FY2018 Trends in Fisheries
FY2019 Fisheries Policy
White Paper on Fisheries: Summary
This document is a report on fisheries trends and the policy implemented during FY2018 in accordance with the provisions of Article 10, paragraph (1) of the Fisheries Basic Act (Act No. 89 of 2001) as well as the fisheries policy to be implemented in FY2019 in accordance with the provisions of paragraph (2) of said Article.
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Note: The maps in this document do not necessarily inclusively show Japan’s territory.
Chapter 1 Reform of Fisheries Policies

- The Basic Plan for Fisheries formulated in 2017 clearly indicated that the government would continue to study necessary measures for vigorous enhancement of resource management through quantity control, etc. and transformation of the fisheries industry into a growth industry, including reviews of related laws.
- In June 2018, the agriculture, forestry and fisheries industry and regional vitality creation headquarters compiled a document entitled "Reform of Fisheries Policy," specifying the concrete content of reform of fisheries policies. Of the indicated reform items, necessary legislation was developed with regard to basic systems relating to fishery production, including resource management measures and fishery rights, as well as systems relating to fisheries cooperatives, etc., and was promulgated in December 2018.

Outline of the Act Partially Amending the Fishery Act, etc.

Purport

Fisheries have a mission to supply fish and fishery products to the people, but due to a decrease in fisheries resources and other factors, the production volume and the number of fishers have been declining in the long term. On the other hand, the world’s vastest fishing grounds extend around Japan, so fisheries have a large potential. In order to achieve both appropriate resource management and transformation of the fisheries industry into a growth industry at the same time, the basic fishery production system concerning resource management measures and fishing permit and license systems, etc. will be reviewed in an integrated manner.

Outline of the Amendment

I. Amendment of the Fishery Act (*Integration of the Act on Preservation and Control of Living Marine Resources (the TAC Act) into the Fishery Act)

(1) Establishment of a new resource management system
  Setting targets and maintaining or recovering resources based on scientific grounds
  **Basic principles of resource management**
  - Resources are basically to be managed on the basis of the total allowable catch (TAC) and to be maintained at or recovered to the sustainable level, based on stock assessment (Article 8).
  - The TAC is basically to be managed on the basis of individual quota (IQ) (if a management category is not ready to introduce the IQ system, the TAC for the category is to be managed on the basis of the total catch quantities in that category) (Article 8).
  **Determination of the TAC**
  - The Minister of Agriculture, Forestry and Fisheries decides on the resource management target, and determines the TAC so as to recover the resources to that target level (Article 11).
  **IQ**
  - The Minister of Agriculture, Forestry and Fisheries or a prefectural governor sets an IQ for each vessel, etc., taking into account the past catch results and other factors (Article 17).
  - Transfer of IQ is only allowed in certain cases, such as upon transfer of a vessel (Article 22).

(2) Review of the fishing permit system for enhancing productivity
  Increasing competitiveness and realizing fisheries by fishing vessels that appeal to young people
  - Regulations on vessel size are reviewed for enhancing the safety, comfortableness, etc. of fishing vessels (Article 43).
  - The permit system is reviewed, and issuance of new permits on an as-needed basis is promoted (Article 42).
  - A person who has been granted a permit is imposed the responsibility to appropriately manage resources and enhance productivity, and is obligated to report on information about fishery production (Article 52).

(3) Review of the system for use of the sea for developing aquaculture and coastal fisheries
  Carrying out review for making appropriate and effective use of the waters
  **Increased transparency in the formulation process of the sea-area fishing ground plan**
  - A prefectural governor hears and examines the opinions of fishers and persons who intend to operate fisheries about the draft plan, and publishes the results.
  - The governor stipulates the content of fishery rights and other matters in the sea-area fishing ground plan in order to achieve maximum use of the sea (Articles 62 through 64).
  **Determination of persons to whom fishery rights will be granted**
  - If a holder of an expiring fishery right is found to have appropriately and effectively used the relevant fishing ground, the fishing right is granted to that person, but in other cases, such as if no person had been previously granted a fishery right, the fishery right is granted to the person who contributes to the development of the local fisheries industry the most (the statutory priority order was abolished) (Article 73).
  **Management of coastal fishing grounds**
  - A system in which a fishery authority, etc. implement activities for conserving coastal fishing grounds on designation by the prefectural government is introduced (Articles 109 through 116).

(4) Revitalizing fishing communities and enabling them to demonstrate their multifunctional roles
  The national and prefectural governments give sufficient consideration so that activities of fisheries, etc. are carried out in a sound manner, and fishing villages are revitalized, given that fisheries and fishing communities have multifunctional roles (Article 174).

(5) Others
  - The Sea-area Fisheries Adjustment Commissions continue to have a character as administrative commissions centered on representative fishers. The system for electing member fishers is reviewed into one in which the prefectural governor appoints the members by obtaining the consent of the prefectural assembly (Article 138).
  - The penal provisions to combat poaching are strengthened (Articles 132 and 189).

II. Amendment of the Fishery Cooperative Act

Reviewing the fishery cooperative system in line with the fishery reform
The businesses and management bases of fishery cooperatives are strengthened through measures such as appointing sales professionals as officers and introducing audits by certified public accountants.
Changes in Schools, etc. Providing Fisheries Education

- Japan's first full-fledged fisheries education started at the Fisheries Education Center established by the Japan Fisheries Association in 1888. Subsequently, fisheries education aimed at learning fishery, manufacturing, and aquaculture technologies that are necessary for improving regional fisheries industries began to be provided at locations nationwide. In addition, initiatives also began to train human resources with knowledge and skills of distant water fisheries.
- Since after World War II, fisheries education has been mainly conducted at fisheries high schools (upper secondary high schools specializing in fisheries), and particular focus was placed on training mid-level technical specialists of distant water fisheries. However, the number of applicants for admission to fisheries high schools decreased in line with the contraction of distant water fishery as a result of the oil crises and various countries setting exclusive economic zones.
- From the beginning of the Heisei era (around 1990s), fisheries high schools started to provide not only conventional education on specialist skills, but also classes for enhancing the students' initiatives and inquisitive minds.
(2) Study about the Fisheries Industry and Fish and Fishery Products at Elementary Schools

- The fisheries industry is mentioned in the social studies part of the Course of Study for Elementary School. In addition, there is a statement about the role of soup stock that serves as the basis of traditional Japanese daily meals in the home economics part (an opportunity to learn that soup stock can be taken from boiled-dried fish, etc. in the study).
- Opportunities to be exposed to fisheries are provided at various scenes; in actual classes, they are mainly provided in the period for integrated study and school events.
- In order to develop future leaders in the fisheries field, it is necessary to increase the opportunities for direct physical exposure to fisheries.

(3) Study about the Fisheries Industry and Fish and Fishery Products at Lower Secondary Schools

- The social studies part of the Course of Study for Lower Secondary School includes a description on industries as an item to be mentioned when learning about Japan's regional characteristics, etc. The cultivation of aquatic organisms is mentioned in the industrial arts and home economics part.
- Opportunities to be exposed to fisheries are provided at various scenes also at lower secondary schools.

(4) Fisheries Education at Fisheries High Schools

a. Current Status of Fisheries High Schools

- As of the end of FY2018, there were 46 fisheries high schools. Among these, 22 high schools offer specialized courses. A total of 62 training vessels of 5 tons or more are used by 43 high schools in their study programs (including 29 training vessels of 100 gross tons or more used by 36 schools).
- The total number of fisheries high school students in 2018 was 9,831 (0.3% of all upper secondary school students nationwide).
- As for the post-graduation paths taken by FY2017 graduates, 35% entered educational institutions, and 38% became employed in fisheries or marine industries (compared to FY2007, the percentage for employment in these industries increased by 14%). Regarding the employment status of students who completed specialized courses, 8% were employed on fishing vessels, and 56% were employed on merchant vessels (compared to FY2007, the percentage for employment on fishing vessels increased by 2%, and on merchant vessels by 16%).
- The number of fisheries high school teachers in 2016 was 1,015 (0.4% of all upper secondary school teachers nationwide). There are concerns about a future shortage of teachers as teachers aged 40 or younger only constitute 35% of all teachers.
b. Initiatives by Fisheries High Schools

- Fisheries high schools have focused their efforts on not only conventional education on specialist skills, but also the subjects of project studies and the period for integrated study for enhancing students' initiatives and inquisitive minds.
- As coordination is often made with local governments or fisheries cooperatives in teaching these subjects, the activity also contributes to the local communities.

Case Example

1) Human resources development using the educational abilities of the local community (Toyama Prefectural Namerikawa High School)

Toyama Prefectural Namerikawa High School provides training to second-year students at fishery work sites in coordination with relevant local places of work. In the practice of fixed net Toyama squid fishing, a local representative fishing method, the students learn about the fishing method, the structure of the fixed net, and the workflow from fishing to shipping.

2) Fish Girl activities (Ehime Prefectural Uwajima Fisheries High School)

Due to the low profile of Ehime Prefecture's farmed bluefin tuna, bluefin tuna producers in Uwajima, Ehime Prefectural Government (Fisheries Policy Division, Agriculture, Forestry and Fisheries Department), and Uwajima Fisheries High School have collaborated with each other since FY2012 to start activities of Fish Girl, a team of high-school girls who show bluefin tuna filleting demonstrations in and outside Japan.

(5) Fisheries Education at Universities

- Among 19 fisheries universities, six universities possess a total of 15 training vessels for on-board training, etc. (as of the end of 2018). Six of these vessels, which have been approved as joint research centers by MEXT, are also used by other universities.
- Fisheries universities particularly focus on developing human resources who can play a central role in research and development and the fisheries industry.
- In FY2017, 34% of to-be graduates found employment in fisheries-related fields, the highest proportion of which was accounted for by the processing and distribution field, at 54%.

Case Example

1) Enjoying the sea and learning from the sea! (National Fisheries University)

The university engages in a broad range of education and research concerning fisheries from the marine environment, etc. to distribution and business management. It also conducts resource studies and other practices as well as providing education for marine technicians, etc. using large training vessels. Most of the graduates find jobs in fisheries-related industries and become active leaders.

2) Comprehensive marine education and research (Tokyo University of Marine Science and Technology)

The university aims to realize outstanding education for developing industrial, government, and academic leaders who play an international role in the marine field, by conducting comprehensive marine education and research with development of highly skilled professionals including researchers at the core. In addition, by concluding agreements on coordination with fisheries high schools, etc., the university stimulates high school students' motivation and enhances their awareness of their future paths through providing university lectures, etc. to them.
Section 2 Development of Young Fishers, etc.

(1) Trends in the Number of Fishers

a. Trends in Fishers

- The number of fishers follows downward trends and totaled 153,490 in 2017.
- The annual number of new entrants into fisheries has remained at the same level, at around 2,000 persons, since 2009, about 70% of which are 39 years old or younger. The ratio of fishers aged 39 or younger among all the fishers has remained at the same level.

b. Problem of Shortage of Marine Technicians in Fisheries

- Maritime certificates (national exams) are required in order to board a vessel of 20 tons or more as the captain, chief engineer, etc.
- Since each fishing trip spans a long period of time in distant water fisheries, it is difficult to have opportunities to acquire a higher-grade maritime license. In addition, graduates of fisheries high schools do not necessarily take a job in fisheries. Due to this situation, the aging and shortage of marine technicians has become a serious problem.
- Because of this, fishery-related organizations recruit new entrants through their fishery job consultation meetings, etc. and make efforts to offer systematic training programs, etc. aimed at acquisition of maritime licenses.
- Meanwhile, National Fisheries University introduced a new course including six-month on-board training, starting in FY2019. As this will shorten the one year and nine month service record on board that is required for graduates of fisheries high schools to take the 4th grade marine technician examination, graduates of fisheries high schools are expected to be able to acquire marine technician certification earlier than before.

(2) Development of New Entrants into Fisheries and Young Fishers, etc.

a. Development of New Entrants into Fisheries

- It is important to secure motivated fishers and develop them as leaders, not only for ensuring a stable supply of fish and fishery products, but also for enabling fisheries and fishing communities to demonstrate their multifunctional roles and for revitalizing local communities.
- The national government has provided support that emphasizes the acquisition of fisheries skills and knowledge so that people having no experience of fisheries in advance can take a job in fisheries and stay in it.
- There are 17 fisheries schools (as of the end of FY2018; the number is planned to be increased in the future) set up nationwide to teach practical fishing techniques and skills and to develop work-ready fishers. The national and local governments have provided support so that students of fisheries schools can devote themselves to acquiring the skills.

Comprehensive Support Project for Development of Fisheries Human Resources

In order to secure and develop fishers, etc. in a stable manner, funds are provided to young people before taking a job in fisheries, and support is provided for long-term training at fishery sites, acquisition of maritime license or other certifications, and enhancement of fishers’ management skills, etc. aimed at encouraging them to take a job in fisheries and stay in it.

**Job preparation**
- Offering information to encourage people to take a fishery job
  - Holding job preparation workshops consisting of lectures and hands-on fishery experience.
  - Holding fishery job consultation meetings and matching up fishery job seekers with fishers.

**Support for acquisition of marine technician certification**
- Providing minimal funds (as compared to the case of taking a job in other industries) to young people who are acquiring necessary knowledge at fisheries schools, etc. to work in the fishing industry.
  - 1.5 million yen/year for two years at maximum

**Support for improvement of management/skills**
- Supporting young fishers to acquire knowledge on business management and the skills and know-how of experienced fishers in order to improve their profitability.

<table>
<thead>
<tr>
<th>Employment type (Employment type)</th>
<th>(Executive training type)</th>
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</thead>
<tbody>
<tr>
<td>Providing support for training expenses for instructors (mainly corporations) teaching trainees who will be hired by fishing companies.</td>
<td>Providing support for training expenses for instructors (mainly corporations) teaching trainees who have been hired by offshore/far-seas fishing vessels and are aiming to become executives.</td>
</tr>
<tr>
<td>141,000 yen/month at maximum</td>
<td>188,000 yen/month at maximum</td>
</tr>
<tr>
<td>For one year at maximum</td>
<td>For two years at maximum</td>
</tr>
</tbody>
</table>

**Support for long-term training**
- Supporting training expenses for instructors providing training at fishery sites.

**Investment in next-generation human resources (preparation type)**
- Providing minimal funds (as compared to the case of taking a job in other industries) to young people who are acquiring necessary knowledge at fisheries schools, etc. to work in the fishing industry.
  - 1.5 million yen/year for two years at maximum

**Support for acquisition of marine technician certification**
- Supporting expenses required for private organizations, etc. to set up a course for acquiring marine technician certification, targeting graduates of fisheries high schools.

**Support for improvement of management/skills**
- Supporting young fishers to acquire knowledge on business management and the skills and know-how of experienced fishers in order to improve their profitability.

Fisheries Schools in Japan

In order to deal with the shortage of crew on fishing vessels, the Training Project to Secure Fishing Vessel Crew was established in February 2017. One of its initiatives, Fisheries Guidance, is an activity in which representatives from fishing companies visit fisheries high schools nationwide and conduct recruitment activity or explain and help students understand the appeal of fisheries and the actual fishing work, etc.
Local communities are also conducting initiatives for securing new entrants into fisheries. The national government provides support to hold fishery job consultation meetings and job preparation workshops. In particular, the Fishery Employment Support Fair, which has been held since FY2012, is a platform for connecting between fishery job seekers and fishing companies, etc., and the number of job seekers visiting the fair has been on an increase in recent years.

b. Development of Young Fishers

Various initiatives are conducted in order to develop young fishers that will lead the fisheries industry in the future.

Case Example

1) Owada School, a school for developing fishery leaders (Hyogo Prefecture)
Owada School is an organization for developing appropriate human resources for becoming leaders of fishing communities, targeting young fishers, etc. The trainees need to earn credits in order to complete the course just like a university, and those who have completed the course so far are already conducting activities as leaders.

2) Fishery Entrepreneur Training School (JF Zengyoren)
JF Zengyoren opened Fishery Entrepreneur Training School in January 2019. Young fishers come from all parts of Japan and take classes covering content ranging from practical matters that are useful for solving business management issues to matters that view the fisheries industry from a broad perspective. The school is planned to be opened again next year onward, and is expected to foster human resources that will become fishery entrepreneurs or leaders.

Class scene (Photo courtesy: JF Zengyoren)

Graduation thesis presentation meeting (Photo courtesy: Hyogo Prefecture Fisheries Foundation)

JF Zengyoren established Japan Fisheries Cooperative School in 1941, and has trained leaders of fishery cooperatives and fishing communities (a total of about 2,600 persons by 2017).

c. Development of Human Resources that Support the Management of Fishery Cooperatives

Section 3 Development of Human Resources That Will Be Demanded in the Future

(1) Future Direction of Fisheries Education

Fisheries high schools used to mainly develop technical specialists of distant water fisheries. Today, however, they provide a wide range of education including education on food safety and the environmental problems as well as education for acquiring a global mindset.

There are concerns about a shortage of teachers specializing in fisheries at fisheries high schools. It is important to secure such teachers through coordination with fisheries universities.

Fisheries universities need to provide opportunities for students to be exposed to a broad range of fisheries industries at an early stage after entering university, and make it easier for them to have a future vision. In addition, fisheries universities must strengthen their coordination with local communities, and promote research and development and human resources development with a view to contributing to the local fisheries industry. Moreover, they also need to coordinate with various other educational fields, including engineering, such as ICT, and commerce, such as marketing.
(2) Utilization of Fisheries Schools and Helping New Entrants Stay in Fisheries through Matching Up

- The government continues to promote the initiatives of fisheries schools located nationwide to develop new entrants into fisheries.
- It is also important to help new entrants stay in the job by matching up employers and job seekers to enable them to communicate with each other. The national government also supports such initiatives.

(3) Development of Human Resources in the Distribution and Processing Field

- Graduates of fisheries universities most often take a job in the processing and distribution field, but they have little opportunity to learn skills related to fisheries business. Therefore, it is necessary to increase opportunities for them to participate in internships in coordination with relevant companies and receive education in practical fields, and thereby develop human resources that will be useful at work sites.

(4) Empowerment and Active Participation of Women in the Fisheries Industry

- Women play an important role in the work ashore after landing and in the fishery processing industry. The national government supports the development of facilities for helping women's activities, consisting of waiting rooms for children, test kitchens, etc. It also sets up the Ocean Treasure! Suisan-joshi Genki Project in November 2018 to back up the reform of fisheries work sites into a women-friendly environment and to increase the appeal of fishery jobs.

(5) Revitalization of the Fisheries Industry through Active Information Gathering and Exchanges with Other Industries

- By actively gathering information that is useful for the fisheries industry, it is possible to achieve revitalization of the fisheries industry with originality and ingenuity. Also, active exchanges with other industries contribute to revitalizing the fisheries industry and the community as a whole. It is important to develop human resources that have such broad vision in the future.

(6) Foreign Worker Trends

- In December 2018, the Act Partially Amending the Immigration Control and Refugee Recognition Act and the Act for Establishment of the Ministry of Justice was enacted, which newly enables the acceptance of work-ready foreign nationals who possess certain expertise and skills. Foreign nationals that satisfy certain criteria started to be accepted also in the fisheries field and the fishery processing industry from April 2019. The national government provides necessary support.
- The Technical Intern Training Program for Foreign Nationals aims to promote international cooperation by transferring technologies, etc. to developing areas through human resources development. In relation to the fisheries industry, technical intern training is provided for nine types of fisheries/aquaculture work and eight types of fishery processing work. The national government established the Fisheries Technical Intern Training Program Council, and strives to make technical intern training in fisheries/aquaculture appropriate, for example, by determining the treatment of technical intern trainees and setting up a system to protect them.
Section 1 Trends in Fisheries Resources and the Fishing Ground Environment

(1) Fisheries Resources in the Waters around Japan

○ In the management of fisheries resources, it is indispensable to estimate the resource abundance, levels, and trends through stock assessment, and, based on the results of such assessment, to take appropriate management measures.

○ The new Fishery Act provides that efforts be made to conduct stock assessment of all useful fisheries resources by carrying out resources study for collecting necessary information.

○ The results of the FY2018 stock assessment in the waters around Japan (for 84 stocks of 50 species) show that resource levels are high in 14 stocks, moderate in 29 stocks and low in 41 stocks.

○ As for major 37 stocks of 15 species closely linked to the lives of people, resource levels are high in 6 stocks, moderate in 18 stocks and low in 13 stocks.

Source: Prepared by the Fisheries Agency, based on the Fish Stock Assessment in the Waters around Japan (the Japan Fisheries Research and Education Agency and the Fisheries Agency)

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

○ The new Fishery Act provides that resources are basically to be managed on the basis of total allowable catch (TAC).

○ The resource management in shellfish/seaweed collection, in set net fishing, and in aquaculture is conducted based on a fishing rights system whereas the resource management in offshore/distant water fisheries based on a fishing permit system.

○ The TAC system has so far covered eight fish species.

○ In the future, the TAC system will be implemented based on the new Fishery Act. The TAC is set in accordance with resource management targets such as the values of target resource levels to be maintained or restored for realizing the maximum sustainable yield.

○ Under the new Fishery Act, fishing resource management based on the IQ method is to be conducted for fisheries or sea areas which are ready to introduce the IQ method, and the management of catch quantities in management categories that are not ready to introduce the IQ method is to be conducted on the basis of the total catch quantities in that category.
b. Joint Management Based on a Resource Management Plan

In Japan, not only statutory regulations but also fishers’ voluntary resource management, which imposes limits on fishing periods, fish lengths, operating periods, fishing areas, etc., plays a key role in fisheries resource management.

The national and prefectural governments set the "Resource Management Guidelines" from FY2011, based on which the groups of fishers develop and implement their own resource management plans. The "Resource Management and Income Stability Measure" is implemented for fishers who are systematically engaged in resource management.

Outline of the Resource Management and Income Stabilization Measures

Resource management efforts
- In line with the Resource Management Guidelines prepared by the national and prefectural governments, fishers (organizations) shall develop and implement resource management plans that present voluntary resource management measures such as restrictions on catches and fishing gear.
- Fish farmers shall comply with the farming capacity specified in the aquaculture area improvement plan prepared by a fishery cooperative, etc., to improve and conserve fishing grounds based on the Sustainable Aquaculture Production Assurance Act.

Measures for stabilizing income in fisheries
Resource management efforts are supported by the Mutual Relief of Fisheries and the Income Support Program.
- In the case of income loss by a given value from the standard income, the loss is compensated with the Mutual Relief of Fisheries (up to 80%) or with the Income Support Program (up to 90%).
- Part of the premium of the Mutual Relief of Fisheries is supported by the government.
- The government pays back to fishers the part of the deposits made by fishers 1 government 3 of the Income Support Program and subsidizes 30% (average) of the mutual relief premium.

Note: Standard Income: The minimum and maximum incomes are excluded from each fisher’s income in the last five years, and the rest of the incomes are averaged to calculate the standard income.
Chapter III Trends in Japan’s Fisheries Since FY2017

(3) Approaches to Practical, Effective Resource Management

- Authorized fisheries supervisors are engaged in regulatory activities in cooperation with the coast guard and police officers while fishers belonging to fisheries cooperatives patrol fishing grounds, report illegal fishing, and implement measures to prevent poached catches from being distributed.

- The number of arrests for violation of fisheries laws and regulations stood at 1,834 in 2017 (1,731 in coastal waters and 103 in inland waters). The number of poachings conducted by non-fishers has increased. In particular, the poaching of reef resources, which is systematically conducted by antisocial forces, has become rampant.

- Under the new Fishery Act, the penal provisions were considerably strengthened, such as introducing penal provisions against persons who gather or catch specified aquatic animals and plants, in order to effectively cause disadvantage to offenders and prevent poaching.

- In 2018, the Fisheries Agency conducted 14 on-board inspections and captured six foreign fishing vessels; and the number of confiscations of illegal fishing gear totaled 26.

- In waters surrounding Yamato Ridge of the Sea of Japan, illegal operations conducted by fishing vessels belonging to North Korea, etc. have been on the increase. In response, vessels for fishery inspection are deployed on a priority basis to remove illegal vessels by taking rigorous actions such as the use of water cannon. As a result, in 2018, the number of cases in which an expulsion warning, etc. was issued to foreign fishing vessels stood at 5,315.

- In order to deal with illegal operations conducted by foreign fishing vessels in the waters around Japan, the Fisheries Agency’s “Fisheries Enforcement Headquarters” was established in January 2018, headed by the Director-General of the Fisheries Agency. The number of vessels for inspection (currently seven vessels) has started to be increased from FY2017, and is expected to become nine vessels in FY2021.

- Illegal operations will be strictly dealt with, for example, by conducting intensive surveillance in sea areas in which, and at times during which, illegal operations occur frequently.

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Japanese vessel for fishery inspection using a water cannon against a North Korean fishery vessel

Authorized fisheries supervisors entering a large Russian refrigerator trawler
(4) Measures to Actively Enhance Fisheries Resources

- In each area, a seedling release program is in place to raise juvenile fish to certain sizes or release in order to actively increase resources.
- Such programs as the "Resource-creating Farming Fisheries," in which part of adult fish are conserved for the next generation reproduction, are promoted.
- The government has implemented the "Frontier Fishing Ground Enhancement and Development Project" that is to enhance offshore fisheries resources by constructing mound reefs, etc. These activities have been working well in the conservation and propagation of fisheries resources.
- Inland water fisheries cooperatives, meanwhile, are working on programs to release sweetfish/eel seedlings and set up spawning beds.
- With the amendment of the Fishery Cooperative Act, the qualifications for individual regular members of inland water fisheries cooperatives were unified between cooperatives for rivers and those for lakes, and "persons who reproduce aquatic animals and plants" were newly added to the qualification.

(5) Trends in Fishing Ground Environment

- It is important to raise the level of productivity in the entire ecosystem through the conservation of seaweed beds and tidal flats and the recovery of their functions. Broad-based conservation measures have been promoted by combining local governments’ development of seaweed beds/tidal flats with fishers’ conservation of seaweed beds/tidal flats.
- In fish farms, fisheries cooperatives, etc. formulate "Fishing Grounds Area Improvement Plans". Improvement of the fish farm environment has been promoted with support based on the "Resource Management and Income Stability Measure".
- Since it has been pointed out that the decline, etc. of nutritive salts including nitrogen and phosphorus is potentially reducing the primary productivity of sea areas such as the Seto Inland Sea, surveys and research are promoted to find out the impact of nutritive salts on fisheries resources.
- A system was introduced in the new Fishery Act whereby, when a fisheries cooperative, etc. conducts conservation activities such as red tide monitoring, the prefectural government may designate the fisheries cooperative, etc. upon application, and have the fisheries cooperative, etc. conduct activities to manage coastal fishing grounds under newly set rules.
- As far as inland water fisheries are concerned, in accordance with the "Guidelines on Promotion of Inland Water Fisheries," the relevant ministries and agencies, local governments, and fisheries cooperatives have been cooperative with one another in setting forward their efforts for the recovery of the fishing ground environment.
- It is necessary to monitor climate change by conducting observations using satellites, etc. In addition, it is important to have measures for both mitigation of the situation by, for example, controlling the emission of greenhouse gases, and adaptation to an unavoidable impact. With regard to adaptation, the development of aquaculture species that can tolerate high water temperature has been promoted.
- Ocean pollution problems due to plastic wastes have attracted the public attention. Plastic wastes have an impact on the environment and ecosystems as well as on fisheries through being mixed into fishery catch catches. The Act on Promoting the Treatment of Marine Debris was amended in June 2018, and The 4th Fundamental Plan for Establishing a Sound Material-Cycle Society, adopted by the Cabinet in the same month, sets forth that the government will formulate a Japan’s Resource Circulation Strategy for Plastics. The Fisheries Agency has discussed measures to reduce the amount of plastic use in fisheries and aquaculture and a shift to environmentally friendly materials, and has investigated ecological data of aquatic organisms that have eaten microplastics in the water.
- For sustainable fishery activities, it is important to maintain the marine environment and ecosystem in a sound condition. Since the Marine protected areas (MPAs) have been designated in an accelerated manner around the world in these years. MPAs have a potential to contribute to increasing fisheries resources, and appropriate management of such areas should be promoted.
(6) Damage to Fisheries Caused by Wildlife and Mitigation Measures

On recent years, reports have come out about damage to fisheries caused by wildlife such as Steller’s sea lions and Ascidella aspersa. Especially in the sea areas around Hokkaido, considerable damage to fishing gear and catches caused by Steller’s sea lions have been occurring. 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.

Inland water fisheries have been facing the problem of feeding damage to resources caused by largemouth bass, great cormorant, etc., and therefore control measures against them are promoted.

Section 2 Trends in Japan’s Fisheries
(1) Trends in Fisheries and Aquaculture

The volume of domestic fisheries and aquaculture production was 4.31 million tons in 2017, which is lower by 50,000 tons than in the previous year. Marine fisheries production was 3.26 million tons, which was same level as the previous year. Pacific saury, etc. decreased while Japanese sardine increased. Marine aquaculture decreased by 50,000 tons to 62,000 tons.

The value of domestic fisheries and aquaculture production, which turned to an increase in 2013, stood at 1,607.5 billion yen in 2017, an increase of 21.9 billion yen over the previous year. The production value of marine fisheries was 962.8 billion yen, which was the same level as the previous year, that of marine aquaculture increased by 15.3 billion yen to 525.0 billion yen, and that of inland water fisheries and aquaculture increased by 5.9 billion yen to 119.7 billion yen.

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

<Production volume>

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<th>Total (100 million yen)</th>
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Source: Fisheries and Aquaculture Production Statistics (the Ministry of Agriculture, Forestry and Fisheries)

Source: Prepared by the Fisheries Agency, based on Gross Fisheries Output (the Ministry of Agriculture, Forestry and Fisheries)

Note 1: The figures of distant water fishery, offshore fishery, and coastal fishery shown above (2007-2010) are all estimates.

Note 2: 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.).

Note 3: Marine fisheries output by segment in terms of value has not been available since 2007.
(2) Trends in Fishery Management

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

- The prices of fish and fishery products vary depending on multiple factors including the fishery condition of each species, the status of overseas fishery production, and domestic and overseas demand for species.
- In recent years, the average local price in fisheries and aquaculture is on an upward trend. The price increased by 8 yen/kg to 366 yen/kg in 2017, compared with the previous year.

b. Trends in Management of Fisheries by Fishing Vessels/Aquaculture

- The average fishing income of coastal fishing households decreased by 160,000 yen to 2.19 million yen in 2017, as compared to the previous year, or 2.39 million yen including non-fishing income.
- Businesses engaged in fisheries by fishing vessels reported that, in FY2017, the fishing income continued to be in deficit, but the operating profit including the non-fishing profits (from fish processing, etc.) was 18.15 million yen.
- Fishing vessels used for fisheries in Japan have further aged, with 57% of all the licensed fishing vessels for designated fisheries being aged 20 years or older as of FY2018.
- Fuel oil prices have fluctuated significantly over the past decade. In recent years, the prices have generally been rising.
- The fishing income of marine aquaculture households in 2017 increased by 1.62 million yen to 11.66 million yen as compared to the previous year.
- Imported fish meal prices in April 2015 increased to nearly 2.6 times the average price in 2005, which may be due to growing consumption by aquaculture (primarily in China) and due to a decrease in fish meal production caused by declining anchovy resources in Peru. 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 contributed in advance by the national government and the fisher, in order to mitigate the impact of the price rise.
Case Example "Seashore Revitalization Plan" Suits for Each Region's Circumstances

1) Taiki Town Regional Fisheries Revitalization Committee in Mie Prefecture
The committee expanded production of "Ise Madai" (Japanese sea bream) cultured using feeds that contain Mie Prefecture's specialty seaweeds and citrus fruits, and started producing a new brand, "Ise Buri" (Ise Japanese amberjack).

2) Itoshima City Regional Fisheries Revitalization Committee in Fukuoka Prefecture
The committee has greatly contributed to expanding the consumption of local fish and fishery products through efforts to raise the price of Japanese Spanish mackerel through processing that maintains high freshness, and attracting customers through oyster hut business.

(3) Trends in Fisheries Working Environment

- In 2018, the number of fishing vessels involved in marine accidents was 539, and the number of dead and missing reported in those accidents was 26.
- Excluding those related to marine accidents, 73 fishers fell overboard in 2018, of which 47 persons were dead or missing.
- Life jackets are vital to saving the lives of those who fall overboard. The government expanded the scope of obligation to wear life jackets to small water crafts. In 2018 and ahead, all persons on board, in principle, any ship or vessel and outside the cabin are required to wear life jackets.
- With regard to diffusion of broadband connection at sea, the Fisheries Agency has coordinated with relevant ministries and agencies to exchange opinions with communication carriers so as to provide services that match the needs of fishers and to provide information to fisheries-related organizations.

(4) Development and Utilization of Technologies for Promoting Smart Fisheries

- It is important to utilize ICT technologies and drone/robot technologies, and to introduce and diffuse them in fisheries and aquaculture sites.
- The government will build “the fishery data collaboration platform (tentative name)” that enables linkage, sharing, and utilization of data obtained in various scenes from production to distribution, which is expected to promote a shift to efficient and advanced smart fisheries through full utilization of data.
(5) Trends in Fisheries Cooperatives

A fisheries cooperative is an organization that plays a core role in improving fishery management, appropriately using and managing fisheries resources, and supporting regional economies and social activities in a fishing community.

The number of fisheries cooperatives as of the end of March 2018 was 955.

The number of fisheries cooperative members has been decreasing in line with a decline in the number of fishers, and most cooperatives remain small in size.

There is a need to strengthen the cooperatives’ business and management foundation through merger, etc. and to further reinforce their sales business.

With the amendment of the Fishery Cooperative Act, the improvement of fishers’ income was stipulated as a role of fishery cooperatives, and it was provided that persons having specialized sales skills should be appointed as directors of cooperatives. Meanwhile, audits by certified public accountants were introduced to federations of fisheries credit cooperatives and fisheries cooperatives exceeding a certain size, in order to ensure sound credit business of the fisheries cooperative system.

(6) Trends in the Distribution and Processing of Fish and Fishery Products

a. Trends in the Distribution of Fish and Fishery Products

In 2015, the percentage of the amount of fish and fishery products distributed through wholesale markets in consuming areas was 52% of the total.

Both the number of wholesale markets in landing areas 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 such markets are 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 as well as wholesale markets in consuming areas, it is important to respond precisely to the diverse needs of consumptive interests, etc.

Volume Distributed Through Wholesale Markets in Consuming Areas and Its Percentage in Total

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Distribution Amount (10,000 tons)</th>
<th>Amount Distributed through Wholesale Markets in Consuming Areas (10,000 tons)</th>
<th>Percentage of the Amount Distributed through Wholesale Markets in Consuming Areas</th>
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Source: Wholesale Market Database (the Ministry of Agriculture, Forestry and Fisheries)
b. Trends in the Fishery Processing Industry

The production volume of processed fishery products for human consumption decreased by 60,000 tons from the previous year to 1.57 million tons in 2017. 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. An important challenge in the fishery processing industry is to secure processing ingredients and employees.

c. HACCP

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 United States and the EU, 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 authorization that demonstrates facilities’ fulfillment of such additional requirements as sanitary control and facility criteria based on HACCP, and that is required for export to the EU and the United States.

In order to accelerate the authorization process for facilities to export to the EU, the Fisheries Agency became an authorization body in October 2014, in addition to the Ministry of Health, Labour and Welfare. As of the end of March 2019, in the fishery processing industry, etc., the number of facilities authorized to export to the EU is 63, and the number of facilities authorized to export to the United States is 411.

Food business operators including fishery processors are going to be required to carry out HACCP-based sanitary control etc. due to partial amendment of the Food Sanitation Act, etc. in June 2018.
Section 3 International Situation Surrounding the Fisheries Industry

(1) Production of World Fisheries and Aquaculture

- The production volume of world fisheries and aquaculture increased by 3% from the previous year to 205.59 million tons in 2017. The breakdown of this volume shows that the capture fisheries production volume stayed flat and there was a drastic increase in the aquaculture production volume.
- For example, in the EU, the United States, and Japan, the capture fisheries production volumes have remained almost flat or have been on a declining trend. In contrast, the capture fisheries production volumes in China, Indonesia, Vietnam, etc. have increased.
- The aquaculture production volume has significantly increased in both marine and inland-water aquaculture production. In marine aquaculture, the production of red algae and brown algae has particularly increased, and in inland-water aquaculture, the production of carp and crucian carp has increased. China is dominant in world aquaculture production, both marine and inland water.
- The ratio of world fisheries resources being exploited within biologically sustainable levels is on a gradually decreasing trend. In 2015, 67% of world fisheries resources were at biologically sustainable levels (world fisheries resources with enough room for production expansion were 7%), and 33% of the resources were at overfished levels.

(2) World Consumption of Fish and Fishery Products

- The world’s per capita consumption of fish and fish products has nearly doubled in the past half century, as a result of food distribution internationalization, a shift to high-protein dietary habits, and so on. The consumption shows significantly increasing trends, especially in emerging countries such as China.
- Although Japan’s consumption is still in a high level, it has declined to the same level as the level 50 years ago.

Trends in the Production Volume of World Fisheries and Aquaculture

Status of World Fish Stocks

Trends in the World’s Annual Per Capita Food Fish Consumption by Region (Gross Food Based)

Trends in the Annual Per Capita Food Fish Consumption in Major Countries/Regions (Gross Food Based)
(3) World Trade of Fish and Fishery Products

- The trade of fish and fishery products is on an upward trend as a whole, in terms of quantity and value (price). In terms of export volume, the EU, China, and Norway are ranked high. In terms of import volume, the EU, China, and the United States are ranked high.
- In terms of export and import value, China is the world's largest net exporter. The EU, the United States, and Japan are major net importers.

World's Export Volume

World's Import Volume

Major Countries' and Regions' Export and Import Values and Net Export/Import Values Concerning Fish and Fishery Products

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

- In WTO rule negotiations, discussions have been continued about the establishment of disciplines on fisheries subsidies. Japan takes a stance of limiting prohibited subsidies to those which truly cause overcapacity and overfishing.
- In February 2016, the 12 participating countries signed the TPP agreement. Subsequent to the United States' announcement of its withdrawal from the TPP in January 2017, the 11 countries excluding the United States engaged in discussions concerning the early effectuation of the TPP, and reached a substantive agreement on the TPP-11 agreement in November of the same year. The agreement was signed in March 2018. The TPP-11 agreement was ratified by six countries by October 31 of the same year, and came into effect on December 30 of the same year.
- The Japan-EU Economic Partnership Agreement (EPA) covers not only the reduction/elimination of customs duties, but also the liberalization of trade in services and investments, and agreements in fields of intellectual property, etc. Japan and the EU agreed on the major framework of the EPA in July 2017, and signed it on July 17, 2018. After completing domestic procedures in both Japan and the EU, the Japan-EU EPA came into effect on February 1, 2019.
(5) International Resource Management

a. 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. Japan, as a responsible fishing nation, actively takes part in tRFMOs for appropriate management and sustainable use of resources.
- The Western and Central Pacific Fisheries Commission (WCPFC), at its meeting in December 2018, adopted provisions that allow any underage of the annual catch limit (up to 5% of the limit) of Pacific bluefin tuna to be added to the catch limit for the following year (carry over). A two-year extension of the current measures was agreed with regard to bigeye tuna, yellowfin tuna, and skipjack tuna.
- The Inter-American Tropical Tuna Commission (IATTC), at its annual meeting in August 2018, adopted the harvest control rules that were agreed on at the joint working group meeting with the WCPFC in September 2017.
- The International Commission for the Conservation of Atlantic Tunas (ICCAT), due to a decline in stocks of tropical tunas, discussed the total allowable catch (TAC) of bigeye tuna for 2019 onward, country-specific quotas, and fish aggregating device (FAD) limits for purse seines, but failed to reach an agreement, so it continues to apply the TAC for 2018.
- The Indian Ocean Tuna Commission (IOTC), at its annual meeting in 2018, adopted management measures for the conservation of marlins, including the setting of total catch limits and prohibition of the retention of fish smaller than 60cm on board.
- The Commission for the Conservation of Southern Bluefin Tuna (CCSBT) reported that the resources have been on a recovery trend, and Japan's quota had increased to 6,165 tons by 2018.

b. 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.
- In July 2017, the NPFC agreed to prohibit increasing the number of Pacific saury fishing vessels of distant water fishing countries and regions permitted to operate in the high seas (while restraining a sudden increase in the number of permitted vessels of coastal countries).
- In July 2018, the NPFC agreed to include the prohibition of discarding of Pacific saury at sea and encouragement to restrain from fishing small fish in the current resource management measures.
- Japan will continue to strongly assert its concerns about a future decrease in Pacific saury resources, and call on further enhancement of resource management measures, such as appropriate limitations on catches.

Tunas Regional Fisheries Management Organizations (tRFMOs)

Major Regional Fisheries Management Organizations Managing Other Resources than Tunas and Skipjacks

Note: The years in parentheses are the years of effectuation of the relevant treaties.

b. Developments Toward Eradicating IUU Fishing

- Illegal, unreported, and unregulated (IUU) fishing, which fails to comply with regulatory measures and carry out disorderly operations, has a risk of having adverse effects on fisheries resources and obstructing appropriate resource management.
- Initiatives toward restraining and eradicating IUU fishing have been promoted internationally. For example, regional fisheries management organizations have made efforts to list fishing vessels that have received proper fishing permission (positive list) and list fishing vessels and carriers that were found to be involved in IUU fishing (negative list), and to prevent international distribution of catches harvested by IUU fishing through the use of the catch certificate system.
- It is expected that, with the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, which came into effect in June 2016, it will become possible to conduct efficient and effective crackdown at ports through port state measures, such as the contracting states prohibiting foreign fishing vessels that have engaged in IUU fishing from calling their ports, and that this will lead to restraining and eradicating IUU fishing.
A small whaler catching Baird's beak whales, etc. which are not subject to IWC protection in Japan's coastal waters

The International Whaling Commission (IWC) is a resource management organization which has a dual mandate, that is, conservation of whale stocks and orderly development of the whaling industry. However, due to the long-standing confrontation between countries supporting sustainable use of whales and anti-whaling countries, it has continued to be unable to make decisions on either management or protection of whales.

With the aim of having the IWC restore its function as a resource management organization, Japan has groped for a solution for more than 30 years.

At the 67th Meeting of the IWC held in September 2018, Japan proposed a IWC reform plan aimed at enabling member states that have different fundamental positions on whales and whaling to coexist within the IWC. However, countries that focus exclusively on the protection of whales and do not acknowledge the need for their sustainable use failed to show compromise, and Japan’s reform proposal was voted down. It became clear through the discussions leading up to that point that there is not even a possibility for coexistence of different opinions or positions.

Due to these developments, Japan fundamentally reviewed its position as an IWC member, and closely examined every option. As a result, Japan decided to withdraw from the IWC.

Whaling, which will be resumed in July 2019 for the first time in 30 years, will be conducted in Japan's territorial seas and EEZ within the scope of catch limits calculated based on the method adopted by the IWC (the revised management procedure (RMP)), targeting common minke whales, sei whales, and Bryde's whales, which have been clearly identified to exist at sufficient resource levels.

(6) New Developments Concerning Whaling

(7) 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 principle of sustainable use of marine living resources.

With regard to coastal countries such as Pacific Ocean island countries, in the waters of which Japanese fishing vessels operate, the Japanese government supports private organizations' cooperation provided to such countries in the repair, etc. of fisheries facilities and in the transfer or dissemination of fisheries technologies.

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.
Section 4 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 7.37 million tons for FY2017 (converted on a fresh fish basis, estimates), of which 5.76 million tons (78%) were for human consumption (food) and 1.62 million tons (22%) for feed and fertilizer (non-food).

○ The self-sufficiency rates (estimates) of fish and fishery products for human consumption for FY2017 decreased by 1 point from the previous year to 55%.

2. Trends in Self-sufficiency Rates of Fish and Fishery Products for Human Consumption

A survey on consumers’ diet preference showed an increase in the number of those who prefer a healthier and simpler diet.

The annual spending per household on fresh fish and fishery products had been flat in recent years, but has been on a slight decline over the past two years.

The fish and fishery product consumption by 49 years old or younger people is lower than the consumption by 50 years old or older people. In addition, the consumption by people in their 50s and 60s is on the decrease, as well.

A survey on consumers’ diet preference showed an increase in the number of those who prefer a healthier and simpler diet.

The fish and fishery product consumption by 49 years old or younger people is lower than the consumption by 50 years old or older people. In addition, the consumption by people in their 50s and 60s is on the decrease, as well.

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

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

○ The annual consumption of fish and fishery products per capita decreased by 0.4 kg from the previous year to 24.4 kg in FY2017 (estimates).

○ The fish and fishery product consumption by 49 years old or younger people is lower than the consumption by people in their 50s and 60s is on the decrease, as well. Meanwhile, the consumption by people 20 years old or younger has stayed level.

○ The most purchased fish species are salmon, tuna, and Japanese amberjack, which are sold in fillets. The annual spending per household on fresh fish and fishery products had been flat in recent years, but has been on a slight decline over the past two years.

○ A survey on consumers’ diet preference showed an increase in the number of those who prefer a healthier and simpler diet.

b. Trends in Annual Per Capita Consumption of Fish and Fishery Products and Meat (Net Food) and Daily Per Capita Consumption of Protein

3. Daily Per Capita Seafood Intake by Age Bracket

Source: Prepared by the Fisheries Agency, based on the National Health and Nutrition Survey (the Ministry of Ministry of Health, Labour and Welfare)
b. Efforts to Popularize Gyo Shoku (Fish Eating)

- Since seafood consumption has declined among young generation in Japan, it is important to create opportunities for young people to become familiar with fish diet through school lunches, etc. In recent years, activities to popularize fish eating have been active; for instance, fishers, etc. themselves visit schools, etc. to give classes.
- Under the "Delight of a Fish-Rich Country" project, in which both public and private sectors cooperate with each other, "Fast Fish," an event in which easy-to-eat and fun-to-serve food products/ways are selected (as of the end of March 2019, 3,288 products), has been held among other events. The National Federation of Fisheries Co-operative Associations has selected and introduced "Pride Fish," which are seafoods that fishers themselves recommend with confidence.

(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, a Cabinet Office Order to partially amend food labeling standards was put into force, which has made it mandatory for each domestically produced processed food product 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 onigiri [rice ball] is subject to such labeling requirement irrespective of the proportion of nori seaweed to the onigiri's weight).
- The Marine Eco-Label Certification System has been gradually adopted around the world. In Japan, MEL certifications issued by the Marine Eco-Label Japan Council (MEL Council) have become widespread. In September 2018, an application was filed to seek its recognition under the Global Sustainable Seafood Initiative (GSSI).
- Under the geographical indication (GI) protection system, Echizen Gani was newly registered in FY2018 as a fishery product.
(4) Trends in the Trade of Fish and Fishery Products

a. Import Trends in Fish and Fishery Products

- The import volume of fish and fishery products (on a product weight basis) decreased 4% year-on-year to 2.38 million tons in 2018, and the import value increased 1% year-on-year to 1,791.0 billion yen.
- Major import partners are China, the United States, Chile and Russia in terms of value.
- Major import items are salmons and trouts, tunas and billfishes, and shrimp in terms of value.

b. Export Trends in Fish and Fishery Products

- The export volume of fish and fishery products (on a product weight basis) increased 26% year-on-year to 0.75 million tons in 2018, and the export value also increased 10% year-on-year to 303.1 billion yen.
- Major export partners are Hong Kong, China, and the United States in terms of value.
- Major export items are scallop, pearl, etc. in terms of value.
- The "Strategy to Improve Export Performance in Agriculture, Forestry and Fisheries" was compiled in May 2016. According to the strategy, the government intends to improve fishery products' production system with the aim of expanding export, and to improve the export environment in a manner that can address the expansion of overseas markets and that can ensure compliance with the health standards, etc. of export partners. With regard to agricultural, forestry and fishery products and foodstuff, the "Economic Policy to Attain Investment for the Future" compiled in August 2016 sets an export target of 1 trillion yen (350 billion yen for fish and fishery products) for the year 2019.
Section 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 (34% of communities located inland from fishing ports are in peninsular areas, and 19% in isolated island areas). Population is rapidly aging and decreasing (the percentage of the elderly in communities located inland from fishing ports is 39%).
- 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 new Fishery Act provides that the national and prefectural governments are to give sufficient consideration so that the activities of fishers, etc. are conducted in a sound manner and fishing communities are revitalized, given that fisheries and fishing communities have multifunctional roles.

Multifunctional Roles of Fisheries and Fishing Communities

- Efforts to conserve coral reefs by removing coral eaters such as crown-of-thorns starfishes [Yamagata Pref.]
- Efforts to maintain and improve Zostera marina beds by both transplanting and fertilizing with nitrogenous fertilizers [Iwate Pref.]
- Efforts to conserve coral reefs by transplanting coral embryos into reef areas [Yamagata Pref.]
- A marina fishery with a peculiar natural richness where marine organisms welcome visitors dressed in traditional Ryukyu clothing and fishing and dragon boat races, etc. [Okinawa Pref.]
- Traditional tidal pools in a small island with long-lasting gleams of the setting sun, etc. [Hokkaido Pref.]
- Total fish consumption meeting [Yokohama Port]
- Establishment of public parks and green areas [Kakamigahara Port]
- Disaster relief and economic revitalization in the wake of the Great East Japan Earthquake [Iwate Pref.]
- Preservation of the cultural heritage of the port city [Kakamigahara Port]
- Safeguarding the lives and property of the public

Source: Prepared by the Ministry of Agriculture, Forestry and Fisheries, based on a report by the Science Council of Japan (only data on the fisheries industry and fishing communities are extracted)

(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 communities, the improvement of living environment is usually lagging behind. The development of fishing communities' roads, drains, etc. has been promoted.
- Measures against the aging of infrastructures are government-wide issues. The maintenance and renewal of infrastructures in fishing ports and communities have been promoted in accordance with plans incorporating measures for preventive maintenance.
(3) Activation of Fishing Communities

- For the activation of fishing communities, it is important to discover local resources in their regions, understand the characteristics of their regions, and on these bases, select specific actions. In some cases, cooperation with relevant industries is important.

- "Seaside Stay" is a type of "Countryside Stay" through which a visitor can enjoy the traditional life experience of a rural community and the exchange with local people in such community, and refers specifically to such experience and exchange in a fishing 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.

Case Example: Interchange Between Cities and a Fishing Community by Utilizing a Closed School

As a measure against a decrease in the number of fishers and shortage of successors, the Nishiura District in the north of Wakasa Town, Fukui Prefecture, has promoted regional revitalization initiatives to create vigor and prosperity in the area by effectively utilizing the building of an elementary school that was closed in 2017. The building has been renovated into a fishing community experiencing facility with a cooking area for processing local fish and accommodation rooms where visitors can stay, attracting young people who will lead the next generation from urban areas, and enabling interchange between the young people and local residents across generations. The facility opened in April 2018 as Wakasa Town Misaki Fishing Community "Misakichi."

Section 6 Reconstruction from the Great East Japan Earthquake

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

- The government continues to make efforts to restore and reconstruct the fisheries industry in the disaster-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.
Chapter III: Trends in Japan’s Fisheries Since FY2017

Summary of Restoration/Reconstruction of the Fisheries Industry Following Great East Japan Earthquake (as of March 2018)

1. Landings
- The landing value has recovered to 90% of the level before the earthquake, and the landing volume to 73%.

<table>
<thead>
<tr>
<th>Prefecture</th>
<th>Landing Value</th>
<th>Landing Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iwate</td>
<td>80%  (1000 tons)</td>
<td>75% (90,000 tons)</td>
</tr>
<tr>
<td>Miyagi</td>
<td>78% (150,000 tons)</td>
<td>77% (244,700 tons)</td>
</tr>
<tr>
<td>Fukushima</td>
<td>78% (150,000 tons)</td>
<td>77% (244,700 tons)</td>
</tr>
</tbody>
</table>

* The 2010 values are those for March 2010 through February 2011, and the values for other years are those for February through January of the following year.

2. Fishing Ports
- The landing functions have recovered in all affected fishing ports.

3. Fishing Vessels
- The restoration target (20,000 vessels) has been achieved up to 93%.

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

* The number of vessels for each year is that as of the end of March.
* The number of vessels restored is the total number for 21 prefectures.
(2) Response to the Impact of the Accident at TEPCO’s Fukushima Daiichi Nuclear Power Plant
(a) 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 and releases the results.

In relation to marine species, since April 2015, only one sample collected in Fukushima exceeded the standard limits in January 2019 (for the first time in three years and ten months), and there have been no samples collected in other prefectures that exceeded the standard limits since September 2014. In relation to freshwater species, in FY2018 five samples collected in Fukushima exceeded the standard limits but no samples collected in other prefectures exceeded them.

After full evaluation of the results of monitoring, trial fishing operation/selling was implemented off the coast of Fukushima. Since April 2017, the number of target species has been expanded to all fish and shellfish (except fish species subject to distribution restriction). From June 2018, fox jacopever, rockfish, and common sea bass became subject to distribution. As a result, almost all of the important species off the coast of Fukushima Prefecture became subject to distribution.
b. Sweeping away Unfounded Reputational Damage and Response to Overseas Import Restrictions

- It is true that some consumers still remain suspicious of food produced in Fukushima. Therefore, the Fisheries Agency has continued to monitor radioactive materials in fish and fishery products and to publish the results to consumers in an easy-to-understand manner and its website provides Q&A on radioactive materials and fish/fishery products to ensure that correct information is given to every consumer.

- Monitoring results are communicated to import partners with explanations on the details of monitoring and safety measures, to have import restrictions relaxed or removed. As a result, 30 countries among the 53 countries and regions that had continued to impose ban on fish and fishery product imports from some prefectures completely withdrew their import restrictions by the end of March 2019.

- As for South Korea's import restrictions, the WTO dispute settlement procedures were initiated in 2015. In February 2018, the panel published a report recommending South Korea to rectify its measures in accordance with the WTO/SPS agreements. South Korea, dissatisfied with the panel's verdict, filed an appeal with the WTO Appellate Body in April of the same year. On April 12, 2019, the Appellate Body published a report, overturning a part of its verdict, but it made no change from the verdict in regard to the safety of Japanese foods.

- The government has continued to encourage countries and regions that still impose an import ban on agricultural, forestry and fishery products produced in Japan to abolish or ease their import ban, while explaining once again the safety of Japanese foods and Japan's safety management initiatives.
Overview
Focus of measures, fiscal measures, tax measures, financial measures, and policy assessment

I. Fishery Resource Management for Making Fisheries a Growth Industry
- Shifting to advanced resource management in Japan and promoting global resource management
- Strengthening the fisheries regulatory system
- Strengthening the functions of income stabilization measures that contribute to stable business management of fishers engaging in appropriate resource management, etc.

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
- Increasing the number of visitors to fishing communities through the promotion of Nagisa Haku (seaside overnight stay)

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