## Chapter 1 Securing Stable Food Supplies

### 1. Food self-sufficiency ratio and food self-sufficiency potential indicator

- In FY2019, the food self-sufficiency ratio on a calorie supply basis increased by 1 percentage point from the previous year to 38%, mainly due to higher wheat yields. On a production value basis, the ratio remained the same as the previous year at 66%.

- To improve the food self-sufficiency ratio/potential, it is necessary to strengthen domestic production bases by fostering and securing business farmers, consolidating and intensifying farmland, increase consumption of domestic agricultural products and strengthen links between agriculture and the food industry, etc.

- To improve the food self-sufficiency ratio, which reflects the feed self-sufficiency ratio, it is necessary to improve both the food domestic production ratio (which reflects the activities of the livestock industry regardless of whether feed is produced domestically or imported) and the feed self-sufficiency ratio.

- With diversifying risk factors, such as the spread of COVID-19, there are growing expectations for increases in food self-sufficiency ratio and stronger food security.

- Food self-sufficiency potential indicators which show potential production are higher than the estimated energy requirement levels when the indicators are based on potato-based cultivation and lower when the indicators are based on rice and wheat-based cultivation.

### 2. Food consumption trends

- The ratio of pre-cooked food spending to total food spending increased for both two-or-more-person households and single-person households in 2019.

- More consumers answered "delicious" as the reason for purchasing frozen foods. This was a factor in the increase in expenditures on pre-cooked foods.

#### Changes in the breakdown of food consumption expenditure by household type

<table>
<thead>
<tr>
<th>(two-or-more-person households)</th>
<th>(single-person households)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2009</strong></td>
<td><strong>2019</strong></td>
</tr>
<tr>
<td>16.8%</td>
<td>16.9</td>
</tr>
<tr>
<td>11.5</td>
<td>13.8</td>
</tr>
<tr>
<td>18.1</td>
<td>17.7</td>
</tr>
<tr>
<td>31.1</td>
<td>28.3</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on MICs' “Family Income and Expenditure Survey”

#### Appeal of frozen foods (multiple answers)

<table>
<thead>
<tr>
<th>Appeal of frozen foods</th>
<th>2020</th>
<th>2017</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>No need to cook</td>
<td>63.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can be stored</td>
<td></td>
<td>57.6</td>
<td></td>
</tr>
<tr>
<td>Delicious</td>
<td></td>
<td>54.6</td>
<td></td>
</tr>
<tr>
<td>Saves time</td>
<td></td>
<td>52.6</td>
<td></td>
</tr>
<tr>
<td>Can use only what is needed</td>
<td>35.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on Survey on Actual Use of Frozen Food Products by the Japan Frozen Food Association

Note: Total calculated based on percentages of men and women, as only data of men and women were published in 2014.
3. Exploration of demand through the creation of new values

Creation of new value chains to meet demand
- Total annual sales of agricultural production-related businesses (the processing and direct sales efforts by farmers, etc.) totaled 2,077.3 billion yen in FY2019, down 26.8 billion yen from the previous year.
- To address the issues faced by agriculture, forestry, and fisheries businesses engaged in AFFrinnovation, the government has set up support centers for AFFrinnovation at the national and prefectural levels to provide advice and support for management improvement efforts.

Enhancement of competitiveness in the food industries
- The domestic food industry production value in 2019 was 101.5 trillion yen, up 1.0 trillion yen from the previous year.
- Compared to the previous year, increases included factory-shipped appetizers, sushi, boxed lunches, breads, etc. in the food manufacturing industry, margin value in the retail industry* in relevant distribution industries, and the sales at restaurants and bars in the eating and beverage services industry.

- Promote efforts to improve the productivity of the food industry by demonstrating the use of advanced technologies, including AI-based inspection equipment, and to streamline food distribution by linking product and logistics information data.

Addressing environmental issues such as food loss and waste
- Japan’s food loss and waste has been on a downward trend in recent years, and in FY2018, it was estimated to be 6 million tons per year, down 120,000 tons from the previous year.
- The Government of Japan has promoted the relaxation of delivery deadlines for food retailers and the easing of expiry date labeling (year/month format, and date batch format) for food manufacturers.
- The government has conducted a survey of food-related businesses regarding the amount of food loss and waste generated in general households due to the spread of COVID-19 after March 2020. As a result, about 60% of the food industry as a whole responded that there was no change, while by industry, about 70% of the eating and beverage services industry reported a decrease.
4. Strategic exploration of global market

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

- Due to the global spread of COVID-19, the export value of agricultural, forestry and fisheries products and foods decreased in the first half of 2020, compared to the same period in the previous year. However, the annual value was 921.7 billion yen, reaching a record high for the eighth consecutive year. The value of exports, including small value cargo, etc., was 986.0 billion yen.

- In April 2020, the government established the Headquarters for the Export of Agricultural, Forestry and Fishery Products and Food as a command tower for export promotion and formulated a basic policy and action plan to strategically and efficiently promote exports.

- Due to progress made in animal and plant quarantine consultations, the ban on exports or the quarantine requirements had been lifted for seven products from seven countries/regions in FY2020. This includes the abolition of the 30-month age limit on beef destined for Macao, making it possible to export top-quality, long-term fattened beef.

- Of the 54 countries/regions that introduced import restrictions and/or measures in the wake of the TEPCO Fukushima Daiichi nuclear power station accident, 39 countries/regions have removed their measures.

- As of the end of FY2020, there were 4,572 registrants for GFP*, which aims to support producers, etc. who are willing to engage in export and to promote cooperation among them. Also, 63 GFP global production areas that meet overseas needs and regulations were adopted.

*Abbreviation for Global Farmers / Fishermen / Foresters / Food Manufacturers Project.

Countries/regions and products for which the ban on exports is lifted or quarantine requirements are relaxed in FY2020

<table>
<thead>
<tr>
<th>Month</th>
<th>Destination country/region</th>
<th>Product</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>APR</td>
<td>USA</td>
<td>Pear</td>
<td>Expansion of production areas and removal of restrictions on certain varieties</td>
</tr>
<tr>
<td></td>
<td>Macau</td>
<td>Chicken meat</td>
<td>Lifting of export ban</td>
</tr>
<tr>
<td>MAY</td>
<td>Thailand</td>
<td>Citrus fruits</td>
<td>Elimination of joint export inspections in some production areas and field inspection of citrus disease (SOS)</td>
</tr>
<tr>
<td>JUN</td>
<td>Macau</td>
<td>Beef</td>
<td>Removal of the 30-month age limit</td>
</tr>
<tr>
<td></td>
<td>Saudi Arabia</td>
<td>Beef</td>
<td>Lifting of export ban</td>
</tr>
<tr>
<td>AUG</td>
<td>Australia</td>
<td>Strawberries</td>
<td>Lifting of export ban</td>
</tr>
<tr>
<td>OCT</td>
<td>EU</td>
<td>Black pine bonsai (including Nishiki-matsu bonsai)</td>
<td>Lifting of export ban</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>Meat products</td>
<td>Lifting of export ban on the use of raw materials imported from third countries</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF
**Promotion of Japanese food and ingredients**

- At the end of FY2019, a total of 6,069 stores had been recognized as Japanese Food and Ingredient Supporter Stores Overseas that proactively use food products made in Japan. A total of 1,719 foreign chefs had obtained their Certification of Cooking Skills for Japanese Cuisine in Foreign Countries and a total of 145 persons had been recognized as Japanese Cuisine Goodwill Ambassadors, who effectively disseminate the appeal of Japanese food and dietary culture in Japan and abroad.

**Intellectual property protection**

- Under the Geographical Indications (GI) Protection System, which protects the names of distinctive regional products as intellectual property, 12 new products were registered in FY2020, totaling 106 products.

- In October 2020, the Revised Act on Improvement and Increased Production of Livestock, which prevents improper distribution of livestock genetic resources, and the Act on Prevention of Unfair Competition on Genetic Resources of Livestock, which protects the value of wagyu genetic resources, came into effect.

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**Certification of Japanese food ingredients and Japanese food**

<table>
<thead>
<tr>
<th>Stores that support Japanese food products</th>
<th>Persons certified in cooking skills for Japanese cuisine</th>
<th>Goodwill Ambassadors for Japanese Cuisine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>700</td>
<td>173</td>
</tr>
<tr>
<td>Africa</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Asia</td>
<td>4,236</td>
<td>1,337</td>
</tr>
<tr>
<td>Middle East</td>
<td>69</td>
<td>7</td>
</tr>
<tr>
<td>Oceania</td>
<td>138</td>
<td>13</td>
</tr>
<tr>
<td>North America</td>
<td>603</td>
<td>137</td>
</tr>
<tr>
<td>Central and South America</td>
<td>323</td>
<td>46</td>
</tr>
<tr>
<td>Japan</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>6,069</td>
<td>1,719</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF  
Note: As of the end of 2020

**Product samples registered under the GI protection system in FY2020**

- Monobe Yuzu (Kami City, Kochi Prefecture)
- Fukuyama Kuwai (Fukuyama City, Hiroshima Prefecture)
- Toyama Hoshigaki (Nanto City, Toyama Prefecture)

Source: Prepared by MAFF

**Outline of the Revised Act on Improvement and Increased Production of Livestock and the Act on Prevention of Unfair Competition on Genetic Resources of Livestock**

- The Revised Act on Improvement and Increased Production of Livestock and the Act on Prevention of Unfair Competition on Genetic Resources of Livestock are designed to prevent the improper distribution of livestock genetic resources, explicitly prohibiting the storage and transfer of livestock genetic resources outside of livestock artificial insemination centers.
Efforts for local production for local consumption

- The total sales value of farmer's markets in FY2019 was 1,053.4 billion yen, down 2.4% from the previous year. The annual sales value of farmer's markets, operated by agricultural cooperatives, was 878 billion yen, accounting for 80% of the total.

Protection/transmission of Japanese food culture

- Information on 17 prefectures was added to the database "Our Regional Cuisines - Beloved tastes and flavors we want to pass on to the next generation" which contains information on the histories, origins, and recipes of regional cuisines selected by each region, thus providing information on 27 prefectures.

6. Promotion of shokuiku (food and nutrition education)

- In March 2021, the Fourth Basic Plan for the Promotion of shokuiku was established in light of the situation surrounding shokuiku, such as the health of the citizens, changes in the environment with regard to food and nutrition, and the digitization of society. This plan covers approximately five years, from FY2021 to FY2025.

- This plan focuses on the following three areas: (1) Promotion of shokuiku supporting lifetime physical and mental health, (2) Promotion of shokuiku supporting sustainable food and nutrition, and (3) Promotion of shokuiku in response to the "new normal" and digitalization.

- The government added a new target for the guidance on local products by diet and nutrition teachers. Also, more assignments of more diet and nutrition teachers will be promoted.

- The “Health Japan 21(the 2nd term)” and “200 grams of Fruits Every Day!” recommend consumption of 350g of vegetables and 200g of fruits respectively. However, these recommendations have not been met (actual figures were 280.5g for vegetables and 100.2g for fruits as of 2019). In order to increase the intake, it is important to both promote and raise awareness among consumers.
7. Ensuring food safety and consumer confidence taking international activities into consideration

- Based on scientific evidence, MAFF develops and disseminates measures for preventing and reducing chemical / microbiological hazards in food at necessary stages throughout the food chain from farm to table.

- The Food Labeling Standards were revised in March 2021 to enable the labeling of unpolished or polished rice to indicate the place of production, variety, and year of production, even if the rice has not been certified by Agricultural products inspection.

Example of food labeling for unpolished or polished rice after the revision of the Food Labeling Standards

<table>
<thead>
<tr>
<th>Raw unpolished rice</th>
<th>Place of production</th>
<th>Variety</th>
<th>Year of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single source rice</td>
<td>Single source rice</td>
<td>Single source rice</td>
<td></td>
</tr>
<tr>
<td>Niigata Prefecture</td>
<td>Niigata Prefecture</td>
<td>Niigata Prefecture</td>
<td></td>
</tr>
<tr>
<td>Koshi Hikari</td>
<td>Koshi Hikari</td>
<td>Koshi Hikari</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>2021</td>
<td>2021</td>
<td></td>
</tr>
</tbody>
</table>

- Example of measures to reduce chemical hazards in food

8. Strengthen measures for animal and plant quarantine

Avian influenza

- In November 2020, an outbreak of highly pathogenic avian influenza occurred in Kagawa Prefecture for the first time in about three years, and as of the end of March 2021, 52 cases had been confirmed on farms in 18 prefectures.

- SDF cooperated in the culling in affected farms in response to requests (28 times as of the end of March 2021).

- The government notified prefectures across the country to (1) conduct simultaneous checking for appropriate biosecurity management, (2) conduct simultaneous emergency disinfection nationwide, and (3) conduct emergency quarantine exercises.

- Detailed information was disseminated including leaflets with easy-to-understand explanations of the arrival statuses of wild birds and the seasonal nature of the virus.

Locations of avian influenza outbreaks

Sources:
- Prepared by MAFF, based on data from the Consumer Affairs Agency.
- Prepared by MAFF.
CSF (classical swine fever)

- The first outbreak of CSF in Japan in 26 years occurred in September 2018, with 63 cases reported in farms in 12 prefectures as of the end of March 2021.
- Based on the Specific Domestic Animal Infectious Disease Quarantine Guidelines for Classical Swine Fever (CSF), the government has designated 30 prefectures as recommended vaccination areas as of the end of March 2021.
- A revision of the Biosecurity Standards has been implemented, including mandatory measures to establish a manual of biosecurity management at each farm, to prevent wildlife from entering, and stricter heating standards for eco-feed.

In March 2020, the Act on Domestic Animal Infectious Diseases Control was partially revised for the purpose of preventing the introduction of transboundary animal diseases such as foot-and-mouth disease (FMD) and highly pathogenic avian influenza (HPAI) from overseas, both of which have enormous impacts on the livestock industry. The quarantine system was strengthened by increasing the number of animal quarantine officers and quarantine detector dogs.

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

Since June 2020, a number of detections of Oriental fruit flies (a serious threat to citrus fruit) have been reported in Kagoshima prefecture, etc. In response, MAFF, in cooperation with the prefectures, implemented control measures such as installations of plates that attract and kill male adults.
9. Establishing comprehensive food security in anticipation of food supply risks

Efforts to prepare for unexpected events in normal times

- In FY2020, the government conducted risk analyses and assessments of food security for three risk categories: large-scale natural disasters, extreme weather events, infectious diseases in livestock, and new infectious diseases such as COVID-19.
- In January 2021, "contagious disease epidemics" was added to the "Food Security Guideline in case of Emergency" as a risk affecting food supply.

Understanding and analyzing international food supply and demand

- The world grain production increased for the third consecutive year, mainly due to growth in crop yields. Consumption increased due to population growth, higher income levels, etc.
- The world’s population is projected to grow from 7.8 billion in 2020 to 9.74 billion* by 2050. *Source: World Population Prospects 2019, United Nations
- It is necessary to take all possible measures to ensure food security based on the trends of international supply and demand due to the instability of global food supply and demand.

Securing a stable supply of imported grain and food

- Japan's agricultural imports in 2020 were 6,212.5 billion yen, year on year decrease of 5.8%.
- The government has maintained and strengthened good relations with import partner countries and collected relevant information in order to ensure the stable supply of the imported major agricultural products upon which Japan depends.

10. Status of international negotiations

- As of the end of FY2020, 21 EPAs/FTAs, etc. have been put into force or signed.
- In November 2020, the RCEP Agreement was signed, and in January 2021, the UK-Japan EPA came into effect.