Chapter 4 International Situation Surrounding the Fisheries Industry

(1) Production of World Fisheries and Aquaculture

○ The production volume of world fisheries and aquaculture has been on the increase. While fishery catches have remained flat, the global aquaculture production has been significantly increasing.
○ In developed countries and regions including the EU, the United States, and Japan, fishery catches have remained almost flat or seen a declining trend. In contrast, an increasing trend has been observed in developing countries including China, Indonesia, and Vietnam.
○ The aquaculture yield has been significantly increasing in China and Indonesia.
○ The ratio of world fisheries resources caught within sustainable levels declined to 65% in 2019, meaning that overfishing accounted for 35%.
(2) World Consumption of Fish and Fishery Products

The world’s annual per-capita consumption of fish and shellfish as food has nearly doubled in a half century, whereas Japan’s annual per-capita consumption of them has fallen to a level below the level of about 50 years ago.

(3) International Situation Surrounding the World Trade of Fish and Fishery Products

The trade volume of the world’s fish and fishery products has been on the increase due to advancement in distribution technology and the relocation of processing factories to countries with lower labor costs, among other factors. At least 30% of the world’s fisheries and aquaculture production volume is for export. The World Trade Organization (WTO) ministerial meeting held in June 2022 adopted the protocol of amendment to the WTO agreement inserting the Agreement on Fisheries Subsidies that provides for the ban on subsidies leading to IUU fishing and the general ban on subsidies that facilitate the depletion of those resources that have already been overfished.
(4) International Resource Management

i. Trends in Tuna Regional Fisheries Management Organizations

- Global tuna and tuna-like species resources are managed by five regional fisheries management organizations (RFMOs), and Japan is a member of all of them.
- As a result of the effort of the Western and Central Pacific Fisheries Commission (WCPFC) in Pacific bluefin tuna resource management since 2015, its spawning stock biomass has been on a recovery path.
- In the 2021 annual meeting, a 15% increase in the catch limit of Pacific bluefin tuna (large fish), which had been proposed by Japan, was adopted and has been applied since 2022.

ii. Trends in Regional Fisheries Management Organizations for Pacific Saury, Chub Mackerel, etc.

- The North Pacific Fisheries Commission (NPFC) manages fisheries resources on the high seas of the North Pacific, such as Pacific saury, chub mackerel, and North Pacific armorhead.
- The annual meeting held in March 2023 agreed to set a TAC of saury on the high seas at 150,000 tons for 2023 and 2024 (25% reduction from 2022).

iii. Developments Toward Eliminating IUU Fishing

- Regional fishery management organizations have been promoting initiatives toward preventing, deterring, and eliminating IUU fishing internationally, such as listing fishing vessels and carriers that engaged in IUU fishing and establishing a catch documentation scheme.
- Under the Act on Ensuring the Proper Domestic Distribution and Importation of Specified Aquatic Animals and Plants enforced in December 2022, the attachment of certificates, etc., issued by foreign government agencies has become mandatory when specified aquatic animals or plants are imported, for the sake of prevention of IUU fishing on an international scale.

Notes: 1) Currently, Japan is not a member of the SPRFMO or NEAFC. Japan withdrew from the GFCM in 2020.
2) The years in parentheses are the years in which the relevant treaties took effect.
iv. Bilateral Relations in Fisheries

○ Mutual fishing access between Japan and Korea has been suspended at present. Approaches are continuously taken to resolve the problem of Korean fishing vessels occupying certain fishing grounds in the provisional zone.

○ Mutual fishing access between Japan and China has been suspended at present. Approaches are continuously taken to resolve, among other problems, the problem of illegal fishing by Chinese fishing vessels in waters around the Yamato Bank in the Sea of Japan. Furthermore, in order to prevent illegal fishing in those waters, the Fisheries Agency deploys fisheries inspection vessels intensively in the waters and responds in cooperation with the Japan Coast Guard.

○ For the 2023 fishing season, Japan and Taiwan have provisionally applied the operation rule whose application has continued since the 2019 fishing season, and have agreed to consult with each other early on reviewing the rule.

○ In the EEZs of the Pacific Island countries, the severity of fishing conditions has increased due to fishing fee hikes, the local landing of catches, and the like. Efforts are being made to secure stable operations on overseas fishing grounds through overseas fishery cooperation, etc.

(5) Developments Concerning Whaling

○ Japan withdrew from the International Convention for the Regulation of Whaling (ICRW) at the end of June 2019 and resumed commercial whaling of large whales in July of the same year.

○ Necessary measures are being taken based on the “Basic Policy of Measures for Ensuring the Sustainable Use of Whales” formulated in October 2020.

○ Japan conducts scientific research on whales in cooperation with international organizations such as the International Whaling Commission (IWC), thereby contributing to the management of whale stocks based on scientific knowledge.

### Species Subject to Whaling, Catch Quotas, and Number Caught (2022)

<table>
<thead>
<tr>
<th></th>
<th>Mother-ship whaling</th>
<th>Shore-based whaling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bryde's whale</td>
<td>Sei whale</td>
</tr>
<tr>
<td>Catch quota</td>
<td>187</td>
<td>25</td>
</tr>
<tr>
<td>Number of whales</td>
<td>187</td>
<td>25</td>
</tr>
<tr>
<td>caught</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reserved by the</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fisheries Agency</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
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. The population is rapidly aging and decreasing, with the percentage of the elderly at 40.6%.
- The fisheries industry and fishing communities appropriately fulfill multifaceted functions such as conserving the natural environment, safeguarding the lives and property of the public, providing exchange opportunities, etc., and developing and maintaining local communities, which widely benefit the general public.
- The Fisheries Agency supports the conservation of seaweed beds and tidal flats, the maintenance, conservation, and improvement of inland water ecosystems, and efforts contributing to the appropriate fulfillment of multifaceted functions by fishers and others, such as marine rescue and border and water monitoring.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Percentage of Elderly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>121</td>
<td>21%</td>
</tr>
<tr>
<td>2007</td>
<td>123</td>
<td>22%</td>
</tr>
<tr>
<td>2012</td>
<td>125</td>
<td>23%</td>
</tr>
<tr>
<td>2017</td>
<td>127</td>
<td>24%</td>
</tr>
<tr>
<td>2022</td>
<td>129</td>
<td>25%</td>
</tr>
</tbody>
</table>

Multifaceted Functions of Fisheries and Fishing Communities

- To prepare for great damage potentially caused by large-scale earthquakes/tsunamis and increasingly severe and frequent natural disasters, it is necessary to promote advance disaster prevention/mitigation measures in fishing ports and fishing communities. The government has promoted, for example, multiple protective measures for fishing communities with breakwaters and seawalls and the construction of breakwaters with a highly durable structure and of evacuation routes.
- Since infrastructures such as fishing port facilities are aging, the government promotes measures to address those aging infrastructures based on plans that incorporate measures for preventive maintenance.
(3) Revitalization of Fishing Communities

○ In order to revitalize fishing communities, it is important to fully understand and make the most of their local resources.
○ The Basic Plan for Fisheries and the Long-term Plan for the Development of Fishing Ports and Fishing Grounds determined in March 2022 incorporate the concept of “UMIGYO,” which aims to revitalize regional economies with fisheries and fishing ports as the core of such revitalization. They seek to achieve their objective of securing income and employment opportunities in communities by making the utmost use of local resources and existing fishing port facilities to nurture and firmly establish “UMIGYO” such that it and the fisheries industry can mutually complement each other.
○ Vacant water areas and land in fishing ports resulted from the reorganization and consolidation of fishing port functions are utilized for “UMIGYO” activities such as aquaculture and factory-direct stores selling fishery products, thereby contributing to the revitalization of fishing communities.
○ In order to increase the number of visitors such as tourists and facilitate interactions with them, the initiative of “Nagisahaku (Seaside Stay),” in which tourists can enjoy the traditional life experience of the fishing community and interactions with people in the community, is supported.

Example of “UMIGYO” at Misaki Fishing Port

Misaki Fishing Port, Miura City, Kanagawa Prefecture

(Lef: Urari Producer-Direct Market Center Right: Miura Misaki Sea Station)

Eri (trap) seen from the sky

Crucian carp moving through the fish passage developed through the Fish Cradle Paddy Field Project

Column  Traditional Fisheries and Dietary Culture of Lake Biwa Area of Shiga Prefecture, a Global Agricultural Heritage

In the Lake Biwa area of Shiga Prefecture, people have since ancient times made use of the blessings of Lake Biwa through fisheries and paddy field farming. In eri (trap) fishing practiced in Lake Biwa, the restriction of the mesh size of fishing nets and the number of nets installed has been handed down from before the Edo era as a method of resource conservation. Lake fish caught through eri fishing, etc., form part of the culture of Lake Biwa, as, for example, they are used for traditional dishes such as funazushi, which are offered as ritual offerings.

In order to protect the spawning and breeding beds of round crucian carp, which is a basic ingredient of funazushi, and other species, fishers and farmers have made various efforts with consideration given to the water quality and ecosystem around Lake Biwa, such as the “Fish Cradle Paddy Field Project” under which efforts such as the installation of fish passages are carried out to conserve the yoshi reed zones and protect the paddy field environment that serves as the site of growth; the “Environment-Conscious Agricultural Practice” to reduce the usage of agrichemicals and chemical fertilizers to at least half of their ordinary usage; and activities to conserve the water source forest that has continued to exist since the Meiji era.

The mutual effect of such “ecosystem including fish” and “culture based on agriculture” has led the circulation-type system handed down over 1,000 years to be valued. As a result, on July 18, 2022, it was designated officially as a new globally important agricultural heritage system, recognized as the “Biwa Lake to land integrated s”
Chapter 6 Reconstruction from the Great East Japan Earthquake

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

- Since the Great East Japan Earthquake struck in March 2011, the restoration of fishing port facilities, fishing vessels, aquaculture facilities, fishing grounds and other facilities has been carried out in the affected areas. Fishery related infrastructures such as fishing port facilities and fishery processing facilities have mostly been restored in full.
- On the other hand, the recovery of the fishery processing industry’s sales remains an issue. The government continues to support initiatives such as the recovery/development of markets for the fishery processing industry.

Summary of Restoration/Reconstruction of the Fisheries Industry Following Great East Japan Earthquake (as of March 2023)

1. Landings

- The landing functions have been recovered in all affected fishing ports.

2. Fishing Ports

- Fishing port facilities mean piers, breakwaters, anchorages, roads, etc.
- The number of affected fishing ports is the total number for seven prefectures.

3. Fishing Vessels

- Fishing vessels in Fukushima Prefecture that want to resume operations will be systematically recovered in the future.

4. Aquaculture

- All aquaculture facilities wishing to resume operations had been reconstructed by the end of June 2017.

5. Processing and Distribution Facilities

- At least 90% of fishery processing facilities wishing to resume operations have resumed.

6. Debris

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

Chapter 6 Reconstruction from the Great East Japan Earthquake

(2) Fishing grounds affected by debris

- With respect to fishery processing facilities, the figures for 2013 through 2017 are those as of the end of December; the figures for 2018 are that as of the end of September; and the figures for 2019 through 2022 are those as of the end of December.
- With respect to wholesale markets in landing areas, the figure for 2013 is that as of the end of December; the figures for 2014 through 2019 are those as of the end of February of the respective following years; and the figure for 2020 is that as of the end of March of the following year.
- White and Miyagi prefectures, all 22 facilities have resumed operations.
- In Fukushima Prefecture, 4 out of 12 facilities were consolidated and all the remaining 6 facilities resumed operations.
- In Iwate and Miyagi prefectures, the recovery of fishing vessels for fisheries that wanted to resume operations was finished by the end of FY2015.
- Since FY2016, the focus has been on systematic recovery in Fukushima where the reconstruction has been delayed due to the impact of the nuclear power plant accident.

* The number of vessels for each year from 2012 (through 2021) is that as of the end of March. The number of vessels in 2022 is that as of the end of December. (Total number of 21 prefectures)

* The figures in parentheses are the numbers of fishing grounds with debris not affecting fishery operations.
(2) Response to the Impact of the Accident at TEPCO’s Fukushima Daiichi Nuclear Power Station

- The national government, in cooperation with relevant prefectural governments and fishery-related organizations, monitors radioactive materials in fish and fishery products in order to ensure the safety of such products.
- The results of radioactive material monitoring are published, and the distribution of those fish and fishery products whose monitoring results exceed the Japanese maximum levels in food (JMLs) is prevented through the cooperation of the national government and the relevant prefectural governments and organizations. In FY2022, the number of samples exceeding the JMLs was two in Fukushima Prefecture. Other than Fukushima Prefecture, there have been no marine species sample exceeding the JMLs since September 2014, and no freshwater species sample has exceeded the JMLs since FY2021.
- Since FY2022, new monitoring analysis has been conducted on fish and fishery products to inspect them for tritium. The results of this analysis have been lower than the detection limit, as was the case for past tritium concentration levels in seawater. Furthermore, in cooperation with the International Atomic Energy Agency (IAEA), efforts have been made to improve the reliability and transparency of data.
- With respect to the handling of water purified by multi-nuclides removal equipment (ALPS: Advanced Liquid Processing System) (hereinafter, “ALPS-treated water”), etc., the government formulated the Basic Policy on handling of ALPS treated water at TEPCO’s Fukushima Daiichi Nuclear Power Station, the Report on the Interim Measures for the Handling of ALPS Treated Water at TEPCO’s Fukushima Daiichi Nuclear Power Station, and an action plan in 2021. On the basis thereof, the government aims for full-scale reconstruction of the fisheries industry in the affected areas and makes unified efforts to develop an environment in which fishers across the country can engage in fisheries with a sense of security. This is to be done by making sure to take thorough measures at each stage of production, distribution, processing, and consumption.
- While concerns about food products produced in Fukushima Prefecture are fading, reputational damage has been caused from time to time. For that reason, the Fisheries Agency strives to provide correct and easy-to-understand information, for example, by publishing the latest monitoring results, Q & A on fish and fishery products and radioactive materials, etc., on its website.
- Monitoring results are published in English, Chinese, and Korean as information available to people abroad. As a result of encouraging the governments of various countries to lift import restrictions, 43 out of the 54 countries and regions that had imposed restrictions on fish and fishery product imports abolished their restrictions by the end of March 2023. The implementation of efforts for early elimination of restrictions will continue into the future.

### Monitoring Results of Radioactive Materials in Fish and Fishery Products (Radioactive Cesium)

**<Marine fish species from Fukushima Prefecture>**

- **2011:**
  - 0 countries/regions
- **2012:**
  - 3 countries/regions
- **2013:**
  - 13 countries/regions
- **2014:**
  - 8 countries/regions
- **2015:**
  - 7 countries/regions
- **2016:**
  - 0 countries/regions
- **2017:**
  - 0 countries/regions
- **2018:**
  - 0 countries/regions
- **2019:**
  - 0 countries/regions
- **2020:**
  - 0 countries/regions
- **2021:**
  - 0 countries/regions
- **2022:**
  - 0 countries/regions

**<Marine fish species from areas other than Fukushima Prefecture>**

- **2011:**
  - 13 countries/regions
- **2012:**
  - 13 countries/regions
- **2013:**
  - 13 countries/regions
- **2014:**
  - 13 countries/regions
- **2015:**
  - 13 countries/regions
- **2016:**
  - 13 countries/regions
- **2017:**
  - 13 countries/regions
- **2018:**
  - 13 countries/regions
- **2019:**
  - 13 countries/regions
- **2020:**
  - 13 countries/regions
- **2021:**
  - 13 countries/regions
- **2022:**
  - 13 countries/regions

*As of April 2021 for Lebanon and Brazil; as of June of the same year for the United States, the Republic of Korea, Mexico, and Chile; and as of August of the same year for Bolivia and Columbia.*

**Details on restrictions**

- **Applicable to all prefectures:**
  - 23 countries/regions
- **Applicable to some prefectures:**
  - 2 countries/regions
- **Applicable to items subject to shipment restrictions in Japan:**
  - 3 countries/regions
- **Applicable to items subject to shipment restrictions in Japan (including import suspension):**
  - 3 countries/regions
- **Applicable to some prefectures (excluding the above countries and regions):**
  - 32 countries/regions
- **Applicable to all prefectures (excluding the above countries and regions):**
  - 73 countries/regions

**Details on imports**

- **Applicable to all prefectures:**
  - 46 countries/regions
- **Applicable to some prefectures:**
  - 27 countries/regions
- **Applicable to items subject to shipment restrictions in Japan:**
  - 30 countries/regions
- **Applicable to items subject to shipment restrictions in Japan (including import suspension):**
  - 25 countries/regions
- **Applicable to some prefectures (excluding the above countries and regions):**
  - 70 countries/regions
- **Applicable to all prefectures (excluding the above countries and regions):**
  - 123 countries/regions

*The 27 EU countries and the UK were counted as one region since they imposed import restrictions as one entity after the accident. However, as the EU announced the relaxation of its restrictions, the EU and the UK came to adopt different regulatory measures between them from September 25, 2021. Accordingly, the UK was counted separately.*

**Enhanced inspection by the importing country**

- **Applicable to all prefectures:**
  - 3 countries/regions
- **Applicable to some prefectures:**
  - 3 countries/regions
- **Applicable to all prefectures (excluding the above countries and regions):**
  - 5 countries/regions
- **Applicable to some prefectures (excluding the above countries and regions):**
  - 5 countries/regions

*As of March 2023.*

**As of May 2021**

- **Number of countries/regions:**
  - 13 countries/regions
- **Number of prefectures:**
  - 9 prefectures

**As of March 2023**

- **Number of countries/regions:**
  - 31 countries/regions
- **Number of prefectures:**
  - 26 prefectures

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**Trends in the Relaxation/Abolition of Import Restrictions Imposed by Foreign Countries and Regions in Connection with the Nuclear Power Station Accident (Fish and Fishery Products)**

- In order to ensure the safety of such products, enhanced inspection by the importing country is required.
- In order to ensure the safety of such products, certificate is required.
- In order to ensure the safety of such products, inspection certificate is required.
- In order to ensure the safety of such products, inspection certificate is required.
<table>
<thead>
<tr>
<th>Sector</th>
<th>KPI</th>
<th>Status of progress (as of the end of 2022)</th>
<th>Plan, etc., in which the KPI is stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisheries</td>
<td>Aims to recover the production to the same level as 2010 (4.44 million tons) by 2030 (Reference: Production in 2018 was 3.31 million tons)</td>
<td>The production (excluding marine algae and marine mammals) in 2021 was 3.19 million tons, which was 72% of the goal.</td>
<td>Strategy for Sustainable Food Systems: MIDORI (formulated in May 2021), and Roadmap for Promoting the New Resource Management (decided in September 2020)</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>Aims to achieve an artificial production of juvenile fish rate of 100% for aquaculture of Japanese eel, bluefin tuna, etc., and to establish a sustainable aquaculture system without any burden on natural resources by switching all fish feed to formula feed by 2050.</td>
<td>The artificial production of juvenile fish rate (for Japanese eel, bluefin tuna, great amberjack, and yellowtail) in 2021 was 2.9%. The rate of formula feed in 2021 was 45%.</td>
<td>Strategy for Sustainable Food Systems: MIDORI</td>
</tr>
</tbody>
</table>
| Aquaculture                    | Aims to achieve the following production volumes for the strategic aquaculture items by 2030.  
- Yellowtail: 240,000 tons  
- Red seabream: 110,000 tons  
- Bluefin tuna: 20,000 tons  
- Salmon and trout: 30,000-40,000 tons  
- New fisheries species (groupers, etc.): 10,000-20,000 tons  
- Scallop: 210,000 tons  
(- Pearls (2027 goal): 20 billion yen) | The production volumes in 2021 were as follows (% indicates comparison with the goal).  
- Yellowtail: 130,000 tons (54%)  
- Red seabream: 70,000 tons (64%)  
- Bluefin tuna: 20,000 tons (100%)  
- Salmon and trout (coho salmon only): 20,000 tons (50%)  
- Scallop: 160,000 tons (76%)  
(- Pearls: 12.9 billion yen (64%)) | Comprehensive Strategy for the Transformation of Aquaculture Into a Growth Industry (formulated in July 2020, revised in July 2021) |
| Export                         | Aims to increase the export value of fish and fishery products to 0.6 trillion yen by 2025 and 1.2 trillion yen by 2030.  
(Of which the export value of the priority export items in 2030 would be:  
- Yellowtail: 160 billion yen  
- Red seabream: 60 billion yen  
- Scallop: 115 billion yen  
- Pearls: 47.2 billion yen) | The export value of fish and fishery products in 2022 was 387.3 billion yen, which was 32% of the 2030 goal. | The figures included in the goals for the export value of agricultural, forestry, and fishery products and food in the Basic Plan for Food, Agriculture and Rural Areas (decided by the Cabinet in March 2020) and the Basic Policy on Economic and Fiscal Management and Reform 2020/Follow-up on the Growth Strategy (decided by the Cabinet in July 2020); and the Comprehensive Strategy for the Transformation of Aquaculture into a Growth Industry |
| Overall fish and fishery products | FY2032 goals for the self-sufficiency rate of fish and fishery products:  
- Fish and shellfish for human consumption: 94%  
- Overall fish and shellfish: 76%  
- Marine algae: 72% | The self-sufficiency rate of fish and fishery products in FY2021 (estimates):  
- Fish and shellfish for human consumption: 59%  
- Overall fish and shellfish: 57%  
- Marine algae: 69% | Basic Plan for Fisheries (decided by the Cabinet in March 2022) |
| Overall fish and fishery products | Aims to establish technologies for the introduction of hydrogen fuel cells, etc., into fishing vessels by 2040. | Demonstration of fishing vessels using hydrogen fuel cells is planned in order to establish such technologies. | Strategy for Sustainable Food Systems: MIDORI |
Overview
- Focus of measures, fiscal measures, legislative measures, tax measures, financial measures, and policy assessment

I. Steady implementation of fisheries resource management, taking into account changes in marine environments
- Enhancement of research on resources and stock assessment
- Steady promotion of new resource management
- Enhancing fisheries enforcement and surveillance capability/poaching monitoring system
- Adaptation to changes in marine environments

II. Realization of transformation of fisheries into a growth industry, taking increasing risks into account
- Structural reform, etc., of maritime fisheries
- Transformation of aquaculture into a growth industry
- Business management stabilization measures
- Export expansion and development of fishing ports and fishing grounds to support transformation of fisheries into a growth industry
- Inland water fisheries/aquaculture
- Human resource development
- Work safety measures

III. Promotion of activation of fishing communities that support the region
- Seashore revitalization/activation
- Restoration/Strengthening of management foundation of fishery cooperative organizations
- Development of measures for processing, distribution, and consumption
- Fulfillment of multifaceted functions of fisheries and fishing communities
- Conservation of fishing ground environments and maintenance of ecosystems
- Measures for disaster prevention/mitigation and building national resilience

IV. Measures to be promoted in a cross-sectoral manner for sustainable development of fisheries
- Strategy for Sustainable Food Systems: MIDORI and fisheries policy
- Utilization of smart fishery technologies
- Carbon neutrality

V. Restoration/Reconstruction after the Great East Japan Earthquake and overcoming the impact of the nuclear power station accident
- Steady restoration/reconstruction in the earthquake/tsunami-affected areas
- Overcoming the impact of the nuclear power station accident in the nuclear disaster-affected areas

VI. Requirements for the comprehensive and systematic promotion of fisheries policies
- Efficiently promoting measures through collaboration among 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