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.

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

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

"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.
**Special Topic 1**
The Policy Package for Enhancing Competitiveness of Japan’s Agriculture

**Special Topic 2**
Fluctuating agriculture in Japan: From 2015 Census of Agriculture and Forestry

### Chapter 1
Efforts for Securing Stable Food Supply

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</tr>
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</table>
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.

To improve agriculture in Japan:

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

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 (AFFinnovation). 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.

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.
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.

**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.
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.

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.

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

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/fruit.

- 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. |
|-----------------|----------------|
| Fertilizer      | About 50%      |
| Agricultural chemicals | About 40% |
| Compound feeds  | About 30%      |
| 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.

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).

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).

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).

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.

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
  [8] Bill for the partial amendment of the Act on Compensation for Agricultural Loss
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.

**Fluctuating agriculture in Japan:**

*From 2015 Census of Agriculture and Forestry*

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).

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

**Management status of agriculture management entities**

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**Trends of agriculture management entities**

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

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.

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.
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 rate 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.

**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 parcels 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.

**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.

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**Usage concentration rate of agricultural land to business farmers**

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>27.6</td>
<td>38.5</td>
<td>47.9</td>
<td>48.8</td>
<td>48.7</td>
<td>50.3</td>
<td>52.3</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Less than 1 ha</th>
<th>1-5 ha</th>
<th>5-10 ha</th>
<th>10-20 ha</th>
<th>More than 20 ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>24.4</td>
<td>54.2</td>
<td>10.3</td>
<td>6.3</td>
<td>6.2</td>
</tr>
<tr>
<td>2010</td>
<td>20.3</td>
<td>47.6</td>
<td>11.9</td>
<td>7.4</td>
<td>12.8</td>
</tr>
<tr>
<td>2015</td>
<td>17.1</td>
<td>42.7</td>
<td>13.2</td>
<td>9.8</td>
<td>17.3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Tohoku</th>
<th>Hokuriku</th>
<th>Kanto/Tozan</th>
<th>Tokai</th>
<th>Kinki</th>
<th>Chugoku</th>
<th>Shikoku</th>
<th>Kyusyu/Okinawa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>32.0</td>
<td>22.6</td>
<td>36.9</td>
<td>22.1</td>
<td>22.4</td>
<td>26.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

**Trends in the number of commercial farm households in paddy farming**

<table>
<thead>
<tr>
<th>Area of cultivated land under management</th>
<th>Hokkaido</th>
<th>Other prefectures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>28,466</td>
<td>22,710</td>
</tr>
<tr>
<td>Less than 1 ha</td>
<td>3,089</td>
<td>2,574</td>
</tr>
<tr>
<td>1-5 ha</td>
<td>9,396</td>
<td>6,397</td>
</tr>
<tr>
<td>5-10ha</td>
<td>7,892</td>
<td>5,472</td>
</tr>
<tr>
<td>10-15 ha</td>
<td>4,387</td>
<td>3,607</td>
</tr>
<tr>
<td>More than 15 ha</td>
<td>3,702</td>
<td>4,440</td>
</tr>
</tbody>
</table>

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

The state after 5 years of single-farming (rice cultivation) (Unit: Management entity)

<table>
<thead>
<tr>
<th>Total status in 2015 ([1])</th>
<th>Continued agriculture management entities</th>
<th>Single-farming (rice)</th>
<th>Single-farming (others)</th>
<th>Multiple-farming ([2])</th>
<th>Other than agriculture management entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>772,785</td>
<td>691,624</td>
<td>307,295</td>
<td>8,443</td>
<td>38,749</td>
</tr>
<tr>
<td>Less than 1ha</td>
<td>438,704</td>
<td>377,320</td>
<td>317,562</td>
<td>208,312</td>
<td>3,029</td>
</tr>
<tr>
<td>1 - 5</td>
<td>305,191</td>
<td>209,913</td>
<td>205,913</td>
<td>233,673</td>
<td>5,683</td>
</tr>
<tr>
<td>5 - 10</td>
<td>18,995</td>
<td>17,130</td>
<td>14,383</td>
<td>213,054</td>
<td>113</td>
</tr>
<tr>
<td>More than 20ha</td>
<td>7,858</td>
<td>7,424</td>
<td>7,182</td>
<td>5,883</td>
<td>4,141</td>
</tr>
</tbody>
</table>

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.
Chapter 1: Efforts for Securing Stable Food Supply

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 have 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.

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.
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.

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 AFFinnovation 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.
Chapter 1: Efforts for Securing Stable Food Supply

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 amount of beef cattle exported to Thailand was also eliminated (a total of 11 ban removals and relaxation was achieved in 8 countries).

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.
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.

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.

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.

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.
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.

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’).

- 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.

Chapter 1: Efforts for Securing Stable Food Supply

Outbreak of Highly Pathogenic Avian Influenza and response state

<table>
<thead>
<tr>
<th>Case</th>
<th>Date of outbreak – date of opening movement restriction areas</th>
<th>Number of poultry/tpe</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] Aomori City, Aomori</td>
<td>11/28-12/27</td>
<td>About 18,000 / duck</td>
</tr>
<tr>
<td>[2] Sekikawa Village, Niigata</td>
<td>11/29-12/27</td>
<td>About 310,000 / layer chicken</td>
</tr>
<tr>
<td>[3] Joetsu City, Niigata</td>
<td>11/30-12/28</td>
<td>About 240,000 / layer chicken</td>
</tr>
<tr>
<td>[5] Shimizu Town, Hokkaido</td>
<td>12/16-1/15</td>
<td>About 280,000 / layer chicken</td>
</tr>
<tr>
<td>[6] Kawaminami Town, Miyazaki</td>
<td>12/19-1/12</td>
<td>About 120,000 / broiler chicken</td>
</tr>
<tr>
<td>[7] Nankan Town, Kumamoto</td>
<td>12/27-1/19</td>
<td>About 92,000 / layer chicken</td>
</tr>
<tr>
<td>[8] Yamagata City, Gifu</td>
<td>1/14-2/8</td>
<td>About 81,000 / layer chicken</td>
</tr>
<tr>
<td>[9] Kijo Town, Miyazaki</td>
<td>1/24-2/17</td>
<td>About 170,000 / broiler chicken</td>
</tr>
</tbody>
</table>

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

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)

Labeling method:

- In descending order by weight, the name on the current rules:
  - Production country labeling
  - Ingredient labeling
  - Production country labeling for semi-processed ingredients

- When labeling in descending order by weight and there is a possibility that the packaging is revised every time the country(ies) of origin is changed even if all inclusive labeling is used.

- Required to add text to explain that the order by weight is based on past ingredients.

- When labeling in descending order by weight and there is a possibility that the packaging is revised every time the country(ies) of origin is changed.

- All inclusive labeling

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] [Example of labeling based on the new labeling rules]

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

Name: Pork Sausage
Ingredients: Pork, 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Final Consumption</th>
<th>Food industry</th>
<th>Restaurant sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>29.6 (2.8)</td>
<td>61.5 (5.8)</td>
<td>8.9 (0.8)</td>
</tr>
<tr>
<td>2011</td>
<td>31.3 (2.9)</td>
<td>69.4 (5.5)</td>
<td>9.2 (0.8)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Category</th>
<th>2014</th>
<th>2015</th>
<th>Growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total in sales area</td>
<td>68,043</td>
<td>72,398</td>
<td>6.4</td>
</tr>
<tr>
<td>Food, beverage, alcohol drinks</td>
<td>11,915</td>
<td>13,162</td>
<td>10.5</td>
</tr>
</tbody>
</table>

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 AFFrinnovation 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.