Chapter 1 Trends in the Supply-Demand and Consumption of Fish and Fishery Products in Japan

(1) Supply-Demand Situation in Fish and Fishery Products

The supply of fish and fishery products for domestic consumption was estimated at 7.24 million tons for FY2019 (converted on a fresh fish basis, estimates), of which 5.68 million tons (78%) were for human consumption (food) and 1.56 million tons (22%) for feed and fertilizer (non-food).

The self-sufficiency rates (estimates) of fish and fishery products for human consumption for FY2019 decreased by 3 points from the previous year to 56%.

- **Japan’s Production and Consumption Structure of Fish and Fishery Products**

  - **In FY2019 (Estimates)**
    - Domestic production volume: 375 (Food: 315, Non-food: 60)
    - Export volume: 72 (Food: 69, Non-food: 3)
    - Supply for domestic consumption as non-food: 156
    - Total supply for domestic consumption: 421 (Food: 317, Non-food: 104)

- **Trends in self-sufficiency Rates of Fish and Fishery Products for Human Consumption**

  - Source: Food Balance Sheet (the Ministry of Agriculture, Forestry and Fisheries)

(2) Status of the Consumption of Fish and Fishery Products

### i. Trends in the Consumption of Fish and Fishery Products and Consumer Awareness

- The annual purchase volume of fresh fish and shellfish per household consistently decreased until 2019. In 2020 the annual purchase amount increased by 4% from the previous year to 23.9kg as a result of an increase of eating in and purchasing from supermarkets, etc., while eating out greatly decreased under the impact of the spread of the COVID-19. Expenditure for fresh fish and shellfish increased 5% from the previous year to 43,600 yen.

- In 2020 household expenditure for eating out recorded the largest decrease of 66% in April in comparison with the same month of the previous year, whereas expenditure for fish and shellfish recorded the largest increase of 10% in June.

- **Changes in annual expenditure and purchase volume of fresh fish and shellfish per household**

  - Source: Family Income and Expenditure Survey (Ministry of Internal Affairs and Communications)

  - **Percentage changes of monthly expenditure per household for eating out, fish and shellfish and cooked food over the year (2020)**

  - Source: Family Income and Expenditure Survey (Ministry of Internal Affairs and Communications)

Note: Households with two people or more.
ii. Health benefits of fish and fishery products

- Various studies have shown that the consumption of fish and fishery products has positive health benefits.
- Omega-3 polyunsaturated fatty acids including Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) contained abundantly in fish fat are expected to have health benefits, including promotion of brain development and prevention of dementia.
- Fish protein is not only a high quality protein containing a good balance of nine essential amino acids, which are necessary for human life, but it is also easily digested and taken in the body compared to soy protein and milk protein.

Column: Fishery products for baby food

The birth rate continues to decline in Japan, but sales of baby foods that help weaning are increasing. Because many parents feel that it is hard to prepare weaning hood, easy-to-use processed baby foods match their needs well. “Support Guide for Breast-feeding and Weaning” (Ministry of Health, Labour and Welfare, 2019) recommends white meat fish at the initial stage of weaning and red meat fish and blueback after progress is made with weaning as a guide. Some baby foods in the market use white meat fish, half-dried small sardine and salmon.

(3) Approaches to Ensuring Information Provision to Consumers and to Protecting Intellectual Property

- Food labeling has been mandatory under the Food Labeling Act and comprehensively and centrally implemented since 2015.
- In September 2017, the Food Labeling Standards were revised and it was made mandatory for each processed food product other than imported ones to have a label displaying the place of origin of its ingredient that accounts for the largest part of the food product in terms of weight (nori seaweed used for rice ball is subject to such labeling requirement irrespective of the proportion of nori seaweed to the rice ball weight).
- There are various Marine Eco-Labels in the world. In Japan, MEL issued by the Marine Eco-Label Japan Council (MEL Council) have become widespread. MEL received recognition from Global Sustainable Seafood Initiative (GSSI) in December 2019.
- As of the end of FY2020, 13 fishery products are registered with the Geographic Indication (GI) protection scheme (one product was added in FY2020).
(4) Trends in the Trade of Fish and Fishery Products

i. Import Trends in Fish and Fishery Products

- The import volume of fish and fishery products (on a product weight basis) decreased by 8.7% from the previous year to 2.25 million tons in 2020. The import value decreased by 15.9% from the previous year to 1,464.0 billion yen.

- Major import items in terms of value are salmons and trouts, skipjacks and tunas, shrimp.

![Trends in the Import Volume and Value of Fish and Fishery Products](image)

- Share in the total import volume of agricultural, forestry and fishery products: 16.5%

ii. Export Trends in Fish and Fishery Products

- The export volume of fish and fishery products (on a product weight basis) decreased by 0.9% from the previous year to 0.63 million tons in 2020. Export value of fishery products greatly decreased to 227.6 billion yen (21% down from the previous year due to the great decline in pearl export, etc. as a result of the spread of the COVID-19).

- Major export partners are Hong Kong, China, and the United States and the export value to these countries and regions accounts for about 50% of total exports.

- Major export items are scallop, mackerel, skipjacks and tunas, etc. in terms of export value.

- A new target for export of agricultural, forestry and fishery products and foodstuff to reach 5 trillion yen (including fishery products of 1.2 trillion yen) by 2030 was established in March.

![Trends in the Export Volume and Value of Fish and Fishery Products](image)

- Share in the total export value of agricultural, forestry and fishery products: 24.6%
Chapter 2 Trends in Japan’s Fisheries

(1) Trends in Fisheries and Aquaculture

The volume of domestic fisheries and aquaculture production was 4.20 million tons in 2019, which is lower by 220,000 tons than in the previous year. Marine fisheries production was 3.23 million tons, which was lower by 130,000 tons than in the previous year. The productions of scallops, Alaska pollacks, etc. increased, while those of mackerels, sauries, etc. decreased. Marine aquaculture production decreased by 90,000 tons to 0.92 million tons. Inland water fisheries and aquaculture production decreased by 4,000 tons to 53,000 tons.

The production value of domestic fisheries and aquaculture was 1,491.8 billion yen in 2019, which is lower by 73.3 billion yen than in the previous year. The production value of marine fisheries decreased by 69.5 billion yen to 868.4 billion yen, that of marine aquaculture decreased by 4.5 billion yen to 501.4 billion yen, and that of inland water fisheries and aquaculture increased by 0.7 billion yen to 122.0 billion yen.

Trends in the Production Volume and Value of Japan’s Fisheries and Aquaculture

<table>
<thead>
<tr>
<th>Production volume (1,000 tons)</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4,421</td>
<td>4,196</td>
</tr>
<tr>
<td>Marine</td>
<td>4,364</td>
<td>4,143</td>
</tr>
<tr>
<td>Fisheries</td>
<td>3,359</td>
<td>3,228</td>
</tr>
<tr>
<td>Distant water fishery</td>
<td>349</td>
<td>329</td>
</tr>
<tr>
<td>Offshore fishery</td>
<td>2,042</td>
<td>1,970</td>
</tr>
<tr>
<td>Coastal fishery</td>
<td>968</td>
<td>929</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>1,005</td>
<td>915</td>
</tr>
<tr>
<td>Inland water</td>
<td>57</td>
<td>53</td>
</tr>
<tr>
<td>Fisheries</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Fisheries and Aquaculture Production Statistics (the Ministry of Agriculture, Forestry and Fisheries)

<table>
<thead>
<tr>
<th>Production value (100 mil. yen)</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>15,651</td>
<td>14,918</td>
</tr>
<tr>
<td>Marine</td>
<td>14,438</td>
<td>13,698</td>
</tr>
<tr>
<td>Fisheries</td>
<td>9,379</td>
<td>8,684</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>5,060</td>
<td>5,014</td>
</tr>
<tr>
<td>Inland water</td>
<td>1,213</td>
<td>1,220</td>
</tr>
<tr>
<td>Fisheries</td>
<td>185</td>
<td>164</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>1,028</td>
<td>1,056</td>
</tr>
</tbody>
</table>

Source: Fisheries Output (the Ministry of Agriculture, Forestry and Fisheries)
Note: The fishery production value was obtained by adding the seedling production value to the fishery output (a value estimated by multiplying the production volume of fisheries and aquaculture by the wholesale prices in the landing area, etc.).

(2) Trends in Fishery Management

i. Trends in the Local Prices of Fish and Fishery Products

In recent years, the average local price in fisheries and aquaculture was on an upward trend. In 2019, it increased by 2 yen/kg from the previous price to 350 yen/kg.

Average Local Price in Fisheries and Aquaculture

Source: Prepared by the Fisheries Agency, based on the Fisheries and Aquaculture Production Statistics and the Gross Fisheries Output (the Ministry of Agriculture, Forestry and Fisheries)
Note: Estimated with the fisheries/aquaculture output divided by its production volume.

Impact of COVID-19 Seen from the Perspective of Fishery-related Businesses

A research group led by researchers of the Research Institute for Humanity and Nature, one of the National Institutes for the Humanities, Inter-University Research Institute Corporation, conducted an individual questionnaire survey of fishery/aquaculture workers and fishery-related business operators (fishery processing, distribution, retail, food service, etc.) from May 29 to July 8, 2020 (350 respondents).

Regarding the impact of the spread of the COVID-19, 85% of the fishery/aquaculture workers and 75% of the fishery-related business operators answered that it had a “negative impact”; sales amount decreased by 33% and 31% on average respectively from the same month of the previous year.
ii. Trends in Management of Fisheries by Fishing Vessels/Aquaculture

○The average fishing income of private management bodies of coastal fisheries using vessels in 2019 decreased by 180,000 yen to 1,690,000 yen. The business income including non-fishing income was 1,880,000 yen.

○Management bodies of companies that engage in fishing boat fisheries have been experiencing deficit in average fishery profit in FY2019. Operating profits, including non-fishery profit from fishery processing, posted a deficit of 7.25 million yen.

○Fuel oil prices, which were temporarily at the lowest level since 2016, have been rising since December 2020.

○The average fishing income of marine aquaculture households in 2019 decreased by 2.72 million yen to 4.91 million yen as compared to the previous year.

○Imported fish meal prices rose to about 2.6 times those of the 2005 level at the peak in April 2015. Subsequently, the prices have slightly leveled off.

○When the price of fuel oil or compound feeds rise, a subsidy is provided to the fisher from funds reserved in advance by the fishers and the national government, in order to mitigate the impact of the price rise.

iii. Seashore Revitalization Plan to boost incomes

○Under the “Seashore Revitalization Plan,” each district thinks about and implements measures to increase fishery income by more than 10% in five years. As of the end of March 2021, 579 districts are implementing their respective plans.

○In FY2015, the “Wide-Area Seashore Revitalization Plan” also started, in which efforts are made to enhance wide-range competitiveness. As of the end of March 2021, 156 districts are implementing their respective plans.

Case Example  “Seashore Revitalization Plan” Suits for Each Region’s Circumstances

Committee for Revival of Local Fisheries, Suzuka City Fishery Cooperative

Fisheries and fishery processing are flourishing on the coast of Suzuka city. The Committee has been working to stabilize production through an optimal combination of fisheries according to the season and increase value of catch through direct selling. As a result, fishery income increased over 10% in five years.

Committee to Revive Furubira/Shakotan Area Fishery

The committee has conducted a variety of activities with focus on sea urchin, including land culture toward stable production of sea urchin, fattening in the sea, experimental seaweed culture using sea urchin shells in cooperation with a university and other partners, and reclamation of seaweed beds. It also worked on branding of yellow tail caught by set net fishing has increased. As a result, fishery income increased over 10% in five years.

Experimental application of fertilizer using sea urchin shells

(Photo provided by East Shakotan Fishery Cooperative)
(3) Trends in Fishers

○ The number of fishery workers has been consistently declining, reaching 144,740 in 2019.
○ Since 2002 the Fisheries Agency has been providing support for new employees according to their situation so that even people without fishery experience can start and continue working in the industry. In addition, in order to address the shortage of fishing vessel crews, we supported fishing guidance for students of fisheries high schools.
○ In the fisheries with vessels of 20 tons or more, problems of aging and shortage of licensed mariners have become serious. From FY2019, it has become possible for graduates of fisheries high schools to shorten the amount of time (one year and nine months) required to have a history of embarkation in order to sit for the Grade IV mariner examination.
○ Women play a more important role in the work ashore after landing and in the fishery processing industry. The government supports the development of facilities for helping women’s activities, consisting of waiting rooms for children, test kitchens, etc.
○ Foreigners who meet the specific criteria regarding “Specified Skills” as qualification for stay are accepted in the fisheries and food and drink production fields (including fishery processing). Under the technical intern training program for foreigners, technical training is provided for 10 kinds of operations in fishery/aquaculture and 10 kinds of operations in fishery processing.
○ In 2020, most foreigners were refused entry due to the global spread of the COVID-19. As a result, intern positions became vacant in fishery and fishery processing management bodies that had planned to employ interns. To address this situation, the government took measures to support continued employment of foreign fishermen on distant water fishing vessels, while at the same time securing human resources from other industries and using exceptional measures for qualification for stay of former technical interns facing difficulty in continuing training.

(4) Trends in Fisheries Working Environment

○ In 2020, the number of fishing vessels involved in marine accidents was 494, and the number of dead and missing reported in those accidents was 24.
○ Excluding those related to marine accidents, 74 fishers fell overboard in 2020, of which 49 persons were dead or missing.
○ Life jackets are vital to saving the lives of those who fall overboard (approximately doubling the survival rate.) In 2018 and ahead, all persons on board, in principle, outside the cabin are required to wear life jackets. In 2020, the rate of wearing life jackets in the event of a fall overboard was approximately 50%.

Source: Prepared by the Japan Coast Guard
(5) Development and Utilization of Technologies for Promoting Smart Fisheries

- In order to transform the fisheries industry into a growth industry, it is important to introduce and disseminate ICT, AI and other technologies to the fisheries and aquaculture.
- Promoting technology development and demonstration toward field implementation of efficient initiatives using ICT/AI in the fields of stock assessment, fisheries/aquaculture and processing/distribution.

**Vision of Smart Fisheries in 2027**

- **Aims to realize** the next-generation fisheries achieving both sustainable use of fishery resources and transformation of fisheries into a growth industry by 2027 through smart technologies.

**MSY-based stock assessment using electronic data**
- Implement stock assessment of about 200 kinds of fishery resources based on electronic data
- Implement stock assessment based on MSY for fish species subject to TAC management in principle
- Efficiency improvement of operation management and creation of new businesses through utilization of obtained data by producers and private companies

**Automatic bonito fishing**
- Use new fisheries technologies to improve productivity and income and maintain workers
- Implement instruction and training of successors
- Promote data cooperation to create fisheries that use data to the fullest
- Enhancing the flow of information, including promotion of electronic commerce to eliminate unreasonable, wasteful or irregular practices and improve productivity
- Add value by using ICT to introduce high-freshness quick freezing, which enables consumption of sustainable-quality fishery products in remote places, and to strengthen the flow of information on freshness to consumers

(6) Trends in Fisheries Cooperatives

- A fisheries cooperative is an organization that plays a core role in contributing to stabilization and development of fishery management by business implementation such as sales, appropriately using and managing fisheries resources, and supporting regional economies and social activities in a fishing community.
- The number of fisheries cooperatives (in coastal areas) as of the end of March 2020 was 939.
- The number of fisheries cooperative members has been decreasing in line with a decline in the number of fishers. There are still many small-cooperatives. There is a need to strengthen the cooperatives' business and management foundation through merger, etc. and to further reinforce their sales business.
(7) Trends in the Distribution and Processing of Fish and Fishery Products

i. Trends in the Distribution of Fish and Fishery Products

- The number of wholesale markets in landing areas had been flat in recent years and that of wholesale markets in consuming areas decreased.

- Wholesales markets play a critical role in effectively distributing fish and fishery products. However, a challenge that wholesale markets in landing areas face is that many of such markets are small and in a weak position in terms of price formation. It is necessary to maintain and strengthen them through market abolition and consolidation, etc. For food distribution, it is important to respond precisely to the diverse needs of consumptive interests, etc.

ii. Role and Problems of the Fishery Processing Industry

- Fishery processing industry and fisheries are the two wheels that drive the marine product industry and contribute to the revitalization of fishing village communities.

- Due to the growing trend of simplification and externalization of diet among consumers in recent years, the importance of processing has increased in the consumption of fishery products. It is necessary to develop products that meet the diversifying consumer needs.

- Need for smooth intake of foreign human resources and personnel/labor saving using ICT and AI.

- In order to address the shortage of process materials due to poor catch of squid, saury, etc., it is necessary to build a production system that enables change of materials.

iii. Response to HACCP

- Food business operators including fishery processors are going to be required to carry out HACCP-based sanitary control etc. after June 2020. (Current standards will be applied as a transitional measure until the end of May 2021.)

- Fishery processing facilities, etc. need to implement the HACCP (Hazard Analysis Critical Control Point) system and to conform to related facilities criteria, as required by the export destination countries and regions, when exporting fish and fishery products to the United States, the EU, etc.

- Accordingly, the government supports the holding of seminars, etc. about general sanitary control and HACCP based sanitary control, and also supports the renovation, etc. of fishery processing and distribution facilities for acquiring the facility authorization required for export to the EU and the United States.

- As of the end of March 2021, in the fishery processing industry, etc., the number of facilities authorized to export to the EU is 91, and the number of facilities authorized to export to the United States is 501.

Trends in the Number of Facilities Authorized to Export to the EU/US in the Fishery Processing Industry, etc.

Source: Prepared by the Ministry of Agriculture, Forestry and Fisheries

Note: Data for central wholesale markets are the data at the end of every fiscal year but data for local wholesale markets are the data at the beginning of each fiscal year (up to FY2011) and at the end of each fiscal year (FY2012 or later).
(1) Fisheries Resources in the Waters around Japan

- For management of fishery resources, it is important to take appropriate measures on the two sides of stock status and fishing intensity based on the stock assessment.

- In FY2020, the fish species subject to stock assessment were expanded from 67 to 119, and the survey on these species was started.

- In FY2020 stock assessment based on MSY was expanded from 7 stocks of 4 fish species to 14 stocks of 8 fish species, with the following evaluation results:
  1. Both stock status and fishing intensity are appropriate: 3 stocks
  2. Stock status is appropriate, but fishing intensity is excessive: 1 stock
  3. Stock status is low, but fishing intensity is appropriate: 3 stocks
  4. Stock status is low, and fishing intensity is excessive: 7 stocks

- Among 73 stocks of 45 fish species for which stock assessment based on MSY was not implemented, stock status of 18 stocks was high, status of 17 stocks was medium and status of 38 stocks was low.

(2) Japan’s Fisheries Resource Management

i. Japan’s Fisheries Resource Management System

- Techniques for resource management are primarily classified into 1) input control, 2) technical control, and 3) output control. These methods are appropriately used and combined in Japan to properly manage resources, taking into account the characteristics of fisheries, the number of fishers, the status of targeted stocks, etc.

- Shellfish and algae harvesting, set net fishing, aquaculture, and inland water fisheries are managed under the fishery rights system. Offshore and distant fisheries are managed on the basis of a fishing permit system.

- The TAC system has so far covered eight fish species. Bluefin tuna is added as a new TAC species in 2018 within the framework of the international resource management.

(Reference)

Species under TAC: saury, Alaska pollack, Japanese jack mackerel, Japanese sardine, mackerel, snow crab, cuttlefish, bluefin tuna
ii. Promotion of Resource Management Based on the New Fishery Act

The new Fishery Act stipulates that national and prefectural governments have responsibilities to provide appropriate conservation and management of fisheries resources.

Fisheries resources shall be managed with a goal to achieve the Maximum Sustainable Yield (MSY) through TAC management basically.

For transformation of the fisheries industry into a growth industry, it is important to maintain, recover, and appropriately manage the resources. Internationally standard scientific stock assessments and effective management methods are introduced.

Flow of Resource Management

- **Research**
  - Collection of Catch and Landing Data
  - Survey by Research Vessels
  - Clarify Relationship between Marine Environment and Stock Dynamics
  - Strengthen collection of information on fishing operation/fishing ground environment

- **Stock Assessment**
  - Stock status
  - Fishing intensity
  - Kobe plot etc.

- **Management Objectives**
  - Explanation to stakeholders
  - Discussion with stakeholders

- **Harvest Control Rules (Catch Scenarios)**
  - Discussion with stakeholders

- **Fishing Operation (Data Collection)**
  - Information collection using ICT

iii. Development of a Road Map for Promotion of the New Resources Management

Prior to the enforcement of the new Fishery Act in December 2020, the “Roadmap for Promotion of New Resources Management” was decided and published in September 2020. The roadmap presents the specific route to build a new resource management system including the enhancement of scientific resource surveys and assessment and promotion of management with the total allowable catch (TAC) based on stock assessment.

The roadmap aims to recover fisheries production to 4.44 million tons by 2030 through the following measures: By the end of FY2023, 1) expanding the fisheries species subject to stock assessment to about 200 species; 2) putting 80% of fisheries production under TAC management; 3) introducing management based on IQ (individual quota) to minister-licensed fisheries, whose main targets are TAC species, in principle, and; 4) shifting the current voluntary resources management by fishermen (Resources Management Plans) to “Resources Management Agreements” based on the new Fisheries Act.
iv. Promotion and Expansion of Management Based on TAC under the New Fishery Act

Under the new TAC system based on the new Fisheries Act, fisheries resources subject to management based on TAC are defined as “Specified Fisheries Resources” in the Basic Policy of Resources Management that is decided by the Minister of Agriculture, Forestry and Fisheries.

For each Specified Fisheries Resource, the resource level that produces the maximum sustainable yield (Target Reference Point, TRP) and the level that prevents overfishing (Limit Reference Point, LRP) are set based on stock assessment. TAC is decided according to the harvest control rule (HCR, management scenario) that is determined beforehand to achieve the management goal. If the fisheries stock biomass is below the LRP, a rebuilding plan should be developed and implemented to recover the biomass to TRP.

The former TAC system and the new TAC system

v. IQ Management will be Gradually Introduced into Minister-licensed Fisheries as the Initial Step

For TAC management, the new Fishery Act basically adopted IQ that allocates a quota to each vessel, etc., as a basic method. The IQ management system under the new Fishery Act will be introduced to minister-licensed fisheries for which IQ-like management methods have been adopted or individual catch quota allocation has been implemented under the former legal system. By FY2023, IQ-based management will be introduced to Minister-licensed fisheries, mainly targeting TAC species in principle.

For coastal fisheries for which IQ-like management methods are currently adopted, such methods would be applied as a management measure under Resources Management Agreements, and TAC species should go under the IQ management system based on the new Fishery Act, depending on the species and regions.

vi. Shifting to Voluntary Resources Management under Resources Management Agreements based on the New Fishery Act

Since FY2011, a resources management system has been implemented where national and prefectural governments develop “Resources Management Guidelines” and the relevant fishermen groups create and implement their “Resources Management Plan” in line with the Guidelines.

With the aim of enhancing the effect of voluntary resources management by fishermen, the current “Resources Management Plans” based on the “Resources Management Guidelines” will be gradually shifted into “Resources Management Agreements” based on the new Fishery Act. Fishermen participating in a “Resources Management Agreement” will be supported by the “Measures to Stabilize Fishery Income.”
(3) Approaches to Practical, Effective Resource Management

i. Prevention of poaching and fishery control in coastal areas of Japan

The number of arrests for violation of fisheries laws and regulations stood at 1,556 in 2019 (1,498 in coastal waters and 58 in inland waters). The number of poachings conducted by non-fishers has increased. Especially poaching by organized criminal groups (Boryokudan) members has become more vicious and sophisticated.

Based on the new Fishery Act enforced on December 1, 2020, sea urchin, sea cucumber, etc. subject to heinous poaching are designated as “Specified Aquatic Animals and Plants,” and their gathering or catching is prohibited in principle, except for gathering or catching based on a fishery right or permission. A person who violates the prohibition is punished by imprisonment with work for not more than three years or to a fine of not more than thirty million yen: the same penal provision applies also to a person who transports, retains or acquires specified aquatic animals and plants knowing that they have been illegally gathered or caught.

ii. Introduction of the Act on Ensuring the Proper Domestic Distribution and Importation of Specified Aquatic Animals and Plants

In 2020, the Act on Ensuring the Proper Domestic Distribution and Importation of Specified Aquatic Animals and Plants was enacted with the aim of preventing mixing of illegally gathered or captured aquatic animals/plants into the distribution process. The act was promulgated in December of the same year. The act mandates notification by fishermen, etc. who handle specified aquatic animals and plants to the relevant administrative organ, communication of catch number and development and maintenance of transaction records.

The act is scheduled for enforcement within 2 years after the promulgation. Before the enforcement, designation of fish species subject to the act and digitalization will be discussed with consideration to reduction of the burden on related business operators.

Outline of strengthened punishment based on the new Fishery Act

<table>
<thead>
<tr>
<th>Violation of prohibition of gathering or catching</th>
<th>Fishing without license</th>
<th>Infringement of a fishery right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the revision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imprisonment with work for not more than three years</td>
<td>Imprisonment with work for not more than three years</td>
<td>Imprisonment with work for not more than three years</td>
</tr>
<tr>
<td>A fine of not more than two million yen</td>
<td>A fine of not more than two million yen</td>
<td>A fine of not more than two million yen</td>
</tr>
<tr>
<td>After the revision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imprisonment with work for not more than three years</td>
<td>Imprisonment with work for not more than three years</td>
<td>Imprisonment with work for not more than three years</td>
</tr>
<tr>
<td>A fine of not more than thirty million yen</td>
<td>A fine of not more than thirty million yen</td>
<td>A fine of not more than one million yen</td>
</tr>
</tbody>
</table>

Trends in the Number of Arrests for Violation of Fisheries Laws and Regulations in Japan's Marine Regions

Outline of the scheme of collecting and handling specified aquatic animals and plants

<table>
<thead>
<tr>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice (Notification number)</td>
</tr>
<tr>
<td>Issuance of certificate of lawful fishing, etc.</td>
</tr>
<tr>
<td>Setting business, etc.</td>
</tr>
<tr>
<td>Handling business operator (Primary purchaser, Processor/distributor, Dealer, etc.)</td>
</tr>
<tr>
<td>Fisherman or fisherman organization</td>
</tr>
<tr>
<td>MAFF (part of its authority is delegated to the prefecture)</td>
</tr>
<tr>
<td>Foreign country</td>
</tr>
<tr>
<td>Document confirmation by customs</td>
</tr>
<tr>
<td>Domestic distribution</td>
</tr>
<tr>
<td>Certificate of lawful gathering or capture</td>
</tr>
<tr>
<td>Certificate of lawful gathering or capture</td>
</tr>
<tr>
<td>Issuance of certificate</td>
</tr>
<tr>
<td>Attachment of certificate</td>
</tr>
<tr>
<td>Submission of necessary documents</td>
</tr>
<tr>
<td>Overseas business operator</td>
</tr>
<tr>
<td>Importer, etc.</td>
</tr>
<tr>
<td>Japan</td>
</tr>
</tbody>
</table>

*Retailers and restaurants are not subject to the obligation of notification.
ii. Monitoring and inspection of foreign fishing vessels

○ In 2020, the Fisheries Agency conducted one on-board inspection and captured one foreign fishing vessel and the number of confiscations of illegal fishing gear totaled 22.

○ Illegal cross-border fishing by Chinese and North Korean fishing vessels in waters around Yamato bank of the Sea of Japan obstructs safe operation by Japanese fishermen. The Fisheries Agency deploys fisheries inspection vessels including two large fisheries inspection vessels that went into service in March 2020 with focus on the waters and responds to violations in cooperation with the Japan Coast Guard. In 2020 the agency issued expulsion order to 4,394 Chinese and other fishing vessels in total.

Trends in the number of foreign fishing vessels captured or inspected, etc.

### Column

**Efforts of the Fisheries Agency to Strengthen Fisheries Inspection**

As of March 2020, the agency deployed 45 fisheries inspection vessels and 4 patrol aircrafts to control fishery activities around the clock. In FY2020 the agency completed new vessels for the first time in 55 years and replaced existing old vessels deployed to Sakaaiminato with the new vessels. Furthermore, completion of another new vessel and one replacement are scheduled in FY2021.

In May 2020, the agency implemented joint training of its fisheries inspection vessels with patrol vessels of the Japan Coast Guard off the port of Niigata. The training assumed an illegal operation by foreign fishing vessels in waters around Yamato bank. A patrol craft played the role of an illegal foreign vessel. Offshore joint training of this scale was unprecedented.

(4) Measures to Actively Enhance Fisheries Resources

○ Seed release is an effort to increase resources by releasing fish, etc. after rearing to a certain size. It is implemented covering about 70 species in various places led by prefectural fish farming centers and others. The government promotes such programs as the Resource-creating Farming Fisheries, in which part of adult fish are conserved for reproduction.

○ With the aim of increasing offshore living aquatic resources, the government is developing preservation and nursery artificial reefs by installing blocks to promote spawning and growth of queen crab, and mound reefs that increase productivity of the sea area through vertical mixing.

○ Inland water fisheries cooperatives, meanwhile, are working on programs to release sweetfish/eel seedlings and set up spawning beds.
(5) Trends in Fishing Ground Environment

i. Promotion of Preservation and Recovery of Seaweed Beds and Tidal Flats and Improvement of Fishing Ground Environment

- It is important to raise the productivity of the entire ecosystem by preserving seaweed beds and tidal flats and recovery of their functions. The national government will promote wide-area measures in which the creation of seaweed beds and tidal flats by local governments and the conservation activities of fishers and others are combined.

- The Act on Special Measures concerning Rejuvenation of Ariake Sea and Yatsushiro Sea was revised in March 2021 as legislation by Diet members. The act includes an increase of the national subsidy ratio for projects to preserve and improve the sea area environment with the aim of rejuvenating the Ariake Sea and Yatsushiro Sea.

- “Fishery ground improvement plan” was formulated that summarizes water quality targets and the amount of fish that can be appropriately cultured.

ii. Impact of Climate Change and Countermeasures / Plastic Litter in Ocean

- As mitigation strategies for climate change, the government promotes implementation of both Smart Fisheries using ICT and electric or hydrogen fuel cell fishing vessels to reduce greenhouse gas emissions. As adaption for climate change, development of aquaculture breeds with high temperature tolerance is also promoted.

- Marine plastic litter affects not only the environment and ecosystems, but also fisheries, such as contamination of fish catches. There are several measures made by the Fisheries Agency, for example, 1) to formulate “Guidelines for Promotion of Systematic Disposal of Fisheries Waste” in order to promote well-planned disposal of used fishing gear; 2) to consider development of fishing gear using environmentally friendly materials and for promotion of recycling; and 3) to promote bringing back of marine litter by fishers, etc.
Drafting of “Strategy for Sustainable Food Systems, MeaDRI” started in October 2020 to achieve both productivity improvement and sustainability of Japan's food, agriculture, forestry and fisheries industries. Its interim report was published in March 2021.

MAFF aims to achieve zero CO2 emissions in agriculture, forestry and fisheries by 2050 through development of innovative technologies and production systems and their application to the industries. This strategy includes the measures as well as reduction of CO2 emissions such as reducing the import, carbon and environmental burden of materials/energy; building a sustainable production system; establishing sustainable processing and distribution systems free of unreasonable and wasteful practices; expanding environmentally friendly sustainable consumption; and promoting food education.

The strategy also enhances the balance between measures of new fisheries resource management and transformation of fisheries and aquaculture into growth industries through appropriate fisheries resource management, sustainable aquaculture production systems and electrification by using fuel cells for fishing vessels without any burden on natural resources.

(6) Damage to Fisheries Caused by Wildlife and Mitigation Measures

• Reports have come out about damage to fisheries caused by wildlife such as steller sea lions and Ascidella aspersa. For wildlife that range/migrate across prefectural borders, for which broad-based measures are expected to be effective for damage prevention/reduction, the national government supports investigations on the occurrence status, the provision of related information, the development of technologies to reduce damage, and control activities, etc.

• Damage cost to fisheries caused by Steller sea lions was reduced by half from about 2 billion yen in FY2013 to about 1 billion yen in FY2019.

• The government is promoting control measures to address feeding damage by great cormorants and non-native fish such as largemouth bass in inland waters.
(1) Production of World Fisheries and Aquaculture

○ In the advanced countries and regions including EU, the United States, and Japan, etc., the capture fisheries production volumes have remained almost flat or have been on a declining trend. In contrast, the capture fisheries production volumes in the developing countries including China, Indonesia, Vietnam, etc. have increased.

○ By fish species, herring and sardine account for the largest part, at 18%. Tuna, skipjack bonito, striped marlin, and shrimp are on an increasing trend in the long term.

○ The aquaculture production significantly increases in China and Indonesia.

○ By fish species, carp/crucian carp and algae have the largest share and their increases is significant in recent years.

○ The ratio of world fisheries resources being exploited within biologically sustainable levels is on a gradually decreasing trend. In 2017, 66% of world fisheries resources were at biologically sustainable levels (world fisheries resources with enough room for production expansion were 6%), and 34% of the resources were at overfished levels.
(2) International Situation Surrounding the Trade of Fish and Fishery Products

- In WTO rule negotiations, discussions have been made about the establishment of disciplines on fisheries subsidies. Japan takes a stance of limiting prohibited subsidies to those which truly cause overcapacity and overfishing.

- The Japan-UK EPA became effective on January 1, 2021. Regarding the tariffs placed by Japan, the content of the Japan-EU EPA is maintained. Regarding the tariffs by UK, the content of the Japan-EU EPA that eliminated tariffs on major export-intended items is maintained.

- The RCEP, in which 15 countries including Japan, China, South Korea, ASEAN, Australia and New Zealand participate was signed on November 15, 2020. Tariffs by Japan were excluded from reduction/elimination for many items, including marine algae, horse mackerel and mackerel. Tariffs on scallop, yellowtail, salmon, etc. by China and on colored carp by South Korea are eliminated.

(3) International Resource Management

i. Trends in Tunas Regional Fisheries Management Organizations

- The global tunas and tuna-like species resources are managed by five regional fisheries management organizations (tRFMOs), and Japan is a member of all of the tRFMOs.

- The 2020 annual meeting of the Western and Central Pacific Fisheries Commission (WCPFC) adopted a one-year extension of the following measures for Pacific bluefin tuna, which was scheduled for expiration at the end of 2020: 1) increase of the upper limit of carry-over ratio of underused catch limit from 5% of the catch limit to 17%; and 2) allowing transfer of catch limit of smaller fish to that of larger fish.

- The 2020 annual meeting of the Inter-American Tropical Tuna Commission (IATTC) adopted a one-year extension of the current measures based on discussions at the joint task force of IATTC and WCPFC.

- The 2020 meeting of the International Commission for the Conservation of Atlantic Tunas (ICCAT) agreed to maintain the current TAC for Atlantic bluefin tuna (36,000 tons for East Atlantic resources and 2,350 tons for West Atlantic resources) also in 2021.

- The 2020 annual meeting of the Indian Ocean Tuna Commission (IOTC) agreed to continue the current resource management measures, including reduction of catch of yellowfin tuna. Considering the unimproved resource status of yellowfin, the commission agreed to hold a special meeting to discuss resource management of the species.

- The 2020 annual meeting of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) agreed to set Japan's annual catch quota for the period from 2021 to 2023 at 6,245 tons.
ii. Trends in Regional Fisheries Management Organizations for Pacific Saury, Chub Mackerel, etc.

○ In the high seas area in the North Pacific, the North Pacific Fisheries Commission (NPFC) manages fisheries resources, such as Pacific saury, chub mackerel, and North Pacific armorhead.

○ The NPFC annual meeting held in February 2021 agreed to set TAC of saury on the high seas at 198,000 tons for 2021 and 2022 (40% reduction from 330,000 tons in 2020) and that member countries shall reduce their TAC on the high seas by 40% from their respective catch in 2018.

iii. Developments Toward Eliminating IUU Fishing

○ Initiatives toward preventing, deterring and eliminating IUU fishing have been promoted internationally. For example, regional fisheries management organizations have established a list of fishing vessels with proper authorizations (positive list) and a list of fishing vessels and carriers that have engaged in IUU fishing* (negative list), and to prevent international distribution of catches harvested by IUU fishing through the use of the catch documentation scheme.

○ The Act on Ensuring the Proper Domestic Distribution and Importation of Specified Aquatic Animals and Plants that was promulgated in December 2020 requires attachment of certificates issued by a foreign government agency, etc. when importing fish and fishery products with high risk of IUU fishing.

*IUU fishing: Illegal, Unreported and Unregulated fishing

iv. Bilateral Relations in Fisheries

○ Relationship between the Japanese and Russian governments, fishing vessels of both the countries are operating under conditions decided through negotiations.

○ The Japanese and Korean governments have not reached agreement about operation conditions for mutual fishing access, etc., and therefore mutual consultations are still underway.

○ The Japanese and Chinese governments have not reached agreement about operation conditions for mutual fishing access, etc., and therefore mutual consultations are still underway. In order to prevent illegal cross-border fishing by Chinese and other fishing vessels around Yamato bank in the Sea of Japan, the Fisheries Agency deploys fisheries inspection vessels with focus on the waters and responds to violations in cooperation with the Japan Coast Guard.

○ Japan and Taiwan continue the operation rule of the previous year (2019).

○ Although the EEZs of the Pacific Island countries continue to serve as vital fishing grounds, the severity of fishing conditions continues to increase due to fishing fee hikes, establishment of marine protect areas, etc.
(4) Developments Concerning Whaling

- Japan withdrew from the International Convention for the Regulation of Whaling (ICRW) at the end of June 2019, under the basic policy of sustainable use of marine resources based on scientific evidence, and resumed commercial whaling of large whales (minke, sei and Bryde's whales) in July 2019.

- These whaling activities are conducted under the catch limit that is calculated in line with the method adopted by the International Whaling Commission (IWC) (Revised Management Procedure (RMP)).

- Scientific research on whales will continue after Japan’s withdrawal from the ICRW to contribute to the management of whale stocks based on scientific knowledge, in cooperation with international organizations such as the IWC.

- In October 2020, the “Basic Policy of Measures for Ensuring the Sustainable Use of Whales” was formulated based on the Act for Ensuring the Sustainable Use of Cetaceans. The policy includes the significance of conducting scientific whale research, calculation of catch limit and basic matters regarding support for whaling industry. Japan is taking necessary measures based on the policy.

Target species and catch quota of the whaling industry (large whales)

<table>
<thead>
<tr>
<th>Species</th>
<th>Estimated abundance</th>
<th>Catch limit</th>
<th>2019 (July-December)</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minke whale (Western North Pacific)</td>
<td>20,513</td>
<td>171</td>
<td>53</td>
<td>44</td>
<td>112</td>
</tr>
<tr>
<td>Bryde's whale (North Pacific)</td>
<td>34,473</td>
<td>187</td>
<td>187</td>
<td>187</td>
<td>187</td>
</tr>
<tr>
<td>Sei whale (North Pacific)</td>
<td>34,718</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: 1) Catch quota is set by subtracting the number of bycatch (5-year average) of set net and quota reserved by the Fisheries Agency from the catch limit.
2) During the period from April to June 2019, 79 minke whales were caught separately for Japanese scientific research program.

(5) Overseas Fishery Cooperation

- For the purpose of the promotion of the fisheries industry and fishing resource management, the Japanese government offers grant aid (for the construction of fisheries facilities, etc.) and technical cooperation (the dispatch of experts, etc.) to fishery sectors in countries that have important fishing grounds for Japanese fishing vessels and countries sharing the stance of sustainable use of marine living resources.

- For the stable operation of Japanese fishing vessels, the Japanese government supports private organizations’ cooperation which provides for the rehabilitation of fisheries facilities and the transfer or dissemination of fisheries technologies to coastal countries such as Pacific Island Countries.

- The Japanese government provides financial and technical assistance to the Southeast Asian Fisheries Development Center (SEAFDEC) in order to achieve sustainable fisheries in the Southeast Asia region.
Chapter 5 Development of Safe and Dynamic Fishing Communities

(1) Current Status and Role of Fishing Communities

- Many fishing communities are situated in advantageous locations for fishery production but are vulnerable to natural disasters (approx. 34% of communities located inland from fishing ports are in peninsular areas, and approx. 19% in isolated island areas). Population is rapidly aging and decreasing (the percentage of the elderly in communities located inland from fishing ports is 40%).

- Fisheries and fishing communities have multifunctional roles such as (i) conserving the natural environment, (ii) safeguarding the lives and property of the public, (iii) providing exchange opportunities and (iv) developing and maintaining local communities. Benefits from the multifunctional roles extend to the public.

- The government supported conservation of seaweed beds and tidal flats, maintenance, conservation, and improvement of inland water ecosystems, and efforts by fishers and others to contribute to the fulfillment of multifaceted functions such as marine rescue, border and water monitoring.

Multifunctional Roles of Fisheries and Fishing Communities

- Efforts to remove clam carcasses caused due to abnormal mass mortality, in order to prevent the degradation of tidal flat (Fukushima Pref.).
- Efforts to maintain and improve coastal marine beds, such as transplantsing kelp forests, shores and sowing clumps (Shikoku Pref.).
- Efforts to conserve coral reefs by transplanting coral and coral slivers (Dienawa Pref.).
- Functions Forming and Maintaining Local Society
- Functions Conserving the Natural Environment
- Functions Preventing and Mitigating Local Disaster
- Functions of Exchange Opportunities, etc.

Population and Percentage of the Elderly in Communities Located Inland from Fishing Ports

Source: Survey by the Fisheries Agency (population and percentage of the elderly in communities located inland from fishing ports); Ministry of Internal Affairs and Communications “Population Census” (percentage of the elderly in Japan of 2005, 2010 and 2015); “Population estimate” (percentage of the elderly in Japan of other years)

Note: The population of communities located inland from fishing ports and their percentages of the elderly (2011-2020) do not include data on three prefectures (Iwate, Miyagi and Fukushima)

(2) Development of Safe Fishing Communities Where People Can Live in Peace

- Fishing ports and fishing communities require both the improvement of disaster prevention capabilities and the promotion of disaster risk reduction measures. Multiple protection measures for fishing communities using breakwaters and seawalls, the construction of breakwaters and seawalls that are resistant to tsunamis, the preparation of evacuation routes, etc. have been promoted.

- In fishing villages, the development of living conditions lags behind. The development of fishing communities’ roads, drains, etc. has been promoted.

- Measures against the aging of infrastructures are a cross-departmental issue for the government. The government promotes measures to address obsolescence of infrastructure, including fishing port facilities, based on plans incorporating measures for preventive maintenance.
(3) Activation of Fishing Communities

In order to revitalize fishing villages, it is important to fully understand and make the most of their local resources to increase the number of visitors and promote interaction. For this purpose, about 1,500 exchange facilities, including stores for direct selling of fish and fishery products, have been developed in fishing ports and communities located inland from ports across the country. For the future, the perspective of sustainability will increase importance.

Using "Seaside Stay" where a visitor can enjoy the traditional life experience of a fishing village community and the exchange with local people in such community, the government supports the implementation of measures concerning contents, such as efforts to polish up community resources as attractive tourist contents, and measures for infrastructures, such as the arrangement of accommodation facilities by utilizing old folk houses, etc.

Thanks to the efforts of "Seashore Revitalization Plans" and the "Wide Area Seashore Revitalization Plans," the activation of fishing communities is expected to be accomplished through the promotion of fisheries.

Exchange facilities, including stores for direct sales of fish and fishery products in fishing ports and communities located inland from ports across the country

<table>
<thead>
<tr>
<th></th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of exchange facilities, including stores for direct selling of fish and fishery products</td>
<td>1,386</td>
<td>1,421</td>
<td>1,371</td>
<td>1,390</td>
<td>1,451</td>
</tr>
</tbody>
</table>

Source: Prepared by the Fisheries Agency
Chapter 6 Current State of Reconstruction That Have Passed 10 Years After the Great East Japan Earthquake

(1) Conditions of the Restoration/Reconstruction from the Earthquake Damage in the Fisheries Industry

- March 2021 marked ten years since the Great East Japan Earthquake. During the 10 years, fishing port facilities, fishing vessels, aquaculture facilities, fishing grounds and other facilities had been restored in the affected areas. The government will continue work to restore and reconstruct the fisheries industry of the affected areas.

- For fishing ports that serve as bases for the fisheries industry, high sanitary control freight handling areas, earthquake resistant piers, etc. have been developed.

- In the marine product processing industry, recovery of sales lags behind production capacity. The government will continue to support reconstruction of marine product processing businesses in the affected areas through tutorials for each process of processing and distribution, seminars and business meetings, development of processing equipment necessary for labor savings, diversification of materials and cultivation of the old and new markets.

Summary of Restoration of the Fisheries Industry Following Great East Japan Earthquake (as of March 2021)

1. Landings

   - The landing functions have recovered in all affected fishing ports.
   - Fishing port facilities mean piers, breakwaters, anchorages, roads, etc.
   - The number of affected fishing ports is the total number of seven prefectures.

2. Fishing Ports

   - Functional restoration status of landing piers in the 319 affected fishing ports (%): bars
   - Restoration status of the 2,852 affected fishing port facilities (%): line
   - More than 90% of fishery processing facilities wishing to resume operations.
   - In Iwate and Miyagi Prefectures, all 22 facilities have resumed operations.

3. Fishing Vessels

   - Systematically recovery of fishing vessels in Fukushima Prefecture which wanted resumption of fisheries
   - In Iwate and Miyagi Prefectures, recovery of fishing vessels for fishers who wanted the recovery finished by the end of 2015.
   - Since FY2016, focus has been placed on systematic recovery in Fukushima, where the reconstruction has been delayed due to the impact of the nuclear power plant accident.

4. Aquaculture

   - At all facilities willing to resume operations have been reconstructed by the end of 2017.
   - The number of affected facilities is the total number of 7 prefectures.

5. Processing and Distribution Facilities

   - More than 90% of fishery processing facilities wishing to resume operations have resumed operations.
   - Functional restoration status of fish markets in the 319 affected fishing ports (%): bars
   - Functional restoration status of landing piers in the 319 affected fishing ports (%): bars

6. Debris

   - Debris removal has been completed in most set net fishing grounds and fish farms where operations were affected by debris.

   - The number of debris removal sites is the total number of 2 prefectures.

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*Figures for each year are those as of the end of March (as of the end of January in 2021 only).
*2 Fishing season is March through August.
*3 Fishing season is September through the following May.
*4 Fishing season is April through the following March.
*5 Fishing season is June through August.

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**Establishing a New Company with Cooperation toward Reconstruction (Kesennuma Kanae Fisheries)**

In Kesennuma (Miyagi Prefecture) multiple companies engaged in inshore long-line fishery of tuna cooperated to make the fishery, which is one of the area's main industries, sustainable in the long term. Toward efficient fisheries, the companies worked on well-organized group operation and reduction of navigation days of eight fishing vessels of the area, cost reduction through blanket purchase of fishing gear and materials, for example. As a result, average navigation days were reduced by about 7 days from 34.5 days to 27.4 days in three years from April 2016 to April 2019, and fishing gear/material purchase cost is reduced by 4.8% compared with individual purchase.

For further streamlining of operations and maintenance of the fleet by constructing replacement vessels, the 6 cooperating companies established Kesennuma Kanae Fisheries in 2018. In 2019, the company constructed “Kanaemaru” with improved inboard ambience, including a Wi-Fi environment and enlarged cabins, in an effort to make the fishery attractive for young people.

**Working on New Product Development Positioning Reconstruction as its Second Start of Business (MORIYA Corporation)**

MORIYA, a marine product manufacturer in Kesennuma (Miyagi Prefecture) lost its head office and factory as they were swept away by the tsunami, but it embarked on a new initiative positioning reconstruction as the second start of business. Before the disaster the company’s main product was simply processed sliced fish. After the disaster, based on the president’s belief that “business is difficult with the profitability of simple processing” the company tried development of products with high added value and developed a product series name “Soft fish—even the bones are edible.” The series uses fresh fish that is landed on foreshore and cooked to make even the bones edible without sacrificing the original flavor and nutrients of the fish. Since the start of experimental selling, the product has been gaining new customers and increasing sales. The company is working to create products to respond to customer demand for small quantity, large variety and quick delivery, while at the same time introducing equipment. As a result of these efforts, the company’s sales as of the end of May 2019 recovered to about 60% of the before-disaster level. Moriya aims to export its products in the future.

**Cooperation of Processing Businesses Driven by the Earthquake (Ishinomaki Umaimono Corporation)**

Driven by the Great East Japan Earthquake, 10 processing businesses in Ishinomaki (Miyagi Prefecture) established the company “Ishinomaki Umaimono” with the aim of cooperation. The member businesses that are of different business categories and with different specialty fish species are increasing processing options while at the same time reducing expenses for plant investment by sharing knowledge, knowhow and processing equipment through cooperation. Ishinomaki Kinnka Chazuke, which focuses not only on taste but also on marketing including packaging to attract consumers’ attention, uses specialty fish species of the member businesses. The series has developed into a fast-selling product of the company.
(2) Response to the Impact of the Accident at TEPCO’s Fukushima Daiichi Nuclear Power Plant

i. Monitoring of Radioactive Materials in Fish and Fishery Products and Trial Fishing Operation/Selling off the Coast of Fukushima

- The government, in cooperation with prefectural governments and fisheries cooperatives concerned, implements monitoring of radioactive materials in fish and fishery products. Results of the monitoring are published.
- Distribution of fish and fishery products whose radioactive material monitoring results exceed the Japanese maximum levels in food (JMLs) is prevented through the cooperation of the national government, related prefectural governments, and fishery related organizations. Restriction of distribution was once lifted for all fishery products by the end of February 2020. However, restriction of shipment was imposed on black rockfish off Fukushima Prefecture because radioactive cesium exceeding JMLs was detected from one in February 2021.
- Trial fishing operation/selling was for coastal fishery and bottom trawl fishery off Fukushima Prefecture. It finished at the end of March 2021.

ii. Handling of ALPS* Treated Water

- In order to decide the government policy on the handling of ALPS-treated water, after receiving the report of the Subcommittee on Handling of the ALPS Treated Water in February 2020, the government is holding discussions with stakeholders broadly including agriculture, forestry and fisheries-related people, in Fukushima Prefecture.
- Listening to the opinions of stakeholders, the government is considering disposal methods that may attract less social concern, enhancement of environmental monitoring, and other countermeasures for reputational damage.
  *Advanced Liquid Processing System

Monitoring Results of Radioactive Materials in Fish and Fishery Products (as of the End of March 2021)

<table>
<thead>
<tr>
<th>&lt;Marine species from Fukushima Prefecture&gt;</th>
<th>&lt;Marine species from areas other than Fukushima Prefecture&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="" /></td>
<td><img src="image" alt="" /></td>
</tr>
</tbody>
</table>

iii. Mitigating Reputational Damage and Response to Import Restrictions in Foreign Countries and Regions

- Some consumers are still concerned about food from Fukushima Prefecture. Therefore, the Fisheries Agency monitors radioactive materials in fish/fishery products and publishes the results to consumers in a timely manner as well as posting a Q&A on its website so that consumers can get correct information and easily understand it.
- Results of the monitoring are published in English, Chinese and Korean. Survey results and measures taken to ensure safety are explained to governments and media to lobby for the relaxation or elimination of import restrictions. As a result, 40 countries among the 53 countries and regions that had continued to impose ban on fish and fishery product imports completely withdrew their import restrictions by the end of March 2021.
- The government will continue to take various opportunities to encourage countries and regions that are continuing import restriction to loosen or lift the restriction.
Structure of "FY2021 Fisheries Policy"

Overview
Focus of measures, fiscal measures, tax measures, financial measures, and policy assessment

I. Fishery Resource Management for Making Fisheries a Growth Industry
- Advancement of domestic resource management
- Promotion of international resource management
- Strengthening the fisheries regulatory system
- Income stabilization measures that contribute to stable business management of fishers engaging in appropriate resource management, etc.
- Conservation of the fishing ground environment and maintenance of the ecosystem

II. Reform of the Distribution Structure which Contributes to Increasing the Income of Fishers
- Establishing a competitive distribution structure
- Developing measures for processing, distribution, consumption, and export

III. Development of an Environment for Securing Leaders and Expanding Investments
- Steady conduct of Seashore Revitalization Plans and fostering of human resources
- Creating an environment for sustainable fisheries and aquaculture
- Demonstrating the roles and restructuring and improving of fisheries cooperatives organizations
- Supporting fishery management through appropriate loans, credit guarantees, and fisheries insurance systems

IV. Efforts to Support Revitalization of Fisheries and Fishing Communities
- Comprehensive development of fishing ports, fishing grounds, and fishing communities
- Promoting the demonstration of multifunctional roles
- Strategic promotion of research, studies, and technological development in the fisheries industry
- Strengthening safety measures for fisheries by fishing vessels

V. Reconstruction from the Great East Japan Earthquake
- Steady restoration and reconstruction
- Overcoming the impact of the nuclear power plant accident

VI. Requirements for the Comprehensive and Systematic Promotion of the Fisheries Policy
- Promoting measures in an efficient manner through coordination between relevant ministries and agencies
- Management and assessment of the progress of measures
- Implementing measures from a public point of view, taking into account the needs of consumers and the public
- Compiling and enhancing the use of statistics in line with policy needs
- Helping business owners and producers become independent and demonstrate originality and ingenuity
- Taking fiscal measures in an efficient and focused manner