For Users

I. Outline of the 2018 Census of Fisheries

1. Survey Objectives

The 2018 Census of Fisheries reveals the actual situation surrounding the fisheries industry in Japan, including the production structure, employment structure, fishing villages and distribution/processing of fishery products, etc. It is aimed at preparing the basic materials necessary for the promotion of fisheries administration in Japan.

2. Laws and Regulations Supporting the Survey

The 2018 Census of Fisheries was conducted as a fundamental statistics survey based on the Statistics Act (Act No. 53 of 2007), the Order for Enforcement of the Statistics Act (Cabinet Order No. 334 of 2008), the Regulations for Census of Fisheries (No. 39 of Ordinance of Ministry of Agriculture, Forestry and Fisheries, 1963), and Ministry of Agriculture, Forestry and Fisheries Notification No. 776 of May 20, 2003 (providing lakes, etc. specified by the Minister of Agriculture, Forestry and Fisheries in Article 5, paragraph (2), item (i) of the Regulations for Census of Fisheries).

3. Survey Framework

Survey Type		Survey System
Marine Fisheries Survey	Survey for Fishery Management Entities	MAFF - Prefectures - Municipalities - Enumerators - Survey targets
	Community Survey for Marine Fisheries	MAFF - Local organization - Survey targets
Inland Water Fisheries Survey	Survey for Inland Water Fishery Management Entities	MAFF - Local organization - Enumerators - Survey targets MAFF - Local organization - Survey targets
	Community Survey for Inland Water Fisheries	MAFF - Local organization - Survey targets
Distribution and	Survey for Fish Markets	MAFF - Local organization - Survey targets
	Survey for Cold Storage/ Refrigerating Plants and Fishery Processing Plants	MAFF - Local organization - Enumerators - Survey targets

4. Survey Targets

(1) Marine Fisheries Survey

Survey for Fishery Management Entities
 Fishery management entities concerned with marine fisheries in the area of

municipalities along the sea and municipalities designated by the Minister of Agriculture, Forestry and Fisheries under Article 86, paragraph (1) of the Fisheries Act (Act No. 267 of 1949) (hereinafter referred to as "coastal municipalities"), and fishery management entities concerned with marine fisheries located outside of these municipalities as deemed necessary by the Minister of Agriculture, Forestry and Fisheries.

b. Community Survey for Marine Fisheries

Fishery cooperatives in coastal areas (fishery cooperatives provided in Article 2 of the Fishery Cooperative Act (Act No. 242 of 1948)).

(2) Inland Water Fisheries Survey

a. Survey for Inland Water Fishery Management Entities

Fishery management entities for inland water fisheries engaged in capture of aquatic animals and plants on natural lakes or other lakes that are important to fishery production in the districts with cooperative fishery rights, and fishery management entities engaged in aquaculture in inland waters.

b. Community Survey for Inland Water Fisheries

Inland water cooperatives provided in Article 18, paragraph (2) of the Fishery Cooperative Act.

(3) Distribution and Processing Survey

a. Survey for Fish Markets

Markets directly landing fishery products by fishing vessels, and markets not directly landing fishery products but nonetheless engage in initial-stage trade after receiving fishery products from their production areas via ground transportation.

b. Survey for Cold Storage/Refrigerating Plants and Fishery Processing Plants

Business entities that freeze or refrigerate fishery products (excluding nori-laver, cold nets) owning cold storage/refrigerating facilities with over 10 horsepower (7.5 kW) in major machines on land (cold storage/refrigerating plants). Business entities that purchase aquatic animals and plants from others and process/manufacture them for the purpose of sale. Business entities that have places recognized as working places/factories and employ full-time workers in their manufacturing activities even if the raw materials are self-produced materials (fishery processing plants).

5. Survey Items

- (1) Marine Fisheries Survey
 - a. Survey for Fishery Management Entities
 - i. Fishery type, fishing vessels used, aquaculture facilities, financial situation of fishery management entities, others
 - ii. Situation of household in individual management entity, number of working days for fishery by household member, other employment status
 - b. Community Survey for Marine Fisheries
 - i. Activities for resource management and improvement of fishing grounds
 - ii. Holding status of assemblies/meetings, etc.
 - iii. Activities for activation of a community

(2) Inland Water Fisheries Survey

- a. Survey for Inland Water Fishery Management Entities
- i. Fishery type, fishing vessels used, aquaculture facilities, financial situation of fishery management entities, others
- ii. Situation of household in individual management entity, status of employment by

household member

- b. Community Survey for Inland Water Fisheries
- i. Number of cooperative members
- ii. Production conditions
- iii. Activities for activation of a community

(3) Distribution and Processing Survey

a. Survey for Fish Markets

Fish market facilities, handled volume, etc.

b. Survey for Cold Storage/Refrigerating Plants and Fishery Processing Plants Business details, number of employees, etc.

6. Survey Date

Conducted as of 1 November 2018 (Distribution and Processing Survey was conducted as of 1 January 2019).

7. Survey Method

(1) Marine Fisheries Survey - Survey for Fishery Management Entities

A self-enumeration survey method (i.e., a method whereby survey targets write down their responses by themselves on the questionnaire) was employed whereby survey enumerators distributed questionnaires to survey targets and then collected them later.

In case that cooperation of survey targets could be obtained, on-line collection of questionnaires was also permitted.

In addition, an interview survey method (i.e., survey enumerators visited survey targets to interview them) was employed upon request from survey targets.

(2) Marine Fisheries Survey – Community Survey for Marine Fisheries, Inland Water Fisheries Survey – Community Survey for Inland Water Fisheries, and Distribution and Processing Survey - Survey for Fish Markets

A self- enumeration survey method was employed whereby questionnaires are distributed to survey targets and then collected later either by postal mail or on-line method.

(3) Inland Water Fisheries Survey - Survey for Inland Water Fishery Management Entities

A self-conducted survey method was employed whereby survey enumerators distributed questionnaires to survey targets and then collected them later.

However, where cooperation of survey targets could be obtained, on-line collection of questionnaire was also permitted.

In case that survey targets request an interview survey, an interview survey method (i.e., survey enumerators visited survey targets to interview them) was employed.

Furthermore, where special circumstances exist, a self- enumeration survey method whereby questionnaire are distributed to survey targets and then collected later either by postal mail, on-line method or government officers was also used.

(4) Distribution and Processing Survey - Survey for Cold Storage/Refrigerating Plants and Fishery Product Processing Plants

A self- enumeration survey method was employed whereby survey enumerators distributed questionnaires to survey targets and then collected them later.

In case that cooperation of survey targets could be obtained, on-line collection of questionnaires was also permitted.

8. Tubulation Method

(1) Organization of tubulation

Tubulation of these surveys were conducted by Statistics Department, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries.

(2) Tubulation Method

Since these surveys are conducted by complete enumeration, the tubulation were made by a simple accumulation of questionnaires with valid responses.

Among questionnaires with no response to mandatory items, some questionnaires which become valid questionnaires after complementing the following items as necessary were included in the tubulation.

- 1) items that could be complemented based on the relationship with other items in the questionnaire; and
- 2) items other than 1) above that are multiple-choice items and would not cause any inconsistencies with other items when complemented by applying certain choices,

The number of valid responses were as follows.

Unit: Questionnaires Classification Number of questionnaires distributed Number of valid responses Marine Fisheries (1) 79,916 79.067 Survey on Fishery Management Entities (2) Community Survey on Marine Fishery Districts 2,132 2,132 Inland Water Fisheries Survey Survey on Inland Water Fishery Management 4,822 4,772 Entities CommunitySurvey on Inland Water Fishery Districts (4) 1,060 1,060 Distribution and Processing Survey Survey on Fish Markets (5) 809 803 Survey on Cold Storage and Refrigerating Plants and 9.039 8,753 Processing

Note: 1 "Number of questionnaires distributed" is the number of questionnaires distributed to the survey targets. The survey objects list was prepared based on the list of 2013 Fishery Census with correction by using administrative records, hearing from relevant organization such as fishery cooperatives, local governments and judgement by enumerators.

9. Target Precision

Target precision was not set as these surveys are complete enumeration.

^{2 &}quot;Number of valid responses" is the number of questionnaires with appropriate response for all items and questionnaires with all mandatory items completed after complementing no-response items.

II. Notes for Using the Report

1. Structure of the Report

This report summarizes main results of the 2018 Census of Fisheries.

2. Definition of Terminology

(1) Survey for Fishery Management Entities

Marine fisheries

The business of capturing fish and aquatic plants from the sea or conducting marine aquaculture in a marine area (including Lake Saroma, Lake Notoro, Lake Furen, Lake Onneto, Lake Akkeshi, Lake Kamo, Lake Hamana, and Lake Nakaumi).

Past year

In the period from 1 November 2017 to 31 October 2018

Fishery management entity

A household or a business entity that engaged in capturing fish and aquatic plants from the sea or conducting marine aquaculture with intent to sell for the purpose of earning a living or profit during the past year.

However, individual management entities engaged in marine fisheries for less than 30 days during the past year are excluded.

Management organization

Classification of fishery management entities by type of organization.

Individual management entity

A fishery management entity operated personally.

Organized management entity

A fishery management entity other than individual management entity.

Company

A joint-stock company, partnership corporation, limited partnership, or private limited company established based on Article 2, paragraph (1) of the Companies Act (Act No. 86 of 2005).

It should be noted that special limited liability companies are included in "joint-stock company."

Fishery cooperative

A fishery cooperative and federation of fishery cooperatives (hereinafter referred to as "fishery federation") established based on the Fishery Cooperative Act.

Inland water cooperatives (inland water cooperatives provided in Article 18, paragraph (2) of the Fishery Cooperative Act) are excluded.

Fishery production association

A fishery production association provided in Article 2 of the Fishery Cooperative Act.

Joint management

Two or more fishery management entities (individual or corporate) manage fishery together by sharing main production means such as fishing vessels, fishing nets, etc. and provide capital or invest such means. The Survey for Fishery Management Entities was conducted for a representative of the entities only meeting the above conditions.

Others

Other entities not classified in the above classifications such as Stock Enhancement Centers and Breeding Centers in prefectures, etc.

Class of management entity

Based on reported "major type of fishing during the past year" and "total tonnage of fishing vessels utilized during the past year," fishery management entities are classified as follows:

- a. First, management entities of which major type of fishing (fishery type for top sales amount) during the past year was large set net, salmon set net, small set net, or marine aquaculture are classified into those classes.
- b. Management entities that do not fall under a. above are classified by type of fishing vessels used and total tonnage of powered fishing vessels ("total tonnage of powered fishing vessels" does not include the tonnage of vessels used only for recreational fishing or fresh fish transport-vessels for procurements, etc.) during the past year (classified based on the type of fishing vessels used and total tonnage of used powered fishing vessels into 16 classes, from "without using fishing vessel", "non-powered fishing vessel", fishing vessel with outboard motor and "powered fishing vessel of less than 1 ton" to "powered fishing vessel of 3,000 tons and over").

Fishery classes

Fisheries are classified as follows:

Coastal fishing class

Collective term for classes of "without using fishing vessel", "non-powered fishing vessel", "fishing vessel with outboard motor", "powered fishing vessel of less than 10 tons", "set net" and "marine aquaculture".

Marine aquaculture class

Class of marine aquaculture.

Small/mid-scale fishing class

Collective term for classes of powered fishing vessels of 10 tons and over but less than 1.000 tons.

Large-scale fishing class

Collective term for classes of powered fishing vessels of 1,000 tons and over.

Fishery type

Types of fishery that a fishery management entity engaged in.

Engaged fisheries

All types of fishery that a fishery management entity was engaged in during the past year.

Sales amount of catches/harvests

Sales amounts (including consumption tax) of catches/harvests of marine aquaculture during the past year.

The average sales was calculated by multiplying the median of each sales amount class by the number of its management entities (for the class with 1 billion yen or more, the actual amount were added up), and then dividing the total sales amount of all classes by the number of fishery management entities.

Shipping destination

Clients to which a fishery management entity directly shipped catches/harvests during the past year.

Markets or facilities for handling cargo operated by fishery cooperative Shipped to a wholesale market operated by a fishery cooperative or a cargo handling facility of a fishery cooperative.

Wholesale markets outside fishery cooperative Shipped to a wholesale market (including a central wholesale market) operated by a non-fishery cooperative.

Distributor and processor

Shipped to a distributor such as a wholesale dealer, processor, etc.

Retailer/co-op

Shipped to a supermarket (including a mass retailer), fresh fish store, or co-op, etc.

Food service industry

Shipped to the food service industry, including restaurants, etc.

Direct sales to consumers

Directly sold to consumers.

Own fisherman's market

Sold in an own fisherman's market by obtaining a distribution license of fishery products based on the Food Sanitation Act (Act No. 233 of 1947).

Other fisherman's market

Sold in a fisherman's market operated jointly or operated by others.

Other method

Sold by mobile sales (peddling), etc., and directly receiving orders from customers through the Internet or telephone, etc. for sale.

Other

Any other case not classified in the above classifications.

Household member engaged in fishery

A household member of an individual management entity who was engaged in fishery activity during the past year. This includes cases where the household member engaged in fishery activity as a member of joint management or an employee of another fishery management entity.

Executive engaged in fishery

A responsible person of an organized management entity who is a manager, an executive, a director or a substitute for them. Those who only attend executive committee meetings or who are in a managerial position but not an executive, etc. are not included as a responsible person.

Responsible person

A manager and a household member who is involved in decision making of management policy of individual management entity, and a manager, an executive, a director or a substitute for them in an organized management entity.

Those who only attend executive committee meetings or who are in a managerial position but not an executive, etc. in an organized management entity are not included as a responsible person.

Manager

A responsible person for the management of fishery or a person who makes management decisions.

Person
participating in
decision making
for management
policy
(excluding
manager)
Chief fisherman

A household member of an individual management entity who has participated in making decisions on fishery management with the manager.

A person who has full control over providing directions/instructions in fishery activity of an organized management entity, and determines the selection or moving fishing ground and the timing of casting fishing nets, etc. and gives instructions to the master of the vessel and other fishermen.

Master of the vessel

A person responsible for the operation of the fishing vessel of an organized management entity, who is in command of the fishing vessel and has obtained a qualification provided in the Act on Ships' Officers and Vessels' Operators (Act No. 149 of 1951) according to the size of fishing vessel.

Chief engineer

A person responsible for engine department, including engines and boilers of vessel of an organized management entity.

Head of aquaculture site

A person responsible for the operation of aquaculture sites in aquaculture facilities at sea or on inland of an organized management entity.

Other

A person responsible for each department of an organized management entity such as chief radio operator, boatswain, and chief steward (chief cook) (including executives who are not in a managerial position).

Responsible person for land work

A person responsible for land work, including management/operational work, etc.

Persons mainly engaged in fishery

A person aged 15 years or older and engaged in fishery work at sea for 30 days or more during the past year.

Only own fishery of individual management entity

Fishery workers who engaged only in their own fishery of an individual management entity and not in joint management fishery or hired in fishery (regardless of whether they engaged in work other than fishery or not).

Executive engaged in

A responsible person of an organized management entity who is a manager, executive, director or a substitute for them. Those who only attend

fishery

executive committee meetings or who are in a managerial position but not an executive, etc. are not included as a responsible person.

Hired in fishery

Fishery workers not classified in the above classifications (regardless of whether they engaged in work other than fishery or not).

New fishery worker

A person who engaged primarily in fishery for the past year for the purpose of obtaining regular income from fishery, and who 1) newly began fishery, 2) had been primarily engaged in another job previously but switched to fishery or 3) had not been engaged in a job on an ordinary basis previously but became primarily engaged in fishery.

A person who was engaged in only own fishery of individual management entity is considered a new fishery worker if he/she worked 30 days or more in marine fisheries among above mentioned category.

Fishery worker at sea

A person aged 15 years or older and who engaged in fishery work at sea as of 1 November.

Fishing vessel

Vessels that are used for fishery production during the past year in a fishery management entity including auxiliary vessels (light vessels for purse seine, fish detection vessels, net vessels, etc.) as well as main vessels.

However, a vessel that is not directly participated in fishery production (those used for recreational fishing only and transport-vessels for procurements, etc.) are excluded even though they are registered.

It should be noted that calculation of the number of fishing vessels mentioned above is limited to those owned on the day of the survey (in order to avoid double-counting).

Non-powered fishing vessel A fishing vessel without propulsion machinery.

Fishing vessel with outboard motor

A non-powered fishing vessel attached with outboard motors (propulsion machinery that can be removed). In case that one outboard motor is used for multiple non-powered vessels, one of these vessels is considered a fishing vessel with outboard motor and others are considered non-powered fishing vessels.

Powered fishing vessel

A fishing vessel with propulsion machinery fixed to the hull. A vessel with an inboard motor installed in the hull and a propulsion unit (propeller, etc.) attached outside the hull is considered a powered fishing vessel.

- Fishery work at sea a. In fishing vessel fisheries, fishery work refers to all works to be carried out at sea including navigation, operation of machinery, fishery catching (work of capturing aquatic animals and plant in fishing grounds), onboard processing, etc. (work of all crew members on a vessel needed for fishery is included such as crew of transport vessels, doctors, cooks, etc. who are not engaged in fishery operations are also included in the fishery workers at sea.)
 - b. In set net fishery, fishery work refers to all works at sea, including net setting (installation of nets), nets changing, vessel navigation, and fishery catching, and spotting (observing fish enter set nets) from the land.
 - c. In beach seine fishery, fishery work refers to all works at sea, including

vessel navigation, working nets and fishery catching, and work of hauling in nets on land.

- d. In fishery that does not use fishing vessels, fishery work refers to collecting of shellfish and seaweed (including seaweed washed on shore), etc. (including diving).
- e. In aquaculture, fishery work refers to the following:
- (a) Aquaculture at a marine facility
 - i. Travel to and from the aquaculture facility using a fishing vessel
 - ii. Installation and removal of the aquaculture facility such as rafts, nets, etc.
 - iii. All works at sea including seed collection, feeding, watching aquaculture facility, collecting products, etc.
- (b) Aquaculture at an inland facility
 - i. All works at an inland facility (breeding pond, rearing pond, water tanks, etc.) concerning collection of eggs and feeding
 - ii. Cleaning of aquaculture facilities (breeding pond, rearing pond, water tanks, etc.)
 - iii. Watching ponds and tanks
 - iv. Feeding (however, the work of feed mixing [feed preparation] is considered land work)
 - v. Collecting products

Fishery work on land

Fishery work other than fishery work at sea specifically refers to the following:

- a. Repair/maintenance of production means such as fishing vessels, fishing nets, etc. (including the those works carried out on a fishing vessel in a port)
- b. Loading of fishing tools, fishing nets and food
- c. Pulling down/up of fishing vessels at the time of leaving/entering port (returning port)
- d. Waiting to leave port at the time of bad weather
- e. Purchase and preparation of feed
- f. Inserting nuclei into pearl shells, extracting pearls, shell cleaning, handling of clam meat and drying nori laver and wakame seaweed
- g. Transportation, box packing, etc. of catches until shipment
- h. Production/processing of processed fishery products that use self-produced materials as main raw materials

However, in cases where it is carried out in an area acknowledged as a factory or workspace in the same premises (house) using full-time workers, it is not deemed fishery work on land.

i. Management/operational work of own fishery (control/supervision, technical training, accounting/calculation, book-keeping)

Full-time/part-time status of individual management entity

Full-time

As an individual management entity (household), its income came from the household's own fishery only during the past year.

Part-time type 1

An individual management entity (household) that had income from jobs other than the own fishery over the past year, and whose income from their

own fishery exceeded the total of its income from the other jobs.

Part-time type 2

An individual management entity (household) that had income from jobs other than the household's own fishery over the past year, and whose total income from their other jobs exceeded that from the own fishery.

Types of part-time Fishery products processing

A business of processing products mainly by using fishery products as raw materials. There are a case of purchasing/processing other than self-produced materials and a case of using self-produced materials in an area acknowledged as a factory or workspace in the same premises (house) using full-time workers (including family members) for the production. Processing of dried seaweed products alone is not included in fishery processors.

Fisherman's inn

Business entities that have permission to operate a hotel based on the Inns and Hotels Act (Act No. 138 of 1948), accommodate third parties such as tourists, and serve meals using fish and/or aquatic plants produced by themselves or local food ingredients regardless of the rate of use to make profits.

Fisherman's restaurant

Business entities that have permission to operate a restaurant or coffee shop based on the Food Sanitation Act, provide fish and/or aquatic plants produced by themselves to unspecified persons regardless of the rate of use to make profits.

Recreational fishing vessel operation

Business to provide service for recreational fishers by collecting fees to guide them to a fishing ground to catch fish or other aquatic animals and plants by fishing or other methods (vessel fishing, ferry, etc.) using fishing vessels or recreational fishing vessels. Business of introducing recreational fishers to other recreational fishing vessel operators is not included in recreational fishing vessel operators.

Agriculture

Business entities engaged in agriculture in order to sell products.

Retailing

Business entities that retail fish or aquatic plants produced by themselves or processed products using such products. Business entities that do not have stores and sell products through the Internet or peddling, etc. are included.

Other

Any other business not classified in the above classifications.

Core persons mainly engaged in fishery Persons who is aged 15 years or older and work most days in fishery work at sea in the household's own fishery among members of an individual management entity.

By generation structure

One-generation individual management

A fishery management with a household structure of "manager only", "manager and his/her spouse only" or "manager and brother/sister of manager only".

Two-generation individual management

A fishery management with a household structure of one-generation individual management plus one of the following members: child, parents, grandparents or grandchild.

Three-generation individual management

An entity with a household structure other than one-generation individual management or two-generation individual management.

Successor of own fishery

A person who is scheduled to become the manager of the own fishery in the future among the persons aged 15 years or older and engaged in fishery during the past year.

Major fishing area

An unit to show statistical value in marine fisheries production statistical survey. It divides Japan's sea area into nine areas. The boundaries of each area are shown in the Major fishing Area Classification Chart (page 24).

(2) Community Survey for Marine Fisheries

Fishery zone

A zone in which fishery is conducted commonality of socio-economic activities related to the use of local fisheries centered on common fishery conditions and common fishery rights, etc. within the municipality area.

Past year

In the period from 1 November 2017 to 31 October 2018

Resource management plan

A plan for resource management to be implemented independently by fish type or fishery type created by relevant persons related to fishery based on the "Resource Management Guidelines" established as a basic policy on ideal resource management in the future by the government and prefectures.

Fishing ground improvement plan

A plan created by a fishery cooperative, etc. for assuring sustainable aquaculture production and authorized by the governor, etc. based on Article 4 of the Sustainable Aquaculture Production Assurance Act (Act No. 51 of 1999).

Other

Voluntary activities by a fishery cooperative aimed at resource management and improvement of fishing grounds other than the resource management plan and the fishing ground improvement plan.

Management of fishery resource
Setting quota

Setting quota (capture/harvest) Setting the volume of catches by fish type and fishery type. In case of the marine aquaculture, setting the number of aquaculture facilities.

Breeding of fishery resource

Release of seeds, etc. (including intermediate-bred ones) for the preservation and expansion of fishery resources.

Other

Any other activity related to the management of fishery resources that are not classified in the above classifications.

Preservation /management of fishing ground Preservation of fishing ground

Measures to maintain the fishing ground in an appropriate state for the growth of fishery resources through activities of development of seaweed beds and tidal flats, activities not to use chemicals, etc.

Maintenance and management of seaweed bed and tidal flat Activities conducted for the maintenance and management of seaweed beds and tidal flats.

Activities not using chemical, etc.

Activities such as making rules to disallow use of chemicals such as antifouling agent for fishing nets, etc. for the reason of high environmental impact among chemicals that are currently permitted. Activities not to use synthetic detergent are also included.

Development of fishing ground

Activities to improve the values of fishing grounds.

Rules on the use of fishing ground

Making rules on the use of fishing grounds.

Other

Any other activities conducted for the purpose of maintaining/managing fishing grounds.

Management of catch

Regulation by legal system

The fishery adjustment rules, the content and restrictions or conditions of fishery permission and the rules based on the rules for enforced areas of fishery rights.

Regulation on fishing method (aquaculture method) Activities to conduct management of catches through prohibition of specific fishing methods (aquaculture methods).

Regulation on using fishing vessel

Activities to conduct management of catches through the rules for using fishing vessels.

Regulation on using fishing tool

Activities to conduct management of catches through the rules for using fishing tools.

Regulation on fishing period

Activities to conduct management of catches by regulating fishing periods (including suspension/prohibition days of fishing)

Regulation on number of fishing days and operating hours Activities to conduct management of catches by regulating the number of fishing days and operating hours (including only setting of the starting/ending time of operation).

Regulation on the size of catch (capture/harvest) Activities to conduct management of catches by regulating the size of fishery products that can be caught/harvested or shipped (length, weight, etc.).

Regulation on the quantity of catch (capture/harvest)

Activities to conduct management of catches by regulating the quantity of catches per management entity or fishing unit per year, fishing period, or day. For marine aquaculture, regulation on harvests per management entity for marine aquaculture.

Other

Any other activities conducted for the purpose of managing catches.

Agenda of assembly/meeting, etc.

Change of specific demarcated fishery right/ common fishery right

Agenda includes a change of specific demarcated fishery rights (demarcated fishery right licensed preferentially to fishery cooperatives and fishery federations as fishery rights; as "bamboo-installed aquaculture", "algae aquaculture", "suspension-type aquaculture (excluding pearl aquaculture)", "fish pen aquaculture" and "shellfish aquaculture as a class 3 demarcated fishery") and common fishery rights (rights of operating a common fishery (fishery operated in certain commonly utilized waters)).

Entry of company

Agenda includes the entry of companies into fishery/aquaculture in local area.

Waiver of fishery right

Agenda includes the waiver (including only some parts of area) of fishery rights (fixed gear fishery rights, demarcated fishery rights, and common fishery rights) licensed to a fishery cooperative.

Compensation for fishery-related loss

Agenda includes the compensation (compensation of consideration) for fishery right, etc. in case where the fishery right is waived or cannot temporarily be executed.

Management of common property/facility of local area

Agenda includes the management of fishing port facilities and facilities of fishing grounds shared by fishery managers of local area.

Preservation of natural environment Agenda includes the preservation of the natural environment of local area including seaweed beds and tidal flats.

Social event/ceremony of local area (festival, etc.) Agenda includes the implementation of festivals (fishery cooperative festivals, fishery product festivals, fish festivals, etc.) and events (outlet to consumers, seine fishing experience, beach opening, etc.) held at local area.

Other

Agenda includes any other matters mentioned above.

Activities related to fishery cooperative

Activity to secure new fishery worker /successor Activities to secure new fishery workers and successors mainly conducted by fishery cooperatives.

Activity to clean waste (on beach, at sea, bottom of the sea)

Activities of cleaning beach (collecting not only waste that has been washed ashore but also waste left by tourists, etc.) and activities such as collecting/disposing waste mixed with fishing nets or caught in set nets, etc. in an organized manner by each fishery cooperative.

Activity for the sixth industrialization

Activities related to integrated business from production to processing and distribution (sixth industrialization) in which farmers, fishermen and foresters, etc. to process agricultural, forestry and fishery products produced by themselves, then directly sell them to consumers and provide them in fisherman's inn and/or fisherman's restaurants, etc.

Activity of blue tourism

Activities of blue tourism (recreational activities to enjoy nature, culture and interaction with people in fishing area) mainly conducted by fishery cooperatives to accept urban residents, etc.

Regardless of the duration of stay if the activities conducted for the purpose of accepting recreational activities.

Preservation of fishery-related traditional festival/culture/a rt

Activities to preserve historical festivals associated with the sea and fisheries (water god festival, sea god festival, etc.), cultures (dietary cultures, fishing methods from ancient era, etc.), and public arts (Kagura dances to celebrate bountiful catches, etc.).

Activities mainly included are those handed down before the World War II but particular preservation activities after the World War II are also included.

Holding of other various events

Holding of various events other than the above for the purpose of activation of community.

Fishery experience

Activity allowing actual experience of fishery such as using a beach seine, set net, or trawl.

Fishery food promotion activity

Activity to implement events such as lectures/lessons of fish cooking, exhibit of fish dishes and panel display at local events, etc. for the purposes of expanding consumption of fishery products (including promotion of their nutritional properties and as a health food) and deepening understanding of fisheries.

Fisherman's market

Business entities that own a facility (structure with adequate durability such as steel construction, reinforced concrete or timber construction with a refrigerating facility, water supply, waste treatment facility, etc.) to sell fresh seafood, processed fishery products, etc. directly to consumers on a regular basis with a distribution license of fishery products based on the Food Sanitation Act (Act No. 233 of 1947) and employ their own full-time workers for sales activities.

(3) Survey for Inland Water Fishery Management Entities

Inland water fisheries

Fisheries conducted in inland water (excluding Lake Saroma, Lake Notoro, Lake Furen, Lake Onneto, Lake Akkeshi, Lake Kamo, Lake Hamana and Lake Nakaumi; hereinafter the same).

Past year

In the period from 1 November 2017 to 31 October 2018

Inland water fishery management entity

A lake fishery management entity or inland water aquaculture management entity

Lake fishery management entity

A household or business entity that engaged in capture or aquaculture of aquatic animals and plants in natural or other lakes with cooperative fishing rights registered by the Minister of Agriculture, Forestry and Fisheries in order to sell products to gain profit or income during the past year.

Inland water aquaculture management entity A household or business entity that systematically or continually feeds or applies fertilizer for culturing/release of seeds or conducts aquaculture or cultivating adult fish for sale in inland water to gain profit or income during the past year.

Management organization Individual management

entity

A classification on fishery management entities by type of organization.

A fishery management entity operated personally.

Organized management entity

A fishery management entity other than individual management entity.

Company

A joint-stock company, partnership corporation, limited partnership or private limited company established under Article 2, paragraph (1) of the Companies Act. It should be noted that special limited liability companies are included in "joint-stock company."

Fishery cooperative

A fishery cooperative and a fishery federation established based on the Fishery Cooperative Act.

Fishery production association

A fishery production association provided in Article 2 of the Fishery Cooperative Act.

Joint management

Two or more fishery management entities (individual or corporate) manage fishery together by sharing main production means such as fishing vessels, fishing nets, etc. and provide capital or invest such means. The Survey was conducted for a representative of the entities only meeting the above conditions.

Other

Other entities not classified in the above such as Prefectural Centers for Stock Enhancement and Aquaculture Centers, etc.

Full-time/part-time status of individual management entity Full-time

An individual management entity (household) whose income for the past year came from the household's own fishery only.

Part-time type 1

An individual management entity (household) that had income from jobs other than the own fishery over the past year, and whose income from their own fishery exceeded the total of its income from the other jobs.

Part-time type 2

An individual management entity (household) that had income from jobs other than the own fishery over the past year, and whose total income from their other jobs exceeded that from the own fishery.

Fishery type

Fishery types conducted by lake fishery management entities (11 types).

- 1) Net fishery (5 types): trawl/vessel seine, gill net, set net, cast net, other kinds of net fishery
- 2) Other fishery (4 types): angling/long-line, shellfish collecting/seaweed collecting, cage, other fishery types
- 3) Aquaculture (2 types): fish cultivation, other aquaculture types

Fishery type with the highest sales amount Engaged-in fishery type

The fishery type with the highest monetary sales amount among all fishery types practiced during the past year.

All fishery types practiced during the past year.

Aquaculture type

Aquaculture types conducted by inland water aquaculture management entities (16 types).

1) For food (9 types) : rainbow trout, other trout, sweetfish, common

carp, crucian carp, eel, softshell turtle,

saltwater fish species, others

2) For breeding (4 types) : trout, sweetfish, common carp, others

3) For display (2 types) : nishikigoi carp, others

4) Pearl (1 type) : pearl

Aquaculture for with the highest sales amount

The aquaculture type with the highest monetary sales amount among all aquaculture types practiced during the past year.

Engaged aquaculture type

All aquaculture types that were practiced during the past year.

Fishery work on lake

Fishery work conducted on lake

- 1) In fishing vessel fishery, works of vessel navigation, fish catching, etc.
- 2) In set net fishery, all fishery works of net setting/changing, vessel navigation, fish catching and others on a lake as well as spotting (observing fish enter set nets) from the land.
- 3) In beach seine fishery, all fishery works of vessel navigation and working nets on a lake as well as hauling in nets on land.

- 4) Collecting of shellfish/seaweed without using fishing vessels.
- 5) In aquaculture, all fishery works of round trip to aquaculture site, installation and removal of aquaculture facilities (rafts, preserves, etc.), collection of seeds, watching aquaculture facility, harvesting, etc. on a lake (except for engaging in works only of practices of pearl culture, shell cleaning and handling of clam meat).

On-lake fishery worker

A person aged 15 years or older who engaged in fishery work on lake during the past year regardless of number of days, including persons who worked temporarily to perform a specific task.

Aquaculture work

Works necessary in aquaculture such as feeding (including preparation of feed), sorting, landing, cultivation pond management, installation of aquaculture facilities and other works necessary for management (including cultivation work in lake fishery).

Aquaculture worker

A person aged 15 years or older who engaged in aquaculture work during the past year regardless of number of days, including persons who worked temporarily to perform a specific task.

New aquaculture worker

In the individual management entities, persons engaged primarily in fishery for the past year for the purpose of obtaining regular income from fishery and fall under the following categories; 1) newly began fishery, 2) primarily engaged in another job during the past but switched to fishery, or 3) had not been engaged in a job ordinarily during the past but became primarily engaged in fishery.

Owned fishing vessel

A fishing vessel that a fishery management entity manages and operates on 1 November 2018 among all fishing vessels used during the past year (includes fishing vessels borrowed from other entities, but does not include fishing vessels lent to other entities).

Non-powered fishing vessel

A fishing vessel without propulsion machinery.

Fishing vessel with outboard motor

A non-powered fishing vessel attached with outboard motors (propulsion machinery that can be removed). In case that one outboard motor is used for multiple non-powered vessels, one of these vessels is considered a vessel with outboard motor and others are considered "non-powered fishing vessels.

Powered fishing vessel

A fishing vessel with propulsion machinery fixed to the hull. A vessel with an inboard motor installed in the hull and a propulsion unit (propeller, etc.) attached outside the hull is considered a powered fishing vessel.

Successor of own fishery

A person who is scheduled to become the manager of the own fishery in the future among the persons aged 15 years or older and engaged in fishery during the past year.

Number of cultivation pond

The number of cultivation ponds used in aquaculture (rearing ponds, fry ponds, auxiliary ponds for harvest, etc.; does not include sedimentation ponds for water purification, filtration ponds, etc.).

Sections demarcated by concrete or other fixed items are counted for each section. (Removable separations such as fishing nets are not included.)

Moreover, in case of the net preserve culture, the number is the number of preserves net, and in case of the pearl culture, the number is the demarcated fishery rights.

Aquaculture area

The area of cultivation ponds.

Moreover, in case of the net preserve culture, the area is water surface enclosed by a preserve nets, and in case of the pearl culture, the area is the installed section area of the aquaculture facility.

Sales amount of fishery catch

Sales amounts (including consumption tax) of catches in lake fishery during the past year. It includes harvests in lake aquaculture.

The average sales was calculated by multiplying the median of each sales amount class by the number of its management entities (for the class with 10 million yen or more, the actual amounts were added up), and then dividing the total of all classes by the number of fishery management entities.

Sales amount of harvest

Sales amounts (including consumption tax) of harvests in inland water aquaculture during the past year. "No sales" includes management entities without response for the survey items on the sales amount of harvests.

The average sales was calculated by multiplying the median of each sales amount class by the number of its management entities (for the class with 100 million yen or more, the actual amounts were added up), and then dividing the total of all classes by the number of fishery management entities.

(4) Community Survey for Inland Water Fisheries

Past year

In the period from 1 November 2017 to 31 October 2018

Certificate of approval for recreational fishing

A certificate of approval to be issued for recreational fishers by a cooperative as the right holder of common fishery rights with recreational fishing regulations set from the view point of public characteristics of fishery rights.

Exchange activity with urban area

A hands-on activity intended to deepen understanding of fishery and fishery products for the people visiting from outside of fishing area implemented by an inland water fishery cooperative during the past year.

Fishery experience

Activity allowing actual experience of fishery such as using a beach seine, set net, or trawl.

Fishery food promotion activity

Activity to implement events such as lectures/lessons of fish cooking, exhibit of fish dishes and panel display at local events, etc. for the purposes of expanding consumption of fishery products (including promotion of their nutritional properties and as a health food) and deepening understanding of fisheries.

(5) Survey for Fish Markets

Past year In the period from 1 January 2018 to 31 December 2018

Fish market A market where fishery products are directly landed by a fishing vessel

and a market that engaged in initial-stage trade after receiving fishery products from production areas via ground transportation even if fishery

products are not landed directly, during the past year.

Fishery product A trader receiving consignment for sale of or purchase fishery products wholesaler from shippers.

Fishery product A middleman or a participant of trade purchasing from fishery product wholesalers.

Shipping agent A business operator purchasing fishery products from fishery product in producing area wholesalers and ships them to other wholesale markets.

Processor A business operator producing processed products from fishery products purchased from fishery product wholesalers.

Other Any other fishery product trading participants not classified in the above classifications.

Equipment for quality and hygiene

management of fishery products

Seawater disinfection equipment Equipment to disinfect/sterilize seawater.

Ice Equipment to make ice for covering fishery products, etc. used at a fish crusher/maker market.

It does not include equipment to make ice only for loading in refrigerator trucks and holds of fishery vessel.

Deodorization Equipment to purify air in a building. exhaust gas

Fishery processing equipment

Other

treatment equipment

Equipment to conduct initial processing of fishery products, packing work, etc. automatically such as a fillet machine, packing machine, etc.

Any other equipment installed for the purpose of managing the quality or hygiene of fishery products and not classified above such as ozone water generation equipment to clean devices in a hygienic manner.

(6) Survey for Cold Storage/Refrigerating Plants and Fishery Processing Plants past year

In the period from 1 January 2018 to 31 December 2018

Cold storage/ refrigerating plant

A business entity that owns cold storage/refrigerating facilities with over 10 horsepower (7.5 kw) in major machines on land, and that froze or refrigerated fishery products during the past year.

Cold storages of business entities that do not handle fishery products. business entities that store "nori laver" cold nets only, and fish retailers that aim to store fishery products for a short period of time, etc. are not included.

Fishery processing plant

A business entity that purchased aquatic animals and plants from other business and processed them or a business entity that processed materials even if they are self-produced materials in an area acknowledged as a factory or workspace, using full-time workers for the purpose of sales during the past year.

Types of business entity

Individual Business entity operated personally.

Company

A joint-stock company, partnership corporation, limited partnership, and private limited company established under Article 2, paragraph (1) of the Companies Act. A special limited liability company is included in joint-stock company.

Fisherv ry federation/ production association

A fishery cooperative, federation of fishery cooperative associations and association/fishe | fishery production association under Article 2 of the Fishery Cooperative Act.

Fishery processing cooperative/proc essing federation

A fishery processing cooperative or federation of fishery processing cooperatives under Article 2 of the Fishery Cooperative Act.

Other cooperative

An organization whose name contains "cooperative" or "federation of cooperatives" but which is other than "fishery cooperative/fishery federation/production association" or "fishery processing cooperative/processing federation" mentioned above.

Other

Any other business entities other than above.

Full-time worker

A person falling under any of categories 1) to 4) below.

- 1) Owner of individual business entity or family member without salary
- 2) Executive with salary (person covered by the executive salary /remuneration system)
- 3) Employee (person with wage or salary [including payment in kind])
- 4) Person received through transfer or dispatch (assigned employee)

The above do not include business owners who are not involved in actual duties, or workers or trainees transferred or dispatched to other companies,

etc.

Of the Full-time worker, Employee An employee who is a full-time worker (person who receives a wage or salary [including salary in kind])

Other

A person other than a full-time worker who is employed for a set period of less than one month on a day-to-day basis, etc.

Cold storage capability

Normal carrying capacity retaining 10°C or less at all times. It is the "volume calculated by multiplying the area measured from the center line of the walls and other subdivision by the effective height (from the floor surface to the bottom part of the girder or lower end of the duct, whichever is lower), and then multiplying the result by 90%" (Implementation Policy No. 25 for the Regulation for Enforcement of the Warehousing Business Act, 28 March 2002).

Freezing capability

Daily freezing capability of production under normal conditions.

Processed fishery product

Frozen fishery products produced by freezing fresh fishery products or processed foods including processed foods, oils and fats, feed, and fertilizer manufactured using aquatic animals and plants as main raw materials (50% of raw materials).

If processed products are manufactured using frozen fish paste, they are included in processed fishery products.

In addition, least processed fishery products such as boiled octopus and boiled crabs, etc. that are sold only after boiling them are not included. However, fishery products in case of being boiled and then frozen to improve preservability are included in processed fishery products as frozen fishery products.

3. Symbols Used

The following symbols appear in the statistical tables.

- : Item for which a correct value is unavailable

...: Item for which the detail is unknown or which is not surveyed

x: Item for which no statistical value is released in order to protect confidential information of individuals, corporations, or other organizations

△ : Value that is negative or decreased

nc: Value that cannot be calculated

4. Confidential Measure

In results of the Statistical Survey, if a figure was 2 or lower, the result is shown as "x" as a confidential measure from the viewpoint of keeping the survey result on an individual, corporation, or other organization confidential.

If a result is expected to apply to the confidential measure as a total balance, figures that do not need to be kept confidential are also shown as "x."

5. Postings on Websites

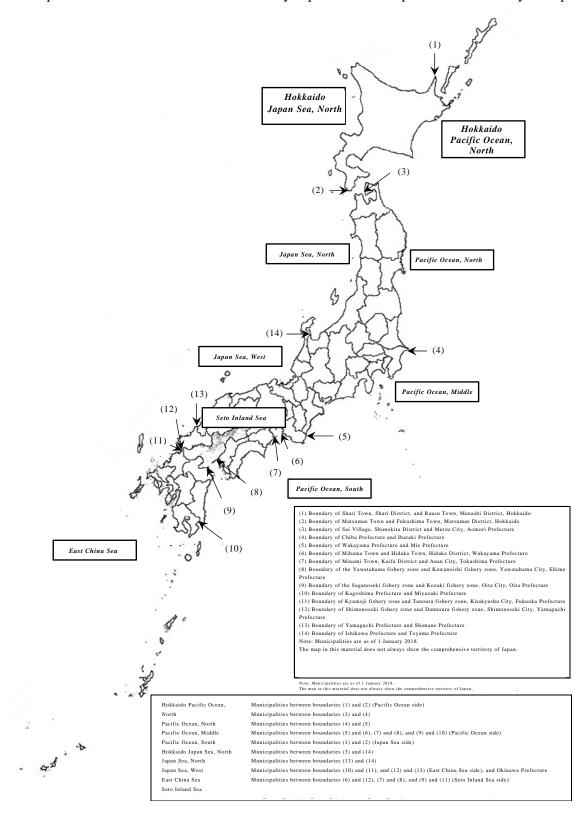
The results of various agriculture, forestry and fisheries statistical survey are available for viewing as statistics information ("Data"-"Statistics") on the Ministry of Agriculture, Forestry and Fisheries website.

[https://www.maff.go.jp/e/data/stat/]

The results of this report are available for viewing at "Fisheries"-"Census of Fisheries."

6. Major fishing Area Classification Chart

The maps in this document are not necessarily represents a comprehensive territory of Japan.



III. Major amendments of the 2018 Census of Fisheries

In conducting the 2018 Census of Fisheries, the following amendments are made taking into account the changes in the situations of the fisheries industry, etc.

1. Marine Fisheries Survey

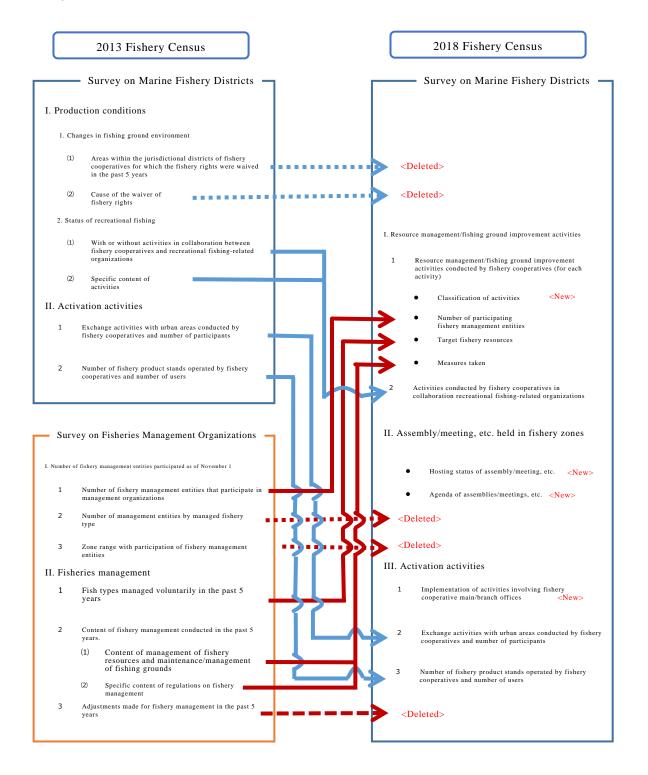
- (1) Survey for Fishery Management Entities
 - a. Until the previous survey (2013), sex, age group, number of days in fishery work at sea, and fishery type with most days engaged in fishery work at sea, etc. had been identified only for household members engaged in individual management entities' own fishery. In this survey, the same matters as household members engaged in individual management entities' own fishery were newly identified also for managers of organized management entities, responsible person for work at sea/land work (executives, etc.), and employees who are in a managerial position such as master of the vessel and head of fishery work, etc.

In addition, for each of the above, not only the number of days in fishery work at sea, but the number of days in own fishery that includes land work was also identified, and the top three fishery types with most days engaged in fishery work at sea were identified.

- b. In individual management entities, whether household members engaged in fishery other than the managers were involved in decision making of management policies or not was newly identified.
- c. For the types of fishery that fishery management entities engaged in, "pufferfish culture" that had previously been included in "other fish culture" was separated, and the areas of facilities in aquaculture sites for "pufferfish culture" were newly identified. In addition, the term "tuna culture" was changed to "bluefin tuna culture."
- d. Until the previous survey (2013), among fishery types that fishery management entities engaged, the fishery types for the top two sales amounts as well as the type of powered fishing vessel for the top sales amount had been identified. In this survey, the fishery types and the fish types for the top three sales amounts were identified. Additionally, regarding the powered fishing vessels, the fishery types for the top three largest numbers of fishing days and the top three sales amounts were identified.
- e. For the sales amount of catches/harvests of fishery management entities, when the sales amounts were in the highest class (1 billion yen or more), the actual amounts were newly identified.
- f. For the shipping destinations of catches/harvests of fishery management entities, the food service industry is newly added, and "own fisherman's market", "other fisherman's market" and "other method" were also added under the classification of "direct sales to consumers" in order to identify the detail status of direct sales to customers.
- g. For businesses other than fishery, "self-employed fishery products processing", "private accommodation", "recreational fishing vessel operation" and "others" as well as "employed" had been previously identified only for individual management entities. In this survey, "fisherman's restaurant", "agriculture" and "retailer" were newly added to classifications, and the same contents were also newly identified in organized management entities.
- h. The following survey items were deleted.
 - i. The size of powered fishing vessels used by household members engaged in fishery of individual management entities
 - ii. The number of guests of recreational fishing vessel operated by individual management entities
 - iii. The number of employees of individual management entities and the number of workers of organized management entities by residential area

(2) Community survey for Marine Fisheries

Marine Fisheries Survey for Fisheries Management Organizations and Marine Fisheries Community Survey for Marine Fisheries that had previously been conducted until the 2013 Census of Fisheries were combined/reorganized, and new Marine Fisheries Survey-Community survey for Marine Fisheries were conducted for fishery cooperatives in coastal area to identify resource management/fishing ground improvement activities and regional activation activities, etc.



2. Inland Water Fisheries Survey

Survey for Inland Water Fishery Management Entities

- (1) It was newly identified whether household members engaged in fishery other than managers of individual management entities were involved in decision making of management policies or not.
- (2) For the fish types captured/harvested, "mysid shrimps" of aquatic animals were identified by including it in "Other aquatic animal."
- (3) For the sales amount of catches/harvests of fishery management entities, in case that the sales amounts were in the highest class (10 million yen or more for lake fishery, 100 million yen or more for aquaculture), the actual amounts were newly identified.
- (4) The following survey items were deleted.
 - a. Part-time status of individual management entities
 - b. Number of guests of private accommodations

3. Distribution and Processing Survey

- (1) Survey for Fish Markets
 - a. For the number of business entities of fishery product purchaser, it was changed to be identified by business category.
 - b. For the yearly handled monetary amount of fish markets, the amounts of landing and loading, which were also included in the total, were newly identified as same as the quantities handled yearly.
- (2) Survey for Cold Storage/Refrigerating Plants and Fishery Product Processing Plants
 - a. Product types for the production volume of fishery products were changed from 68 types to 66 types.
 - b. For the sales amounts of processed fishery products of fishery product processing plants, the class selection items were maintained but the actual amounts were newly identified only when those were in the highest class (1 billion yen or more).
 - c. For the shipping destinations of processed fishery products of fishery product processing plants, which had been paused since the 2008 Census of Fisheries, were identified with the addition of "export".
 - d. The survey item on the status of HACCP introduction for fishery product processing plants was deleted.

IV. List of Reports Issued

The reports on census of fisheries issued are as follows.

The 2018 Census of Fisheries (Summary)

Volume 1 Statistics on Marine Fisheries (Nationwide/Major Fishing Areas)

Volume 2 Statistics on Marine Fisheries (Prefectures)

Volume 3 Statistics on Marine Fisheries (Municipalities)

Volume 4 Statistics on Marine Fisheries (Fishery Zones)

Part 1 Hokkaido/Tohoku/Hokuriku

Part 2 Kanto/Tokai/ Kinki

Part 3 Chugoku/Shikoku

Part 4 Kyushu/Okinawa

Volume 5 Statistics on Structural Changes in Marine Fisheries

Volume 6 Statistics on Organized Management Entities in Marine Fisheries

Volume 7 Statistics on Inland Water Fisheries

Volume 8 Statistics on Distribution and Processing (Nationwide, Prefectures, Municipalities)

Volume 9 Statistics on Distribution and Processing (Fishery Zones)

THE 2018 CENSUS OF FISHERIES (English)

V. Inquiries

Census of Fisheries Statistics Team, Census Statistics Office, Management and Structure Statistics Division, Statistics Department, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries

```
TEL: (Main) 03-3502-8111 (Extension) 3660 (Direct) 03-3502-8467 FAX: 03-5511-7282
```

[https://www.contactus.maff.go.jp/j/form/kanbo/koho/160807.html]

^{*} In addition to the above, the opinions/requests for this report are also accepted on the on the Ministry of Agriculture, Forestry and Fisheries website.