FY2019
Summary of the Annual Report on Food, Agriculture and Rural Areas in Japan

June 2020

MAFF
Ministry of Agriculture, Forestry and Fisheries
# Contents

## FY2019 Annual Report on Food, Agriculture and Rural Areas in Japan

### Special Topic 1
- New Basic Plan for Food, Agriculture and Rural Areas
  - 3
- Growing Empowerment of Women Farmers
  - 6

### Topic 1
- Food, Agriculture, Rural Areas and SDGs (Sustainable Development Goals)
  - 11
- Japan-U.S. Trade Agreement
  - 14

#### Chapter 1
- Securing Stable Food Supply
  - Food self-sufficiency ratio and food self-sufficiency potential
    - 16
  - Strategic exploration of global market
    - 16
  - Global food supply and demand, and efforts for establishing food security
    - 18
  - Food consumption trends and promotion of shokuiku (food and nutrition education)
    - 19
  - Ensuring food safety and consumers’ confidence
    - 19
  - Animal and plant quarantine
    - 20
  - Trends of food industry
    - 20
  - Creation of new values through production, processing and distribution stages
    - 21

#### Chapter 2
- Creating Strong Agricultural Structure
  - Trends of agricultural output, agricultural production income, etc.
    - 22
  - Promoting structural reform of agriculture
    - 22
  - Developing and conserving agricultural production infrastructure
    - 24
  - Trends of rice policy reform
    - 24
  - Production trends for major farm and livestock products
    - 25
  - Promoting measures to enhance agricultural production competitiveness
    - 26
  - Promotion of environmental policy such as responses to climate change
    - 27
  - Agriculture-related organizations supporting agriculture
    - 27

#### Chapter 3
- Taking Advantage of Local Resources to Promote and Vitalize Rural Areas
  - Current status of rural areas and trends of regional empowerment
    - 28
  - Promoting agriculture in hilly and mountainous areas
    - 28
  - Harmonious coexistence and interactions between cities and rural areas centered on countryside stay
    - 28
  - Maintaining and demonstrating multifunctional roles of agriculture and rural areas
    - 29
  - Wildlife damage and Gibier
    - 30
  - Utilizing renewable energy
    - 30
  - Promotion of urban agriculture
    - 31
  - Promoting agriculture-welfare collaboration
    - 31

#### Chapter 4
- Restoration/Reconstruction from Natural Disasters, Disaster Prevention/Reduction and Strengthening National Resilience
  - Restoration/reconstruction from natural disasters in FY2019
    - 32
  - Disaster prevention/reduction, strengthening national resilience and preparations that should be made by farmers
    - 33
  - Restoration/Reconstruction from Great East Japan Earthquake
    - 34
  - Restoration/Reconstruction from Kumamoto Earthquake
    - 34
  - Response to the Novel Coronavirus
    - 35

## FY2020 Measures for Food, Agriculture and Rural Areas

- 37
Based on the Food, Agriculture and Rural Areas Basic Act, a new Basic Plan for Food, Agriculture and Rural Areas was formulated in March 2020 as a medium-term to long-term basic guideline for agricultural policies.

In the new basic plan, challenges are identified as securing a stable supply of food that is indispensable to people's lives, improving the food self-sufficiency ratio and establishing food security by promoting "industrial policy" for transforming agriculture and food industries into a growth industry as well as "regional policy" for promoting the maintenance and implementation of agriculture's multifunctional roles as the two driving forces.

In addition to the total food self-sufficiency ratio targets set on a calorie basis and a production value basis, new targets for "food domestic production ratio" that does not reflect the feed self-sufficiency ratio are set as an index to evaluate the situation of domestic production regardless of whether the feed is domestic or imported.

New Basic Plan for Food, Agriculture and Rural Areas

- There have been significant changes in the situation surrounding Japan’s food, agriculture and rural areas, such as a full-fledged declining birthrate and aging population, lifestyle changes and expansion of overseas markets, weakening of production base due to the decrease in the amount of farmland and number of workers engaged in farming and concerns over the maintenance of local communities.

- To pass Japan’s food culture and lively agriculture and rural areas onto the next generation, various measures are promoted, such as the development of production and supply systems that adapt to changes in demand structure, strategic expansion into global markets, strengthening of the production base of various entities, such as those run by SMEs and families and integration of regional policies in collaboration with the relevant parties.

Key points of the new Basic Plan for Food, Agriculture and Rural Areas

- Promote industrial policies and regional policies as two wheels of a cart to stably supply food essential for people's life now and in the future, and achieve improved food self-sufficiency ratio and establishment of food security

- Policies that meet the needs of consumers and users

- Forming a national consensus on establishment of food security and importance of agriculture and rural areas

- Developing and securing human resources toward ensuring the sustainability of agriculture and deploying policies for enhancing production bases

- Accelerating smart agriculture and promoting digital transformation of agriculture

- Integrating regional policies and maintaining and demonstrating multifunctional roles

- Reinforcing measures against risks that threaten the sustainability of agriculture, such as disasters, livestock diseases, and climate change

- Promoting measures for increasing income in agriculture and rural areas

- Policies that bolster sustainable activities triggered by SDGs

Basic plan for food, agriculture and rural areas (March 2020)

- Passing Japan’s food culture and lively agriculture and rural areas onto the next generation

- Forming a national consensus on establishment of food security and importance of agriculture and rural areas

- Developing and securing human resources toward ensuring the sustainability of agriculture and deploying policies for enhancing production bases

- Integrating regional policies and maintaining and demonstrating multifunctional roles

- Reinforcing measures against risks that threaten the sustainability of agriculture, such as disasters, livestock diseases, and climate change

- Promoting measures for increasing income in agriculture and rural areas

- Policies that bolster sustainable activities triggered by SDGs

Source: MAFF
New food self-sufficiency ratio targets and food self-sufficiency potential indicator

Food self-sufficiency ratio targets

- The total food self-sufficiency ratio targets are set each on a calorie basis, which evaluates the food security situation and a production value basis, which evaluates the situation of agricultural economic activities.
- The food self-sufficiency ratio excludes the livestock products produced from imported feed, however, “food domestic production ratio” targets are set as the new targets focusing on domestic production that do not exclude these products.
- To improve the food self-sufficiency ratio, in terms of production, efforts are made to strengthen production/supply systems compatible with changes in domestic and overseas demand and enhance domestic agricultural production bases. In terms of consumption, efforts are made to deepen the connection between consumers and food and agriculture and collaboration with the food industry.

<table>
<thead>
<tr>
<th>Targets for food self-sufficiency ratio, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Unit: %)</td>
</tr>
<tr>
<td>FY2018 (Results)</td>
</tr>
<tr>
<td>FY2030 (Targets)</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Total food self-sufficiency ratio (Calorie basis)</td>
</tr>
<tr>
<td>Total food self-sufficiency ratio (Production value basis)</td>
</tr>
<tr>
<td>Feed self-sufficiency ratio</td>
</tr>
<tr>
<td>Food domestic production ratio (Calorie basis)</td>
</tr>
<tr>
<td>Food domestic production ratio (Production value basis)</td>
</tr>
</tbody>
</table>

Source: MAFF

Food self-sufficiency potential indicator

- To secure food supplies in Japan even in the case of an unforeseen event, it is important to always keep track of, maintain and improve the food production potential of Japan's agriculture, forestry and fisheries (food self-sufficiency potential).
- Calories of food that can be obtained by fully utilizing Japan's potential production capacity are presented as the food self-sufficiency potential indicator.
- The food self-sufficiency potential indicator is improved to also consider agricultural labor and labor-saving agricultural technologies in addition to farmland and a new outlook for the future food self-sufficiency potential indicator (FY2030) is presented.
- Based on the relationship between the food self-sufficiency potential indicator and farmland, yield, labor, etc., it is necessary to work on securing farmland and labor, increasing yield and promoting technological innovation.

![Food self-sufficiency potential indicator for FY2018](image)

![Outlook for food self-sufficiency potential indicator for FY2030](image)

Source: MAFF
The outlook for the total farmland area in 2030 is estimated to be 4.14 million ha, taking into consideration the trend and the effects of measures (preventing farmland dilapidation and clearing dilapidated farmland).

For the agricultural structure outlook, establishing an agricultural structure in which 80% of the total farmland area is used by business farmers will be pursued by developing agriculture management entities ("farms") that aim to improve their management, regardless of their management form such as family or corporation, into business farmers, according to local circumstances.

Considering the fact that small- and medium-sized entities also support the regions together with business farmers by continuously producing agricultural goods, consideration will also be given to them to continue farming.

### Farm management outlook

For the farm management outlook, concrete models and examples are presented so that various business farmers, including farm households, can maintain and develop regional agriculture as it is becoming increasingly difficult to secure farmers and labor, expecting to see progress in the efforts for developing small-scale farm households and business farmers and increasing their income.

For farm management models, labor-saving and highly productive management models that introduced new technologies, etc., are shown by main agriculture type and region (total 37 models).

Also, efforts to realize new lifestyles, such as half-farmer, half-x and efforts to maintain farmland and contribute to regional vitalization while maintaining small but stable management are shown as examples.

### Outlook and securing of farmland, agriculture structure outlook

**Outlook for total farmland area**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total farmland area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>3.97 million ha</td>
</tr>
<tr>
<td>2030</td>
<td>4.14 million ha</td>
</tr>
</tbody>
</table>

The effects of measures (preventing farmland dilapidation and clearing dilapidated farmland) + 220,000 ha

The total farmland area secured as of 2030: 4.14 million ha

Source: MAFF

Note: The trend refers to the case when no measures are taken.

**Farms supporting the regions**

### An example of a farm management model

**Farming category**: Outdoor grown vegetable (solan raw, farmland maintenance type)

**Target region**: West of Kanto

<table>
<thead>
<tr>
<th>Management development</th>
<th>Estimate results</th>
<th>Reference management model used for comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Type of management]</td>
<td></td>
<td>[Type of management]</td>
</tr>
<tr>
<td>Family management (2 members, one of which is primary worker, 1 temporary worker)</td>
<td>Income of primary worker: 4.19 million yen (person)</td>
<td>Family management (2 members, 1 temporary worker)</td>
</tr>
<tr>
<td>[Operation size, cropping pattern]</td>
<td>Work hours of primary worker: 1,514hr (person)</td>
<td>[Operation size, cropping pattern]</td>
</tr>
<tr>
<td>Cultivated land under management: 1.7ha</td>
<td></td>
<td>Cultivated land under management: 1.7ha</td>
</tr>
<tr>
<td>Cabbage</td>
<td>1.27ha</td>
<td>Outdoor grown vegetable: 1.7ha</td>
</tr>
<tr>
<td>Watermelon</td>
<td>0.58ha</td>
<td></td>
</tr>
</tbody>
</table>

**Key point of the model**

- Family business attempting to save labor and improve productivity through joint use of farming equipment and outsourcing of some work in the aging family management entities.
- Increase in management cost is avoided and transplanting work time is reduced by approximately 50% by joint use of riding-type automated transplanter.
- Burden on middle management is reduced and work time sensing, pesticide spraying, etc., is reduced by approximately 25% by outsourcing such work to be performed using drones.
- Efficiency of work is improved by outsourcing some work and mechanization to resolve the issue of labor shortage associated with aging, and burden of hard labor such as transporting crops by using power assist suit.
- Temporary staffing companies that cover labor for agricultural work are utilized under the situation where procuring labor from the region is becoming difficult due to depopulation and aging.

**Source**: MAFF

Note: The above is based on a trial calculation and may not necessarily indicate the actual situation.
Women farmers play an important role in agriculture and regional promotion. However, despite the large burden of women's farm work, housework, childrearing, etc., their work has not been appropriately evaluated so that various efforts have been made to encourage women's participation in agricultural management and local communities.

In recent years, there has been an increasing number of women farmers who are actively working as certified farmers and those who are engaged in entrepreneurial activities, and entities with women management tended to have higher profitability.

Towards sustainable development of agriculture and rural areas, it is important to promote the further success of women by creating an agricultural/rural environment where women can work and live pleasantly.

**Growing Empowerment of Women Farmers**

### History of the role of women farmers - From "life improvement" to the era of "success"

- After World War II, women were overworked with housework, childrearing and nursing care, in addition to farm work. In 1948, life improvement extension services were launched to improve the status of women farmers and through these services, housework became more efficient with improved stoves and kitchens.

- Entering the period of rapid economic growth, the opportunities for men to do work other than farming expanded and women played a more central role in agricultural production while also bearing the burden of housework, childrearing and nursing care.

- From around the 1970s, farm work has become much easier due to the introduction of rice planting machines, etc. With this, entrepreneurial activities utilizing insight and wisdom unique to women began to rise and women participating in management by their own will also started to emerge.


- In 1999, the Basic Act for Gender Equal Society came into effect with the purpose of realizing a society where every citizen is able to fully display their individuality and ability regardless of gender and across society. In the same year, gender equality was also stipulated in the Food, Agriculture and Rural Areas Basic Act.

- Thereafter, various measures were promoted based on these laws, such as disseminating and raising awareness for gender equality, encouraging farming households to conclude Family Business Agreements, supporting entrepreneurial activities and AFFrinnovation, providing training to become certified farmers and developing next-generation leaders.

### Growing empowerment of women farmers in the agricultural workplace - Looking back on 20 years

- Over the 20 years from 1999 to 2019, the ratio of women in the core persons mainly engaged in farming decreased from 46% to 40%.

**Male-to-female ratio of the number of core persons mainly engaged in farming (1999 → 2019)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>0.56</td>
<td>0.84</td>
</tr>
<tr>
<td>2019</td>
<td>0.40</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Note: "Core persons mainly engaged in farming" refer to those who are mainly engaged in self-employed agriculture as their job.

Source: MAFF, Survey on Movement of Agricultural Structure
Special Topic 2  Growing Empowerment of Women Farmers

The ratio of women newcomers in agriculture also decreased from 30% in 2006 to 24% in 2018.

Meanwhile, the number of certified women farmers increased fivefold, from 2,000 people in 1999 to 11,000 people in 2019. The ratio of women as certified farmers also increased threefold over the 20 years, from 1.6% to 4.8%.

Women play an important role in agricultural management. There is a correlation between women’s involvement in management and increasing profit in farms.

Women's involvement in farm management and improvement of profitability

<table>
<thead>
<tr>
<th>(Net profit increase rate (last 3 years) by women’s involvement in management)</th>
<th>(Ratio of women’s involvement in farm management by sales volume)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned by women or women are appointed as officers/managers</td>
<td>Overall</td>
</tr>
<tr>
<td>No involvement of women in management</td>
<td>52.2 %</td>
</tr>
<tr>
<td></td>
<td>500 million yen or more</td>
</tr>
<tr>
<td></td>
<td>67.1</td>
</tr>
<tr>
<td></td>
<td>100 million - less than 500 million yen</td>
</tr>
<tr>
<td></td>
<td>67.4</td>
</tr>
<tr>
<td></td>
<td>50 million - less than 100 million yen</td>
</tr>
<tr>
<td></td>
<td>60.9</td>
</tr>
<tr>
<td></td>
<td>10 million - less than 50 million yen</td>
</tr>
<tr>
<td></td>
<td>45.1</td>
</tr>
<tr>
<td></td>
<td>Less than 10 million yen</td>
</tr>
<tr>
<td></td>
<td>35.9</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on the FY2016 First Half Agricultural Economic Survey (published in September 2016) by Agriculture, Forestry, Fisheries and Food Business Unit, Japan Finance Corporation

Note: The survey was administered covering 21,389 borrowers of Super L Loan offered by Japan Finance Corporation or agricultural improvement fund (recovery rate of 28.0%).

Source: Prepared by MAFF based on the 2019 July Agricultural Economic Survey (published in December 2019) by Agriculture, Forestry, Fisheries and Food Business Unit, Japan Finance Corporation

Notes: 1) The survey was administered covering 19,215 borrowers of Super L Loan offered by Japan Finance Corporation or agricultural improvement fund (recovery rate of 28.0%).

2) The graph shows the ratio of establishments with one or more women involved in management as directors or managers.
The number of businesses started by women in rural areas also increased more than twofold, from 4,040 in FY1997 to 9,497 in FY2016.

The number of businesses started by individuals has been on the rise, with cases of people becoming independent from their groups after finding business opportunities and starting a business from other fields.

When women are in charge of the AFFrinnovation sector, their ability to pay attention to details, handle matters with feminine perspectives and use ideas unique to women are advantageous to them.

Changes in the conclusion status of Family Business Agreements

- The number of households that concluded Family Business Agreements increased more than tenfold, from 5,335 in 1996 to 58,182 in 2019. The increase was triggered mainly due to the joint application for the plan for improving agricultural management and enrollment in the farmer annuity.

- The number of businesses started by individuals has been on the rise, with cases of people becoming independent from their groups after finding business opportunities and starting a business from other fields.

- Women’s participation was supported by the fact that the target ratios of women to total agricultural committee members and agricultural cooperative directors were set in the 4th Basic Plan for Gender Equality formulated in 2015 and the revisions made to the Act on Agricultural Commission, etc., and Agricultural Cooperatives Act in 2016 included a provision stating that there shall be no significant differences in age and gender.

Further efforts should be promoted.
While the number of agricultural high school students is decreasing, the ratio of female students is increasing. This is due to reasons, such as offering a wide range of subjects related to professions that are popular among female students, for instance processing and sales, instead of just learning about cultivation technology.

In 2016, the *Nougyou-Joshi Project* (Campaign for women farmers to be more active in agricultural business by cooperation with various industries to tap women farmers’ knowledge and experiences) formed the Team *Hagukumi* which aims to add “farming” as a career option for young women. Through the collaboration between the programs offered by educational institutions, such as high schools and universities and the members of the *Nougyou-Joshi Project*, initiatives that lead to the increase of new farmers are promoted.

To achieve further empowerment - Issues surrounding women farmers and countermeasures

Creating an agricultural/rural environment where women can work and live pleasantly

The population of women in rural areas has decreased in recent years. Among them, a significant decrease was seen in the population of childrearing generations (aged 25 - 44) and also more in women than men.

In rural areas, housework and childrearing are still recognized to be a woman’s work, placing a heavier burden on women than men. Women workers engaged in agriculture, forestry and fisheries spent a total of 7 hours and 7 minutes per day on work, housework and childrearing, which was 1 hour 19 minutes longer than that of men engaged in agriculture, forestry and fisheries.

Due to the increased demand in the medical care/welfare fields, there is greater competition for securing a female labor force in rural areas. It is important to promptly promote initiatives to create an agricultural environment where women can work without stress.

Changes in gender ratio of high school students by subject

<table>
<thead>
<tr>
<th>Subject</th>
<th>Men FY1999</th>
<th>Women FY1999</th>
<th>Men FY2019</th>
<th>Women FY2019</th>
<th>Rate of change and percentage point difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General course</td>
<td>48.6</td>
<td>51.4</td>
<td>49.5</td>
<td>50.5</td>
<td>-12.1</td>
</tr>
<tr>
<td>Agricultural course</td>
<td>61.4</td>
<td>38.6</td>
<td>51.1</td>
<td>48.9</td>
<td>-21.7</td>
</tr>
<tr>
<td>Business course</td>
<td>33.8</td>
<td>66.2</td>
<td>37.2</td>
<td>62.8</td>
<td>-1.2</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on the School Basic Survey by MIC

Comparison of the time spent on work, housework and childrearing by gender and by occupation (2016) Weekly average

<table>
<thead>
<tr>
<th>Gender</th>
<th>Work (Agriculture, forestry and fisheries)</th>
<th>Housework</th>
<th>Childrearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>325</td>
<td>173</td>
<td>4</td>
</tr>
<tr>
<td>Women</td>
<td>246</td>
<td>124</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on the Basic Survey on Social Life by MIC

**Case study** A woman with no farming background taking over the management of a konnyaku producer (Gunma Prefecture)

In 2005, Haruna Endo became a new farmer by taking over the management of a konnyaku producer in her husband's hometown, Numata City, Gunma Prefecture. She also engaged in AFFinnovation and developed a konnyaku product (Chururin Balls) processed into round bite-size shapes that do not require pretreatment to remove harshness.

In addition to serving as a special lecturer at Kamata Women's High School, which is a partner school of the Team *Hagukumi* of the *Nougyou-Joshi Project*, she also contributes to educational activities for the next-generation, such as accepting internships from the prefectural farmer’s academy.
Women newcomers in agriculture tend to have concerns for the hard work of farming, cultivation technology, childrearing, etc.

To create an agricultural/rural environment where women can work and live pleasantly, it is necessary to change the mindset of people in rural areas and promote the understanding of the people regarding women playing an active role in agriculture.

Therefore, it is necessary to promote the conclusion of Family Business Agreements that clarify the division of roles, such as work, housework, childrearing and nursing care, joint application of the plan for improving agricultural management and strengthening connections between women farmers.

It is also necessary to promote the development of networks that support childrearing locally, utilization of external support services for farming, spread of agricultural machinery that is easy for women to work with, securing of training opportunities for agricultural management, including e-learning and improvement of the working environment of agricultural corporations.

Reflecting women's opinions in the formulation of regional agriculture policies

Towards the sustainable development of agriculture and rural areas, it is important to reflect the voices of women who have various perspectives as ordinary citizens, consumers and also farmers in the formulation of regional agriculture policies.

Therefore, it is necessary to promote the development of women farmers who will take the lead in regional agriculture, development of networks with consumers, etc., and participation of women in local discussions on people and farmland plans.

Concerns of women newcomers in agriculture (lifestyle)

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health concerns (hard work)</td>
<td>20 %</td>
</tr>
<tr>
<td>Unable to take a vacation easily</td>
<td>17 %</td>
</tr>
<tr>
<td>Children's education</td>
<td>9 %</td>
</tr>
</tbody>
</table>

Concerns of women newcomers in agriculture (management)

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income</td>
<td>19 %</td>
</tr>
<tr>
<td>Insufficient skills</td>
<td>18 %</td>
</tr>
<tr>
<td>Lack of capital investment funds</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Concerns of women newcomers in agriculture (lifestyle)

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health concerns (hard work)</td>
<td>20 %</td>
</tr>
<tr>
<td>Unable to take a vacation easily</td>
<td>17 %</td>
</tr>
<tr>
<td>Children's education</td>
<td>9 %</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on the Results of the Survey on Farming Situation of Newcomers in Agriculture (2017) by National Chamber of Agriculture/National Consultation Center for New Farmers

Case study: Sharing farm work and childrearing by concluding a Family Business Agreement (Mie Prefecture)

Keisuke Minami and his wife Emi in Ise City, Mie Prefecture, started farming as a couple in 2006 to produce strawberries. Around the time when their business was picking up, they concluded the Family Business Agreement considering the birth of their child and recommendation made by the extension advisor.

Concluding the agreement created an environment where they can always consult with each other and make decisions together. They now share the childrearing responsibilities and are building a business with an improved working environment, such as setting days off according to the lifestyle of their children, so that the entire family can live happily.

Case study: Countryside heroines who have achieved generational change (Kumamoto Prefecture)

Inakano Heroine Wakuwaku Network founded in 1994 has been engaged in providing an urban-rural network focused on women farmers and manufacturing of processed products, but found itself at the risk of dissolution due to the aging of its members. To address the issue, the first director, Yoko Yamazaki, proposed a generational change.

After changing its name to Heroines for Environment and Rural Support (HERS) in 2014, they made a new start under the new director, Eri Otsu, from Kumamoto Prefecture and active young women farmers under aged 40 as executives. Their efforts include disseminating information and accepting farm trainees to resolve the shortage of successors in farming.
The SDGs, international development goals to be achieved by the year 2030, were adopted at the 2015 United Nations Summit.

Agricultural sector and food industries are based on natural resources and the environment so that their activities may bring the new possibility of growth by guiding consumer behavior and investment from other sectors while taking initiatives to contribute to achieving SDGs.

Various activities are promoted by the public and private sectors based on the implementation guidelines. To disseminate sustainable production and consumption patterns, MAFF has established a Study Group for Sustainable Production and Consumption Patterns and published an interim report in March 2020.

From MDGs (Millennium Development Goals) to SDGs

The MDGs (Millennium Development Goals) were adopted at the United Nations Millennium Summit in 2000. MDGs are aimed at solving various issues in developing countries and have 8 goals regarding poverty, gender, etc.

In 2015, under the basic principle of “leaving no one behind”, SDGs were adopted as the goals that are universal to all countries including developed countries. SDGs consist of 17 goals and 169 targets.

Promotion of the implementation of SDGs through the public and private sectors

In December 2016, the SDGs Implementation Guiding Principles of Japan were decided. SDGs were reconstructed to eight issues that Japan needs to particularly focus on.

In December 2019, the SDGs Implementation Guiding Principles was revised, which identified the next generation of youth as a key player to achieve goals and set a policy to strengthen awareness and education.

Efforts in the food, agriculture and rural areas

In the fields of food, agriculture and rural areas, it is necessary to actively promote environmentally friendly production activities and also promote sustainable consumption and sustainable community development. Therefore, measures to support these efforts are developed.

NPOs, private companies, consumers, local governments, cooperatives, etc., are also important partners for implementing the SDGs.

Efforts of SDGs that start from rural areas

Among the 17 goals of the SDGs, those that are closely related to “environment” are the base of other goals. Also, efforts using various "technologies" are ongoing to maintain and circulate the "environment" in an economically sustainable way.

From the perspectives of "environment", "technology" and "business model", leaflets are created to promote the efforts in rural areas for the SDGs.
(1) Realization of gender equality and a society where every person can play an active role and gender equality

- Promote shokuiku (food and nutrition education), such as the “Japanese dietary pattern” to achieve a healthy dietary pattern and support the foundation of a society where every person can play an active role.
- Promote environmental improvements, such as providing advanced cases and support measures for improving food access, etc.

(2) Achievement of good health and longevity

- While the number of starving people in the world is growing, support the global expansion of nutrition improvement business of domestic food business operators, etc., to solve the problems of malnutrition in developing countries, etc.

(3) Creating growth markets, revitalization of rural areas, and promoting science technology and innovation

- Launch the Smart Agriculture Demonstration Project to accelerate the nationwide deployment of smart agriculture utilizing advanced technologies, such as robots, AI and IoT.
- Towards the transformation of agriculture to a growth industry, promote full utilization of paddy fields and infrastructure development for creation of multipurpose paddy fields and upland fields to support conversion to highly profitable crops, etc.
- Promote the securing and developing of newcomers in agriculture as the human resources that will lead the agriculture, forestry and fisheries industries.
- To improve the safety of agricultural, forestry and fisheries products and foods, conduct surveys on the actual conditions of hazardous chemical substances and microorganisms and studies to obtain scientific knowledge.
- To revitalize regions including rural areas, promote the development of regional systems that can implement countryside stays as a business and efforts for agriculture-welfare collaboration.

<Case study> Cultivation of wine grapes in consideration of biodiversity (Nagano Prefecture)

- Mercian Corporation has developed 29 ha of wine vineyards by using idle farmland in Ueda City, Nagano Prefecture since 2003.
- Hedge-grown and vegetative vineyards have formed a vast grassland body and after an investigation, 168 species of insects including those that are rare, such as Benimonmadara (Zygaena niphona), and 258 species of plants were found to be inhabiting the vineyards.
- Working collaboratively with NPOs and volunteers, they are also engaged in activities to restore vegetation around the vineyards.
(4) Sustainable and resilient land use, promoting quality infrastructure

- Farmland and irrigation water are the basic resources for agricultural production. Promote farmland consolidation and intensification for business farmers, expansion of farmland partitions to secure and effectively use these resources.

- In preparation for natural disasters that are becoming more frequent and severe, promote disaster prevention/reduction measures in rural areas that appropriately combine tangible measures, such as enhancing structural longevity and seismic resistance of agricultural irrigation facilities and intangible measures, such as creation of hazard maps, etc.

(5) Energy conservation and renewable energy, disaster risk reduction and climate change countermeasures, sound material-cycle society

- Promote the introduction of renewable energy that is in harmony with agriculture, forestry and fisheries, such as farming-photovoltaics and biomass power generation utilizing resources in rural areas.

- Implement the assessment of the impact of climate change in the agriculture, forestry and fisheries fields and development of technologies to mitigate climate change, such as greenhouse gas reduction.

- To reduce food loss and waste, review business practices such as easing the delivery date requirements, promote sales such as meeting the demand for seasonal products, etc.

(6) Conservation of biodiversity, forests, and oceans, and other environments

- To promote sustainable agriculture, accelerate environmentally friendly agriculture, such as organic farming.

- To promote conservation of genetic resources, implement international cooperation activities, such as collection and preservation of overseas plant genetic resources.

- As the measures to address marine plastic waste, promote proper treatment and emission control of plastic containers and packaging for food and agricultural plastic waste, etc.

(7) Means and frameworks for the implementation of the SDGs

- Support developing countries in building their food value chains by dispatching Japan’s private-public missions to these countries and utilizing frameworks, such as bilateral policy dialog with these countries, etc.

To spread sustainable production and consumption patterns

- In November 2019, MAFF established a Study Group for Sustainable Production and Consumption Patterns and published an interim report in March 2020, which contained the establishment of a Sustainability Day and giving awards. Going forward, voluntary efforts by businesses and collaboration between businesses will be promoted by building a network of businesses, etc.

Japan’s tariff concessions are within the range of the past Economic Partnership Agreement including TPP (e.g., rice is excluded from tariff reductions). Achievements for export include the significant expansion of the low-tariff rate quota on beef.

To take advantage of export market expansion, thorough measures to strengthen the production base of Japan’s agriculture, forestry and fisheries industries and to promote the development of new markets are being implemented.

Overview of negotiations

- Negotiations for the Japan-U.S. Trade Agreement started in April 2019, reached an agreement at the Japan-U.S. summit on September 25 and the two nations signed the Agreement on October 7.

Agreement details

Provisions related to Japan’s tariffs

- Rice (rice in the husk, brown rice, milled rice, broken rice) as well as rice preparations are excluded from tariff reductions/eliminations.
- No new U.S.-specific quotas are accepted for items that are set with TPP-wide tariff rate quotas set in the TPP, such as skimmed milk powder and butter.
- Tariff reduction on beef imports is the same as in the TPP and the safeguard trigger level in FY2020 is set at a lower level than the actual import level from the U.S. in FY2018.

Provisions related to the U.S. tariffs

- Regarding beef, access to a low-tariff rate quota of 65,005 t is secured, which was the sum of the previous quota of 200 t for Japan and 64,805 t for other countries.
- Tariff reductions/eliminations are acquired for items that Japan has special interests to export (soy sauce, Japanese yams, cut flowers, persimmons, etc.).

Agreement details on major items (imports from the U.S.) (excerpt)

<table>
<thead>
<tr>
<th>Items</th>
<th>Agreement details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>- Rice and rice preparations are excluded from tariff reductions/eliminations. (also no U.S.-specific quota is established)</td>
</tr>
<tr>
<td>Wheat</td>
<td>- Markup is reduced by 45% as with TPP (maintain the current state trading system, out of quota tariff (55 yen/kg)). - U.S.-specific quota is established as with TPP.</td>
</tr>
<tr>
<td>Barley</td>
<td>- Markup is reduced by 45% as with the TPP (maintain the current state trading system, out of quota tariff (39 yen/kg)).</td>
</tr>
<tr>
<td>Beef</td>
<td>- Tariff on beef will be reduced to 9% with the same details as specified in the TPP and a long-term tariff reduction period is ensured with a safeguard. - The safeguard trigger level for FY2020 is 242,000 t. Thereafter, the level will be gradually expanded in the same way as specified in the TPP, rising to 293,000 t in FY2023. - From FY2023 onwards, if the TPP11 Agreement is revised, discussions will be made to shift to the TPP overall trigger level including imports from the U.S. and TPP11 signatory countries.</td>
</tr>
<tr>
<td>Pork</td>
<td>- With the same details as specified in the TPP, tariff on the ad valorem duty portion will be eliminated and tariff on the specific duty portion will be reduced to 50 yen/kg. The gate-price system and its gateprice (524 yen/kg) are maintained and a long-term tariff reduction period is ensured with a safeguard. - The safeguard ad valorem duty portion is the TPP overall trigger level including imports from the U.S. and TPP11 signatory countries. The level will be 90,000 t in FY2022 and thereafter, it will be gradually expanded in the same way as specified in the TPP, rising to 150,000 t in FY2027.</td>
</tr>
<tr>
<td>Skimmed milk powder/butter</td>
<td>- No new U.S.-specific quota is established.</td>
</tr>
<tr>
<td>Whey</td>
<td>- With the same details as specified in the TPP, a long-term tariff elimination period with a safeguard is ensured for whey (protein content of 25 - 45%, less than 25%), which is likely to compete with skimmed milk powder.</td>
</tr>
<tr>
<td>Cheese</td>
<td>- Same details as specified in the TPP - No U.S.-specific quota is established for fresh cheese used for the ingredient for shredded cheese.</td>
</tr>
</tbody>
</table>

Source: MAFF
**Effect of the Agreement**

- Japan-U.S. Trade Agreement came into effect on January 1, 2020.
- This consequently created a trade zone with a population of 450 million and a GDP of 25.5 trillion dollars, which is equivalent to 30% of the total world GDP.
- According to the Economic Impact Analysis by the Cabinet Secretariat, it is expected that the effect of the Japan-US Trade Agreement will push up the real GDP growth in Japan by about 0.8% (about 4 trillion yen), which will also increase labor supply by about 0.4% (about 280,000 people).

**Revision of the Comprehensive TPP-related Policy Principles**

- The conclusion of the Japan-U.S. Trade Agreement following the entry into force of TPP11 and the Japan-EU EPA has put Japan in a new international environment.
- The government provided a detailed explanation and information to the people and also revised the Comprehensive TPP-related Policy Principles in December 2019.
- The revised Principles included that MAFF will give consideration to motivated farmers, forestry and fishery workers who can demonstrate their creativity and originality to the fullest regardless of the size of their business and the type of environment they are in, such as hilly and mountainous areas; comprehensively promote the strengthening of production infrastructure that aims to increase the production/number of beef and dairy cattle farmed; establish a headquarters for exports.
- In the supplementary budget for FY2019, 325 billion yen was secured for competitiveness enhancement measures based on the revised Principles.
- In December 2019, MAFF published the estimated effects of the Japan-U.S. Trade Agreement on agriculture, forestry and fisheries production. MAFF estimated agriculture, forestry and fisheries production to decline by about 60 billion to 110 billion yen and about 120 billion to 200 billion yen when combining the effects of TPP11. MAFF expected that, while the production value would fall due to price drops accompanying tariff reductions, domestic measures would be taken to secure production and farm household income, with production volume being maintained.

**Overview of the Comprehensive TPP-related Policy Principles**

1. **Building strong agriculture, forestry and fisheries (competitiveness enhancement measures)**
   - Since the Principles were set out, various competitiveness enhancement measures have been implemented.
   - Nurturing business farmers who have an excellent business sense and who will be responsible for the next generation
   - Supporting a wide range of generations to be engaged in farming, expansion of farmland partitions/developing multipurpose farmland, measures for rice terrace/hilly and mountainous areas
   - Exploring demand frontiers including the export of high-quality agricultural, forestry and fisheries products
   - Establishment of a command tower for exports, creation of global production area
   - Promoting the innovation of internationally competitive production sites
   - The crop production base enhancement project, smart agriculture demonstration, nationwide land development
   - Promoting comprehensive projects to enhance the profitability of livestock and dairy farming
   - Stockbreeding cluster project, expansion of grassland partitions to support this, measures to increase the herd/production of beef cattle and dairy farm management
   - Enhancing the international competitiveness of wood products including plywood, lumber and structural laminated wood
   - Switching to sustainable, highly profitable business arrangements

2. **Preparations for stable business and supply (related to five major products)**
   - To secure business stability after the effect of the TPP, etc., the government will expand business stabilization measures upon the effect.
   - Rice (revising the management of public rice reserves)
   - Wheat/barley (implementing business income stabilization measures steadily)
   - Beef/pork, dairy products (enhancing livestock and dairy farming stability measures)
   - Sweetening resource crops (making sweetened prepared products subject to adjustment money collection)

3. **Promotion of intellectual property protection**
   - Geographical Indication (GI)
   - Protection of new varieties of plants/Japanese beef cattle genetic resources

Source: Prepared by MAFF based on data from the Japanese Government's TPP Headquarters, Cabinet Secretariat
1. Food self-sufficiency ratio and food self-sufficiency potential

- In FY2018, due to the decrease in the production of wheat, etc., caused by adverse weather conditions, the food self-sufficiency ratio on a calorie basis decreased by 1 percentage point from the previous year to 37%, the lowest ever recorded. On a production value basis, the ratio stayed the same as the previous year at 66%.

- The food self-sufficiency potential indicator, which shows potential food production capacity, slipped below the estimated energy requirement level in rice/wheat-oriented cultivation and exceeded the levels in potato-oriented cultivation.

- To improve the food self-sufficiency ratio, it is necessary to strengthen the production base by promoting farmland consolidation and intensification for business farmers and recruiting new farmers, and promote consumption expansion, etc., of domestic agricultural products to consumers.

- Based on the Act on Promotion of Exports of Agricultural, Forestry and Fishery Products, the Headquarters for the Export of Agricultural, Forestry and Fishery Products and Food was established in April 2020 as a command tower for export promotion.

- At the end of FY2019, 2,801 companies had been registered to GFP, a community site opened for producers with export ambitions to exchange and share opinions with other producers and hold negotiations. Also, 29 production areas approved the GFP Global Production Plan that meets overseas needs and regulations.

- Due to the progress of the animal and plant quarantine talks, 6 countries/regions lifted their bans or relaxed their quarantine requirements on 8 export items in FY2019, such as Thailand lifting its ban on Japanese pork exports.

2. Strategic exploration of global market

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

- Although falling short of its target of 1 trillion yen, Japan's agricultural, forestry and fisheries products and food exports in 2019 was 912.1 billion yen, making a record high for seven consecutive years. Particularly, beef exports rose significantly due to the increased popularity of Japanese beef cattle, etc.

- At the end of FY2019, 2,801 companies had been registered to GFP, a community site opened for producers with export ambitions to exchange and share opinions with other producers and hold negotiations. Also, 29 production areas approved the GFP Global Production Plan that meets overseas needs and regulations.

- Due to the progress of the animal and plant quarantine talks, 6 countries/regions lifted their bans or relaxed their quarantine requirements on 8 export items in FY2019, such as Thailand lifting its ban on Japanese pork exports.
Promotion of Japanese food/food culture overseas

- In 2019, the number of overseas Japanese food restaurants reached about 156.2 thousand, an almost threefold increase from 2013.
- At the end of FY2019, a total of 4,776 stores have been recognized as Japanese Food and Ingredient Supporter Stores Overseas that proactively use food products made in Japan, a total of 1,375 foreign chefs have obtained Certification of Cooking Skills for Japanese Cuisine in Foreign Countries and a total of 109 persons have been recognized as Japanese Cuisine Goodwill Ambassadors, who effectively disseminate the appeal of Japanese food and dietary culture in Japan and abroad.

Utilizing standards and certification

- As of the end of FY2018, a total of 5,341 entities have acquired GAP certification for agricultural products, an initiative in which farmers check and improve their production process.
- For the mandatory implementation of HACCP scheduled in 2021, creating a manual for introducing sanitary control in line with HACCP and other necessary preparations were supported. As for the Japan-originated JFS (Japan Food Safety) certification, the number of certified establishments increased to 845 as of the end of FY2019.

Protection of intellectual property

- Based on the GI (Geographical Indications) protection system, which protects locally unique product names as intellectual property, 19 new products were registered in FY2019, resulting in a total of 94 products, as of the end of FY2019.
- A working group on the protection of new plant varieties was held to examine measures to control protected varieties to be exported without authorization by the right holder. A revision bill for the Plant Variety Protection and Seed Act was submitted to the Diet.
- A study group on distribution management of the Japanese beef cattle genetic resources was established to examine measures to strengthen the production of the value of the Japanese beef cattle genetic resources as intellectual property. A revision bill for the Act for Improvement and Increased Production of Livestock for ensuring proper marketing of semen and fertilized ova for livestock artificial insemination and a bill to prevent unfair competition of livestock genetic resources for requesting an injunction against unfair competition of livestock genetic resources were submitted to the Diet.
Global food supply/demand trends

- Global grain production increased for the second straight year mainly due to a yield increase, while global grain consumption increased due to population and income growth, etc.
- In 2019, the global population was 7.71 billion, which is expected to rise to 9.74 billion in 2050.
- Uncertainties, such as climate change, are present in the production of agricultural products.

Establishing comprehensive food security

- It is necessary to secure a stable food supply based on increasing domestic agricultural production in combination with imports and stockpiles.
- Imports of agricultural, forestry and fisheries products and foods are on an upward trend due to a rise in import prices owing to a weaker yen. Aside from price fluctuations, they are on a long-term declining trend. This is due to the decreasing total amount of calories supplied based on the total population.
- In 2019, corn imports were 384.1 billion yen, a 3.2% increase from the previous year and beef imports were 385.1 billion yen, a 0.1% increase from the previous year. On the other hand, wheat imports were 160.6 billion yen, a 11.3% decrease from the previous year and soybean imports were 167.3 billion yen, a 1.6% decrease from the previous year.
- To secure stable supply of major agricultural products dependent on imports from overseas, efforts are made to maintain/strengthen positive relations with export countries and collect related information.

Agricultural products trade negotiations, maintaining/strengthening international relations

- As of the end of FY2019, Japan had put into effect or signed a total of 18 EPA/FTAs. Regional Comprehensive Economic Partnership (RCEP), etc. are still under negotiation.
- Taking advantage of the G20 Niigata Agriculture Ministers’ Meeting held in May 2019, bilateral talks were held. Requested elimination/relaxation of import restrictions.
5. Ensuring food safety and consumers’ confidence

Based on scientific evidence, MAFF develops and disseminates measures for preventing or reducing contamination in food at necessary stages throughout the food chain from production to consumption.

The Act for Partial Revision to the Fertilizer Regulation Act promulgated in December 2019 requires measures, such as introduction of a raw materials control system, to be taken from the perspective of safer use of fertilizer.

A procedure for handling agricultural, forestry and marine products and foods obtained by using genome editing technology has been established, which requires business operators, etc., to notify the relevant ministry prior to using such products. Then, the relevant ministry confirms the notification and publishes the information of the notified product.

Outline of the Act for Partial Revision to the Fertilizer Regulation Act

Key points of the revision

1. Introduction of a fertilizer raw materials control system
   - Clarify that can be used for fertilizer by establishing standards, etc.

2. Review of regulations on fertilizer mixture
   - It allows the production of fertilizers mixed with normal and special fertilizers and creates an environment where it is easy to work on labor saving and activities for soil improvement by simultaneous application.

3. Development of fertilizer labeling standards
   - In addition to the labeling for composition, etc., establish standards also for the labeling for the effect of fertilizer, etc.

4. Change of the title of the Act
   - The title of the Act was revised to Act on the Quality Control of Fertilizer.

Source: MAFF
6. Animal and plant quarantine

- The CSF (Classical Swine Fever) outbreak, which occurred in Japan in September 2018 for the first time in 26 years, has spread. As of the end of March 2020, 58 cases have occurred at farms in 8 prefectures.

- In addition to guidance on compliance with the Standards of Rearing Hygiene Management provided to farms, a new quarantine guideline was implemented in October 2019, which allowed giving prophylactic vaccinations to domestic pigs. Measures implemented to address the problem of wild boars, which are considered one of the transmission routes, include increasing the capture rate and establishment of a “vaccination belt” by spraying oral vaccines.

- In August 2018, ASF (African swine fever) occurred in China and spread to other Asian countries. ASF has no cure or prevention so that its spread can be a threat to the stable supply of livestock products. Therefore, strict border control has been implemented to prevent the entry of the virus in Japan. The Act on Domestic Animal Infectious Diseases Control revised in February 2020 allows for pre-emptive culling when an ASF outbreak occurs in Japan.

- In order to enhance measures against infection of wild animals, ensure the thorough implementation of rearing management at farms and strengthen import and export quarantine of livestock products, a bill to partially revise the Act on Domestic Animal Infectious Diseases Control was submitted to the Diet, which passed in March 2020.

- To prevent the entry/spread of plant diseases and pests in Japan, quarantine inspections on imported plants and emergency control of the entered pests have been implemented.

7. Trends of food industry

- In 2018, the food industry’s domestic production value was 99.9 trillion yen, a 0.6 trillion yen increase from the previous year.

- Compared to the previous year, the factory shipment value of seafoods, prepared foods, etc., increased in the food manufacturing industry, margin value of wholesale business increased in the distribution industry and sales of restaurants increased in eating and drinking services.
Food manufacturing is facing problems of a labor shortage and securing human resources. In July 2019, Vision for Tackling the Labor Shortage Problem in the Food Manufacturing Industry was compiled.

Japan’s food loss and waste is 6.12 million t per year. In October 2019, the Food Loss Reduction Promotion Act was entered into force, stipulating the responsibilities of the national government, local governments and business operators, the roles of consumers, etc. Also, in the basic policy of the Food Waste Recycling Law, a target to reduce the amount of business-related food loss and waste to half has been set.

Reviewing business practices is promoted, such as posting consumer enlightenment posters to reduce food loss and waste, easing the delivery date requirements by food retailers and displaying the expiry date in the year/month format by food manufacturers.

In May 2019, the government formulated the National Action Plan on Marine Plastic Litter and the Plastic Resource Recycling Strategy. The agriculture, forestry and fisheries and food industries have taken several measures, such as reducing volume by using thinner and lighter containers and packaging, and conducting research and development on easily recyclable materials and products.

8. Creation of new values through production, processing and distribution stages

Total sales from agricultural production-related initiatives, such as processing and farmers’ markets, in FY2018 were 2,104 billion yen, equivalent to the previous year.

According to a survey of business operators whose integrated business plans have been approved under the Act on Promotion of the "Sixth Industry" to Create New Value Added Using Agricultural Products In Rural Areas, nearly 80% of business operators saw increased sales but half of them saw decreased net profit. The main factors were an increase in the labor and depreciation costs associated with starting the business and an increase in expenses due to soaring prices of materials, etc.

To improve management, measures, such as the development of a support system by financial planners, are promoted.

*Vision for tackling the labor shortage problem in the food manufacturing industry*

**Direction of future measures (key points)**

1. Increase the motivation of employees.
2. Improve productivity by introducing IT/mechanical equipment.
3. Utilize diverse human resources.

**Amounts and locations of food loss and waste (FY2017 estimation)**

- Food manufacturing industry: 1.21 million t (19.8%)
- Food retail industry: 0.64 million t (10.5%)
- Food wholesale industry: 0.16 million t (2.6%)
- General household consumption: 2.84 million t (46.4%)
- Eating and drinking services: 1.27 million t (20.8%)
- Food manufacturing industry: 6.12 million t

**Total annual sales related to agricultural production**

<table>
<thead>
<tr>
<th>Year</th>
<th>Agricultural processing</th>
<th>Farmer's markets</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>18,175 billion yen</td>
<td>18,672 million yen</td>
<td>19,680 million yen</td>
<td>56,527 billion yen</td>
</tr>
<tr>
<td>2014</td>
<td>18,742 million yen</td>
<td>19,356 million yen</td>
<td>20,725 million yen</td>
<td>58,823 million yen</td>
</tr>
<tr>
<td>2015</td>
<td>19,974 million yen</td>
<td>19,880 million yen</td>
<td>21,044 million yen</td>
<td>61,908 million yen</td>
</tr>
<tr>
<td>2016</td>
<td>10,324 million yen</td>
<td>10,275 million yen</td>
<td>21,040 million yen</td>
<td>41,640 million yen</td>
</tr>
<tr>
<td>2017</td>
<td>10,790 million yen</td>
<td>21,044 million yen</td>
<td>21,040 million yen</td>
<td>62,884 million yen</td>
</tr>
<tr>
<td>2018</td>
<td>10,789 million yen</td>
<td>21,040 million yen</td>
<td>21,040 million yen</td>
<td>62,884 million yen</td>
</tr>
</tbody>
</table>

**Sales and net profit of approved business operators**

- 23% decrease in sales
- 49% increase in sales
- 51% decrease
- 77% increase in sales

Including net profit

Source: MAFF