-commerce transactions in food and beverages are expected to grow further in the future as the number of aged households is increasing.
- More than half of the food in Japan depends on imports from overseas and 6.21 million t (2014) of food loss and waste are generated from food-related businesses and households.
A national campaign to reduce food loss and waste was launched in order to reduce food loss and waste, and the government promotes the review of delivery deadlines of processed food to retailers, food bank activities and not having leftovers at restaurants.

Breakdown of domestically produced agricultural, forestry and fisheries products by use



Market size of e-commerce transactions for consumers in the sales area

(Unit: 100 million, %)

Category	2014	2015	Growth rate
Total in sales area	68,043	72,398	6.4
Food, beverage, alcohol drinks	11,915	13,162	10.5

Source: METI, Market Survey on E-Commerce Transactions

7. Exploring new demand for agriculture, forestry and fisheries products and food

- The number of business plans approved under the AFF rinnovation act based on the Act on Promotion of the "Sixth Industry" to Create New Value Added Using Agricultural Products In Rural Areas was 2,227 (as of the end of FY 2016).
Promotion councils with participation of a wide range of related people were established on a municipality level, and the formulation of a strategy concerning AFFrinnovation is promoted.
- The number of subscriptions decided for the Agriculture, Forestry and Fisheries Fund Corporation for Innovation Value-Chain and Expansion Japan was 109 (as of February 14, 2017).
- The percentage of farmer's markets that play a significant role in local consumption of local produce with annual sales of over 100 million yen was 20.3% (FY 2014).
Excellent examples of efforts made by farmer's markets are compiled and promoted for dissemination.
- The check-off system, in which producers carry out voluntary sales promotion activities, etc. using their own contributions, will be given legal force by the government if it can obtain a certain level of agreement in the industry of each item.

Sales of vegetable gelato from hilly and mountainous areas (Wakayama)

Kimino Town, Wakayama is in a hilly and mountainous area. Tetsuji Ushiro returned to his hometown and became engaged in farming in 2008. He opened the gelato shop "kiminoka" in 2013.

He produces agricultural products and develops products taking consumers' needs into account.

He makes gelato using the goodness of home-grown vegetables and local fruits.

The gelato is gaining popularity, which is sold at his own shop and on-line.



Tetsuji Ushiro