FY2020

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

May 2021

MAFF
Ministry of Agriculture, Forestry and Fisheries
• The figures in the tables and charts are rounded off and may not exactly reflect actual totals.
• The maps in this report do not necessarily indicate Japan’s territories comprehensively.
• Icons used to indicate goals that are particularly relevant to food, agriculture, and rural areas are attached to show the relationship between them and the SDGs. (Not all of the relevant goals are indicated.)
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New strategies for exporting agricultural, forestry and fisheries products and foods

In December 2020, “The Strategy to Realize Export Expansion of Agricultural, Forestry, Fishery and Food Products” was decided at the Headquarters on Creating Dynamism through Agriculture, Forestry, and Fisheries and Local Communities.

Establishment of a market-in system to continuously produce and sell products of the quantity, price, quality, and standards demanded by overseas markets.

Planning and implementation of policies based on the following three basic concepts in the strategy.

【1st Strategy】
Establishing specific targets by product category in order to make the most of Japan’s strengths.

① Establish priority export items (27 items) and targets.
② Clarify target countries/regions, export targets and means.
③ Organize product groups and improve the government's support system overseas.

【2nd Strategy】
Encouraging agriculture, forestry, and fisheries businesses to take on the challenge of exporting with a market-in mindset

① Encourage the supply of funds to businesses that are engaged in export.
② Develop a list of export production areas and provide focused support for the formation of export production areas.
③ Utilize ports and airports, and develop export logistics centers, etc., in order to establish large-lot, high-quality, and efficient export logistics.

【3rd Strategy】
Overcoming obstacles to exports by transcending ministry boundaries and working together as one government

① Engage in government-wide efforts to ease or eliminate regulations under the Export Headquarters.
② Accelerate the development and certification of HACCP facilities, etc. that meet the needs and adhere to export destination regulations.
③ Enhance measures to prevent the outflow of intellectual property in order to protect Japan’s advantages, etc.

Establish an "Export and International Affairs Bureau" (tentative name) in the Ministry of Agriculture, Forestry and Fisheries.

Strategy for Sustainable Food System
-Measures for achievement of Decarbonization And Resilience with Innovation (MeaDRI)

In order to achieve the SDGs and carbon neutrality, it is urgent to transform food systems into more sustainable ones.

In March 2021, MAFF published an interim report (to be formulated by May 2021) of MeaDRI, a national strategy which will both strengthen the potential productivity and ensure sustainability.

Followings are addressed in the strategy,

Developing innovative technologies and implementing them enable achievement of zero CO2 emissions from agriculture, forestry and fisheries sectors.

Promoting behavior change and actions among stakeholders in the food systems, including farmers, consumers and business people.

Sharing the ideas of sustainable food systems with countries in Asian monsoon region and communicating on them in international fora (e.g., UN Food Systems Summit (September 2021))

Goals by 2050

- Zero CO2 emission from the agriculture, forestry and fisheries sectors.
- 50% reduction in risk-weighted use of chemical pesticides by dissemination of the Integrated Pest Management and newly-developed alternatives.
- 30% reduction in chemical fertilizer use.
- Increase in organic farming to 1 Mha. (equivalent to 25% of farmland.)
- At least 30% enhancement in productivity of food manufacturers(by 2030).
- Sustainable sourcing for import materials(by 2030).
- 90% and more superior varieties and F1 plus trees in forestry seedling.
- 100% of artificial seedling rates in aquaculture of Japanese eel, Pacific bluefin tuna, etc.

Source: Prepared by MAFF
**Topic 3**  
**FY2019 Smart Agriculture Demonstration Projects**

- The Smart Agriculture Demonstration Project was implemented in FY2019. The project aims to introduce smart agriculture using advanced technologies, such as robotics, AI and IoT at production sites, verify its management effects and disseminate the information.
- The interim report on the demonstration conducted in paddy field farming revealed the result of reducing work hours by the use of robot tractors, drones, etc.
- The “Smart Agriculture Promotion Comprehensive Package” was formulated in October 2020 in consideration of the issues identified through the project, defining the policy direction over the next five years (revised in February 2021).
- Various measures to reduce initial investment using agricultural support services (i.e., sharing services) will be promoted and information dissemination on the effects of introducing smart agriculture technologies will be enhanced.

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**Case study of results of the paddy farming demonstration**  
(Comparison of work hours per 10a with conventional farming methods)

<table>
<thead>
<tr>
<th></th>
<th>Conventional area</th>
<th>Introduced area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-scale paddy field farming</td>
<td>14.4 Hr/10a</td>
<td>12.5 Hr/10a</td>
</tr>
<tr>
<td>Paddy field farming in hilly and mountainous areas</td>
<td>14.7 Hr/10a</td>
<td>13.0 Hr/10a</td>
</tr>
<tr>
<td>Paddy field farming for export</td>
<td>6.1 Hr/10a</td>
<td>5.9 Hr/10a</td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF  
Note: Demonstration cases launched in FY2019

**Main Example of Smart agricultural technologies**

Collaborative work between an unmanned robot tractor and a manned tractor  
Pesticide spraying by drone

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**Topic 4**  
**Promotion of Digital Transformation in Agriculture and Food-Related Industries**

- In agriculture and food-related industries, efforts to transform their environment through the use of digital technologies are underway.
- Fewer than 20% of agricultural management entities utilize data-based agriculture at the moment.
- In rural areas, efforts to use digital technology for wildlife damage control countermeasures, agricultural infrastructure development, etc. are still in progress.
- In distribution and consumption sectors, utilizing digital technology is required to enable data sharing between upstream and downstream.
- In the food manufacturing and food service industries, various advanced technologies are expected to be utilized in various scenarios, such as automation by AI and robot technologies, in order to cope with labor shortages.
- In order to promote DX(*) in agriculture and food-related industries, a new policy blueprint for the use of digital technologies in the agricultural sector named the Conception and Projects for DX of Agriculture was set up in March 2021, the "Agricultural DX Concept" was put together to promote DX in agriculture and food-related industries.

* DX=Digital Transformation

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**<How nimaru Works>**

1. **Shipping contact**  
2. **Shipping data**  
3. **Invoice generation**  
4. **Shipping data**  
5. **Sales data**  
6. **Sales notifications**

The system makes possible easy completion of data exchanges (regarding arrival data and sales) and formulation of DX logistics onsite.  

Selling price data (stocking information)  
Automatic importing of arrival data  
Seamless and smooth exchange of data on agricultural production and sales between farmers and distributors through an SNS-based application

Source: kikitori Co., Ltd.
Response to avian influenza and CSF (Classical Swine Fever)

- In November 2020, an outbreak of highly pathogenic avian influenza occurred in Kagawa Prefecture (for the first time in three years) and as of the end of March 2021, 52 cases have been confirmed on farms in 18 prefectures. Approximately 9.87 million birds have been culled so far.
- Following the outbreak of avian influenza, the government notified prefectures across the country to (1) conduct simultaneous appropriate biosecurity management, (2) conduct simultaneous emergency disinfection nationwide, and (3) conduct emergency quarantine exercises.
- In FY2020, five cases of Classical Swine Fever (CSF) occurred on farms in five prefectures.
- Measures against Classical Swine Fever (CSF) include: (1) Ensure thorough biosecurity management, including the installation of protective fences on farms and raising the heating standards for eco-feed; (2) Take measures against ingress of wild boars by strengthening trapping efforts and spraying oral vaccines, and (3) Proactively vaccinate domestic pigs.

Countermeasures against outflow of seedling of new plant varieties

- New plant varieties bred in Japan represent important intellectual properties that will enhance further development of Japan’s agriculture. These varieties are highly valued in the foreign export market.
- In order to protect Japan’s brand abroad, the amended Plant Variety Protection and Seed Act took into effect, enabling holders of plant breeder’s right to restrict the export of their registered varieties outside Japan. It is expected that outflow of Japan’s excellent varieties will be controlled, and that the export strategy of Japan’s agricultural products by Japan’s new varieties will be promoted in the future.

Current status of Food Tech

- There has been a growing interest worldwide in "Food Tech," a new technology and business model that utilizes new technologies in the food sector in order to connect production, distribution, processing, food service, and consumption. Global investment in FoodTech is estimated to be over 2 trillion yen per year and has been rapidly increasing in recent years.
- In Japan, start-up and other companies carry out business development and R&D activities in fields such as meat alternatives, health and nutrition-oriented food products, cooking robots (as a response to labor shortages as well as individual preferences) and the production of foods, feeds, and fertilizers, using insects, that contribute to the reduction of environmental impact.
- In October 2020, the FoodTech Public-Private Council was assembled. Through its activities, etc., they will promote the creation of new FoodTech markets that take advantage of Japan’s unique strengths in such areas as healthy, nutritious food, and insect-based feed and fertilizer production.
Impact on food consumption

<Impact on eating out>

- Since February 2020, school closures, consumer trepidation, and a decrease in inbound demand have had a significant impact on eating/drinking businesses and other related industries.

- Since March 2020, spending on food and beverage services has declined significantly from the previous year.

- Supplies of rice, pasta, and frozen foods were temporarily unavailable or in short supply at supermarkets; however, due to continued production by food manufacturers and holiday deliveries by distributors, a steady food supply was maintained.

- In 2020, the overall market for food and beverage services declined by 15% from the previous year – the largest drop since the survey began in 1994.

- Fast food, supported by demand for take-out and delivery, remained at a 3.7% decrease. On the other hand, with a 50% decline, pubs and izakaya (Japanese-style cafe bars) took a big hit.

- The state of emergency was reinstated in January 2021. As of the end of March 2021, the number of bankruptcies nationwide relating to the pandemic was highest for restaurants with 205 cases, and fifth highest for food wholesalers with 62 cases.

<table>
<thead>
<tr>
<th>Business type</th>
<th>No. of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Restaurants/bars</td>
<td>205</td>
</tr>
<tr>
<td>2 Construction/engineering</td>
<td>110</td>
</tr>
<tr>
<td>3 Hotels/inns</td>
<td>86</td>
</tr>
<tr>
<td>4 Retail apparel</td>
<td>67</td>
</tr>
<tr>
<td>5 Food wholesalers</td>
<td>62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,237</strong></td>
</tr>
</tbody>
</table>

Source: Prepared by MAFF based on "Survey of Market Trends in Eating and Drinking Services" published by Teikoku Databank, Inc. on March 31, 2021

Note: Figures as of March 31, 2021
New movements toward the demand for agricultural products

- Due to increases in consumer usage, food and beverage providers have increased their business through take-out and delivery services.
- 10% of consumers said they would support domestic producers (who have lost sales channels) through “ethical consumption”.
- 30% of respondents in the food industry want to increase business through the use of domestic production areas. The reason given by 50% of respondents was that their customers are becoming more domestic product oriented. The reason cited by 70% of the respondents was price.
- Unused food meant for consumers was provided to “Children’s Cafeterias” through food banks.
- 19 countries, including Russia and other grain exporting countries, have imposed export restrictions due to the spread of COVID-19.
- In January 2021, the WTO informal ministerial meeting and other international meetings were held in which international cooperation was promoted for the purpose of avoiding impacts on food security to include proposals to suppress export restrictive measures and clarify disciplines of export restriction.
- Most countries that once implemented export controls have since lifted them. We will continue monitoring developments in each country to prevent the implementation of unfair export controls.
Impacts on market prices and sales channels

- The expansion in COVID-19 affected wholesale prices, etc., mainly for wagyu beef, seafood and flowering plants.
- Wholesale prices for wagyu beef sharply fell in April 2020. Prices have been on a recovery trend since May.
- Due to a decline in demand for dairy products for school lunches and commercial use, the volume of raw milk processed into butter and powdered skimmed milk (products that are storable for longer periods of time) increased.
- Wholesale market prices of cut flowers decreased from March to May 2020. These prices recovered after June due to increased household demand and other factors, but declined again after the state of emergency was issued in January.
- The volume of rice sold has decreased since April 2020, mainly due to home meal replacement (HMR)/eating out.

In the July 2020 survey, half of farmers said their sales were negatively affected (the figure rose to over 60% in the January 2021 survey). The most common reason was a decline in per unit and market prices, followed by shrinking existing sales channels and closures of directly managed facilities, etc.
Movements to maintain and expand sales channels

- Producers and tourist farms have maintained and expanded their sales channels by using online to sell directly to consumers and changing their sales channels from eating out service to retail and processing.
- Agricultural, forestry and fisheries products and foods export value trended downward until June 2020, but have increased year-to-year since July. Eggs and grapes, mainly for home consumption, have increased.

Impact due to entry restrictions

- Restrictions on the entry of foreign nationals have significantly reduced the number of foreigners who planned to come to Japan from April 2020.
- Despite concerns about the impact of human resource shortages on the agricultural sector, the government responded by securing alternative human resources from other industries.

Movements to secure labor force

- Efforts have been implemented including securing labor through matching with other industries such as accommodation, addressing labor shortages through agriculture-welfare collaboration and the introduction of smart agricultural machinery.

New movements of interest in rural areas, ways of working, and interaction

Growing interest in rural areas

- Interest in rural areas has increased as telework and other location-independent work styles have developed during the pandemic.
- The number of inquiry about workation has increased in countryside stay regions nationwide.

Survey of “workation” requirements in countryside stay regions

(Inquiries since the COVID-19 outbreak)

<table>
<thead>
<tr>
<th>Activity</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microtourism</td>
<td>84</td>
<td>132</td>
</tr>
<tr>
<td>House rentals</td>
<td>78</td>
<td>77</td>
</tr>
<tr>
<td>Educational travel</td>
<td>49</td>
<td>34</td>
</tr>
<tr>
<td>Individual teleworking</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Corporate teleworking</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Online lodging and experience</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Sports/cultural use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office relocation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooks/chefs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomodation for other industry workers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Future targets for countryside stay regions)

<table>
<thead>
<tr>
<th>Activity</th>
<th>345 districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microtourism</td>
<td>287</td>
</tr>
<tr>
<td>Workation</td>
<td>212</td>
</tr>
<tr>
<td>Educational travel</td>
<td>191</td>
</tr>
<tr>
<td>Urban businessmen</td>
<td>145</td>
</tr>
<tr>
<td>Cooks/chefs</td>
<td>118</td>
</tr>
<tr>
<td>Other industry workers</td>
<td>103</td>
</tr>
<tr>
<td>Sports/cultural groups</td>
<td>26</td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>

Prepared by MAFF
Note: Inquiries/requests since the outbreak of COVID-19, and the results of responses to questions about targets that should be considered in the future (multiple choice)
Movements regarding migration

- In May 2020, Tokyo experienced an excess of out-migration for the first time since the start of the survey, and this trend has continued since July.
- Urban residents living in the three major metropolitan areas have increased intents to move to rural areas – particularly among those in their 20s.
- Some municipalities held online immigration counseling events.

Increasing interest in agriculture and rural areas and movement of half-farmer, half-X

- Visitors to counseling sessions for those wishing to start farming in FY2020 have increased since September. This suggests growing interest in agriculture.
- Some municipalities have implemented efforts to expand “half-farmer, half-X” (working in other jobs while farming, i.e., farming and accommodation, farming and sake brewing, etc.) in the production field.
Response in the agriculture, forestry, fisheries, and food industries

The MAFF has implemented various measures in its emergency economic efforts, etc., from the perspective of ensuring a stable supply of food to the public in response to the pandemic.

Implementation of emergency economic measures, etc.

- Support for the continuation of management of agricultural, forestry, and fishery businesses.
  - Support livestock farmers to improve their management in order to cope with the decline in carcass prices and the increase in powdered skimmed milk and butter stocks.
  - Provide financial support to farmers who are actively engaged in the cultivation of highly profitable crops.
  - Support the business continuity and cash flow of agriculture, forestry, fishery and food-related businesses.
  - Support the switch from imported agricultural and livestock products to domestic products, and the development of systems for the continuous and stable supply of domestic agricultural and livestock products.

- Support agricultural, forestry, and fisheries businesses, etc. by promoting sales and increasing consumption of domestic agricultural, forestry, and fisheries products.
  - Call for increased consumption of milk and dairy products (Plus One Project).
  - Support and promote efforts to expand the use of flowers (Hana Ippai Project).
  - Promote efforts to sell and diversify sales channels for domestic agricultural, forestry, and fisheries products (including processed products such as sake and shochu).
  - Support efforts to maintain and promote the export of agricultural, forestry, fisheries, and food products.
  - Support efforts to provide unused food to Children's Cafeteria, etc. through food banks.
  - Support efforts to stimulate demand from restaurants and bars.
  - Support efforts to restore and expand demand for sake brewing rice (the raw material for sake).
Go To EAT Campaign

- In October 2020, the government launched the "Go To Eat Campaign" to support restaurants operating as well as agriculture, forestry, and fisheries businesses that supply food, while taking measures to prevent infection.
- (1) Premium meal coupons that can be used at registered restaurants and bars are issued, (2) Points that can be used at restaurants and bars in the future will be given to consumers who make reservations and visit them during the period via online restaurant reservation sites.

Support for securing a labor force for agricultural, forestry and fisheries workers, etc.
- Support for securing a labor force to alleviate shortages due to immigration restrictions, etc.

Prevention of the spread of infection and response to stable food supply

- Disseminate information to the public through websites, MAFF applications, SNS, etc.
- Request smooth distribution to food-related businesses in case of temporary shortages of food items.
- Support competent organizations to develop industry-specific guidelines for infection prevention, etc.

Future actions to be taken

- Risks affecting food supply, such as the spread of COVID-19, have become more diverse.
- Expectations for improving food self-sufficiency and strengthening food security have been increasing. The government will continue to work on reducing the impact of diseases, closely monitor the statuses of outbreaks and take necessary measures.