[Survey Results]

1. Marine Fisheries

(1) Results of Survey for Fishery Management Entities

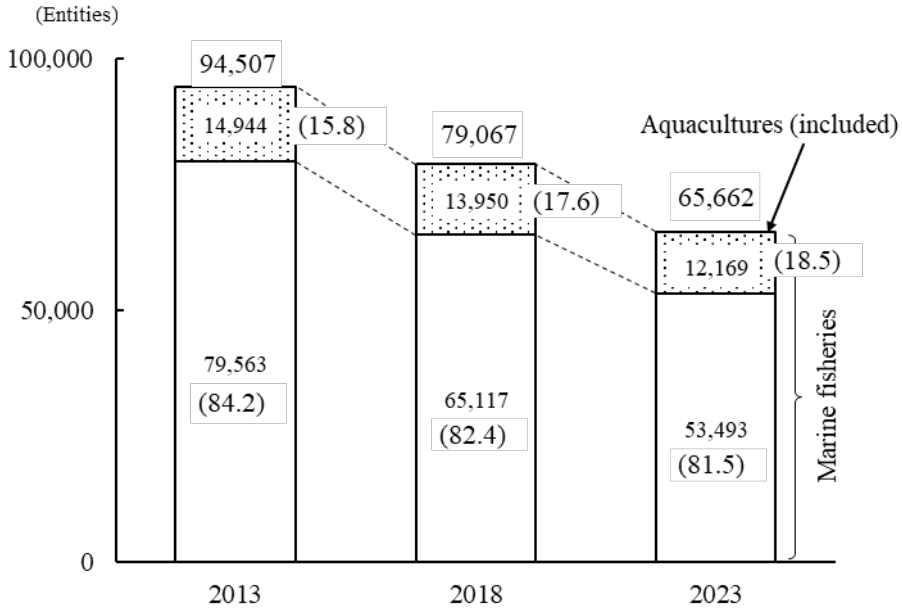
a. Fishery Management Entities

A “fishery management entity” is a household or business entity, etc. that engaged in capturing or culturing aquatic animals/plants in marine areas with intent to sell products (meaning catches and harvests; hereinafter the same) for the purpose of earning a living or profit during the year prior to the survey date (However, individual management entities engaged in marine fisheries for less than 30 days during the year prior to the survey date are excluded).

The total number of fishery management entities in marine fisheries nationwide (as of November 1, 2023) was 65,662, decreased 13,405 (17.0%) from 5 years ago.

Of them, the number of fishery management entities that mainly engaged in marine aquaculture was 12,169, decreased 1,781 (12.8%) from 5 years ago (the decrease was smaller than the overall trend).

Chart 1: Changes in Number of Fishery Management Entities in Marine Fisheries



Looking at this by fishery class, the number of management entities in the coastal fishing class was 61,458, decreased 12,693 (17.1%). Of them, the number of management entities in the marine aquaculture class was 12,169, those in the coastal fishing class other than the marine aquaculture class was 49,289, decreased 1,781 (12.8%) and 10,912 (18.1%), respectively, from 5 years ago.

Table 1: Number of Fishery Management Entities by Fishery Class

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total	79,067	65,662	△ 17.0
1) Coastal fishing class	74,151	61,458	△ 17.1
Marine aquaculture class	13,950	12,169	△ 12.8
Other coastal fishing class	60,201	49,289	△ 18.1
2) Small/mid-scale fishing class	4,862	4,152	△ 14.6
3) Large-scale fishing class	54	52	△ 3.7

Note: "△" in the table indicates decreases (hereinafter the same).
"1)" indicates the total of each class 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.
"2)" indicates the total of each class of powered fishing vessels of 10 tons or more but less than 1,000 tons.
"3)" indicates the total of each class of powered fishing vessels of 1,000 tons or more.

Looking at this by management organization, the number of individual management entities was 61,388, decreased 13,138 (17.6%) from 5 years ago. In addition, the number of organized management entities was 4,274, decreased 267 (5.9%) from 5 years ago. However, of them, the number of companies was 2,651, increased 103 (4.0%) from 5 years ago.

Table 2: Number of Fishery Management Entities by Management Organization

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total	79,067	65,662	△ 17.0
Individual management entity	74,526	61,388	△ 17.6
Organized management entity	4,541	4,274	△ 5.9
Company	2,548	2,651	4.0
Fishery cooperative	163	153	△ 6.1
Fishery production cooperative	94	94	0.0
Joint management	1,700	1,344	△ 20.9
Others	36	32	△ 11.1

Note: Fishery cooperatives include fishery cooperatives and their branches (hereinafter the same).

Looking at this by engaged-in fishery type, the number of management entities engaged in shellfish/seaweed collecting was the largest at 21,676, followed by those engaged in other fisheries at 20,420 and other anglings at 18,579, decreased 4,421 (16.9%), 2,148 (9.5%), and 3,491 (15.8%), respectively, from 5 years ago.

Table 3: Number of Fishery Management Entities by Engaged-in Fishery Type (Multiple Answers Accepted)

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total (actual)	79,067	65,662	△ 17.0
Trawls			
Distant water trawl	3	2	△ 33.3
Trawl in East China Sea	3	-	nc
Off-shore trawl (one-boat operation)	239	224	△ 6.3
Off-shore trawl (two-boat operation)	25	13	△ 48.0
Small trawl	8,857	7,480	△ 15.5
Vessel seine	3,145	2,589	△ 17.7
Surrounding nets			
Large and medium surrounding nets			
Skipjack/tuna on distant water (one-boat operation)	17	13	△ 23.5
Other surrounding nets (one-boat operation)	56	51	△ 8.9
Surrounding net (two-boat operation)	12	9	△ 25.0
Medium/small surrounding net	384	313	△ 18.5
Gill nets			
Salmon/trout drift gill net	42	38	△ 9.5
Swordfish, etc. drift gill net	24	31	29.2
Other gill nets	19,033	15,600	△ 18.0
Saury stick-held dip net	135	91	△ 32.6
Large set net	439	410	△ 6.6
Salmon set net	792	854	7.8
Small set net	3,869	3,304	△ 14.6
Other net fisheries	3,784	3,771	△ 0.3
Longlines			
Tuna longline on distant water	63	55	△ 12.7
Tuna longline on off-shore water	176	150	△ 14.8
Tuna longline on coastal water	364	463	27.2
Other longlines	3,812	3,147	△ 17.4

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Anglings			
Skipjack pole-and-line on distant water	21	19	△ 9.5
Skipjack pole-and-line on off-shore water	41	46	12.2
Skipjack pole-and-line on coastal water	403	497	23.3
Squid angling on distant/off-shore water	45	27	△ 40.0
Squid angling on coastal water	5,782	4,856	△ 16.0
Trolling line fishery	5,409	5,919	9.4
Other anglings	22,070	18,579	△ 15.8
Small-scale whaling	3	3	0.0
Diving apparatus fishery	1,595	1,699	6.5
Shellfish/seaweed collecting	26,097	21,676	△ 16.9
Other fisheries	22,568	20,420	△ 9.5
Marine aquacultures			
Fishes culture			
Coho salmon culture	66	71	7.6
Yellow-tails culture	643	593	△ 7.8
Red sea bream culture	699	615	△ 12.0
Bastard halibut culture	96	84	△ 12.5
Pufferfish culture	200	153	△ 23.5
Bluefin tuna culture	96	77	△ 19.8
Rainbow trout culture	…	28	441 △ 5.0
Other salmons/trouts culture	…	12	
Other fishes culture	464	401	
Common scallop culture	3,019	2,680	△ 11.2
Oysters culture	3,021	2,698	△ 10.7
Other shellfishes culture	635	696	9.6
Kuruma prawn culture	90	67	△ 25.6
Sea squirts culture	856	675	△ 21.1
Other aquatic animals culture	143	222	55.2
Kelps culture	1,628	1,455	△ 10.6
Seaweeds ("wakame") culture	3,442	2,914	△ 15.3
Lavers ("nori") culture	3,414	2,699	△ 20.9
Other seaweeds culture	790	929	17.6
Pearl culture	615	474	△ 22.9
Mother-of-pearl shell culture	405	358	△ 11.6

Note: 1. In the 2023 survey, "rainbow trout culture" and "other salmons/trouts culture" were separated from "other fishes culture" and added as a new survey item, whereas the 2018 figure of "other fishes culture" includes "rainbow trout culture" and "other salmons/trouts." In addition, the increase/decrease rate from the previous survey was calculated based on the total of "rainbow trout culture," "other salmons/trouts culture," and "other fishes culture" to allow

comparison between the 2018 and 2023 figures.

2. In the 2023 survey, “other surrounding nets (one-boat operation)” was created as a survey item by combining “skipjack/tuna on off-shore water (one-boat operation)” and “other surrounding nets (one-boat operation),” and “squid angling on distant/off-shore water” by combining “squid angling on distant water” and “squid angling on off-shore water.” In addition, the increase/decrease rate from the previous survey was calculated based on the total of the respective 2018 figures.
3. “－” in the table indicates items for which correct values are unavailable (hereinafter the same).
4. “…” in the table indicates items for which the details are unknown or which are not surveyed (hereinafter the same).
5. “nc” in the table indicates values that cannot be calculated (hereinafter the same).
6. For items with multiple answers, the sum of breakdowns may not equal the total (actual) (hereinafter the same).

Looking at the increase/decrease rate by sales amount of catches and harvests, the number of fishery management entities increased for each class of 100 million yen or more from the 5 years ago.

Table 4: Number of Fishery Management Entities by Sales Amount of Catches and Harvests

Classification	Total	Less than 1 million yen	1 to 5 million	5 to 10 million	10 to 20 million	20 to 50 million	50 to 100 million	100 to 500 million	500 million to 1 billion	1 billion yen or more
Number (entities)										
2018	79,067	23,668	27,760	10,992	6,763	5,848	2,120	1,603	186	127
2023	65,662	19,960	21,731	9,282	5,912	4,872	1,874	1,692	187	152
Increase/decrease rate from the previous survey (%)	17.0	15.7	21.7	15.6	12.6	16.7	11.6	5.6	0.5	19.7
Component ratio (%)										
2018	100.0	29.9	35.1	13.9	8.6	7.4	2.7	2.0	0.2	0.2
2023	100.0	30.4	33.1	14.1	9.0	7.4	2.9	2.6	0.3	0.2

Note: 1. “Less than 1 million yen” includes “no sales amount.”
2. For component ratio, the figures are rounded to the unit used for presentation, and therefore the sum of breakdowns may not equal the total (hereinafter the same).

b. Labor Force

i. Number of Household Members/Executives Engaged in Fishery by Age Group

A “household member engaged in fishery” is a household member of an individual management entity who was engaged in fishery activity during the year prior to the survey date. This includes cases where the household member engaged in fishery activities as a member of joint management or an employee of another fishery management entity.

An “executive engaged in fishery” is a person in an organized management entity responsible for work at sea or on land who is a manager, an executive, a director, or a substitute for them and engaged in own fishery during the year prior to the survey date. However, those not engaged in own fishery who only attend executive committee meetings are not included.

The number of household members/executives engaged in fishery was 102,208, decreased 32,258 (24.0%) from 5 years ago. Of them, the number of household members engaged in fishery was 92,429 and the number of executives engaged in fishery was 9,779, decreased 31,256 (25.3%) and 1,002 (9.3%), respectively, from 5 years ago.

In addition, looking at this by age group, the number of household members engaged in fishery aged 65 or older was 46,836, accounting for 50.7% of the total, while the number of executives engaged in fishery aged 64 or younger was 6,836, accounting for 69.9% of the total.

Table 5: Number of Household Members/Executives Engaged in Fishery by Age Group

Classification		Total	Age 15 to 29	30 to 39	40 to 49	50 to 59	60 to 64	65 to 69	70 to 74	75 or older
Number (persons)										
2018	Total	134,466	4,832	9,335	15,612	24,128	15,987	21,239	17,106	26,227
	Household member engaged in fishery	123,685	4,488	8,292	13,723	21,355	14,536	19,806	16,159	25,326
	Executive engaged in fishery	10,781	344	1,043	1,889	2,773	1,451	1,433	947	901
2023	Total	102,208	3,431	7,141	12,119	18,101	11,637	13,235	15,596	20,948
	Household member engaged in fishery	92,429	3,108	6,144	10,313	15,682	10,346	12,059	14,673	20,104
	Executive engaged in fishery	9,779	323	997	1,806	2,419	1,291	1,176	923	844
Increase/decrease rate from the previous survey (%)	Total	△ 24.0	△ 29.0	△ 23.5	△ 22.4	△ 25.0	△ 27.2	△ 37.7	△ 8.8	△ 20.1
	Household member engaged in fishery	△ 25.3	△ 30.7	△ 25.9	△ 24.8	△ 26.6	△ 28.8	△ 39.1	△ 9.2	△ 20.6
	Executive engaged in fishery	△ 9.3	△ 6.1	△ 4.4	△ 4.4	△ 12.8	△ 11.0	△ 17.9	△ 2.5	△ 6.3
Component ratio (%)										
2018	Total	100.0	3.6	6.9	11.6	17.9	11.9	15.8	12.7	19.5
	Household member engaged in fishery	100.0	3.6	6.7	11.1	17.3	11.8	16.0	13.1	20.5
	Executive engaged in fishery	100.0	3.2	9.7	17.5	25.7	13.5	13.3	8.8	8.4
2023	Total	100.0	3.4	7.0	11.9	17.7	11.4	12.9	15.3	20.5
	Household member engaged in fishery	100.0	3.4	6.6	11.2	17.0	11.2	13.0	15.9	21.8
	Executive engaged in fishery	100.0	3.3	10.2	18.5	24.7	13.2	12.0	9.4	8.6

ii. Status of Responsible Persons

A “responsible person” is a manager and a household member who is involved in decision making on management policy of an individual management entity, and a manager, an executive, a director, or a substitute for them in an organized management entity.
For organized management entities, it is the same as an executive engaged in fishery defined in i.

(a) Number of Responsible Persons by Age Group

The number of responsible persons of fishery management entities was 76,277, decreased 19,115 (20.0%) from 5 years ago. Of them, the number of those of individual management entities was 66,498 and the number of those of organized management entities was 9,779, decreased 18,113 (21.4%) and 1,002 (9.3%), respectively, from 5 years ago.

In addition, looking at this by age group, in the individual management entities, the number of responsible persons aged 65 or older was 35,730, accounting for 53.7% of the total. In contrast, for organized management entities, the number of responsible persons aged 64 or younger was 6,836 accounting for 69.9% of the total.

Table 6: Number of Responsible Persons by Age Group

Classification		Total	Age 15 to 29	30 to 39	40 to 49	50 to 59	60 to 64	65 to 69	70 to 74	75 or older
Number (persons)										
2018	Total	95,392	1,540	5,222	10,719	18,213	12,150	15,942	12,930	18,676
	Individual management entity	84,611	1,196	4,179	8,830	15,440	10,699	14,509	11,983	17,775
	Organized management entity	10,781	344	1,043	1,889	2,773	1,451	1,433	947	901
2023	Total	76,277	1,319	4,263	8,783	14,052	9,187	10,400	12,187	16,086
	Individual management entity	66,498	996	3,266	6,977	11,633	7,896	9,224	11,264	15,242
	Organized management entity	9,779	323	997	1,806	2,419	1,291	1,176	923	844
Increase/decrease rate from the previous survey (%)	Total	△ 20.0	△ 14.4	△ 18.4	△ 18.1	△ 22.8	△ 24.4	△ 34.8	△ 5.7	△ 13.9
	Individual management entity	△ 21.4	△ 16.7	△ 21.8	△ 21.0	△ 24.7	△ 26.2	△ 36.4	△ 6.0	△ 14.3
	Organized management entity	△ 9.3	△ 6.1	△ 4.4	△ 4.4	△ 12.8	△ 11.0	△ 17.9	△ 2.5	△ 6.3
Component ratio (%)										
2018	Total	100.0	1.6	5.5	11.2	19.1	12.7	16.7	13.6	19.6
	Individual management entity	100.0	1.4	4.9	10.4	18.2	12.6	17.1	14.2	21.0
	Organized management entity	100.0	3.2	9.7	17.5	25.7	13.5	13.3	8.8	8.4
2023	Total	100.0	1.7	5.6	11.5	18.4	12.0	13.6	16.0	21.1
	Individual management entity	100.0	1.5	4.9	10.5	17.5	11.9	13.9	16.9	22.9
	Organized management entity	100.0	3.3	10.2	18.5	24.7	13.2	12.0	9.4	8.6

(b) Number of Responsible Persons by Managerial Position in Organized Management Entities

Looking at responsible persons by managerial position in organized management entities, the number of managers was 5,745 (58.7%), the number of responsible persons for land work was 3,977 (40.7%), and the number of masters of the vessel was 3,217 (32.9%), increased 161 (2.9%), increased 102 (2.6%), and decreased 370 (10.3%), respectively, from 5 years ago.

In addition, looking at the average age by managerial position, the average age of managers was 58.7, that of responsible persons for land work was 59.4, and that of masters of the vessel was 55.0. The average age decreased for all managerial positions.

Table 7: Number of Responsible Persons by Managerial Position in Organized Management Entities (Multiple Answers Accepted)

Classification	Total (actual)	Manager	Responsible person for work at sea					Responsible person for land work
			Chief fisher	Master of the vessel	Chief engineer	Head of aquaculture site	Others	
Number (persons)								
2018	10,781	5,584	1,663	3,587	839	798	2,892	3,875
2023	9,779	5,745	1,969	3,217	860	885	2,150	3,977
Increase/decrease rate from the previous survey(%)	△ 9.3	2.9	18.4	△ 10.3	2.5	10.9	△ 25.7	2.6
Percentage (%)								
2018	100.0	51.8	15.4	33.3	7.8	7.4	26.8	35.9
2023	100.0	58.7	20.1	32.9	8.8	9.1	22.0	40.7
Average age								
2018	-	59.0	57.5	55.3	54.9	53.5	53.7	59.9
2023	-	58.7	57.0	55.0	52.6	52.1	53.1	59.4

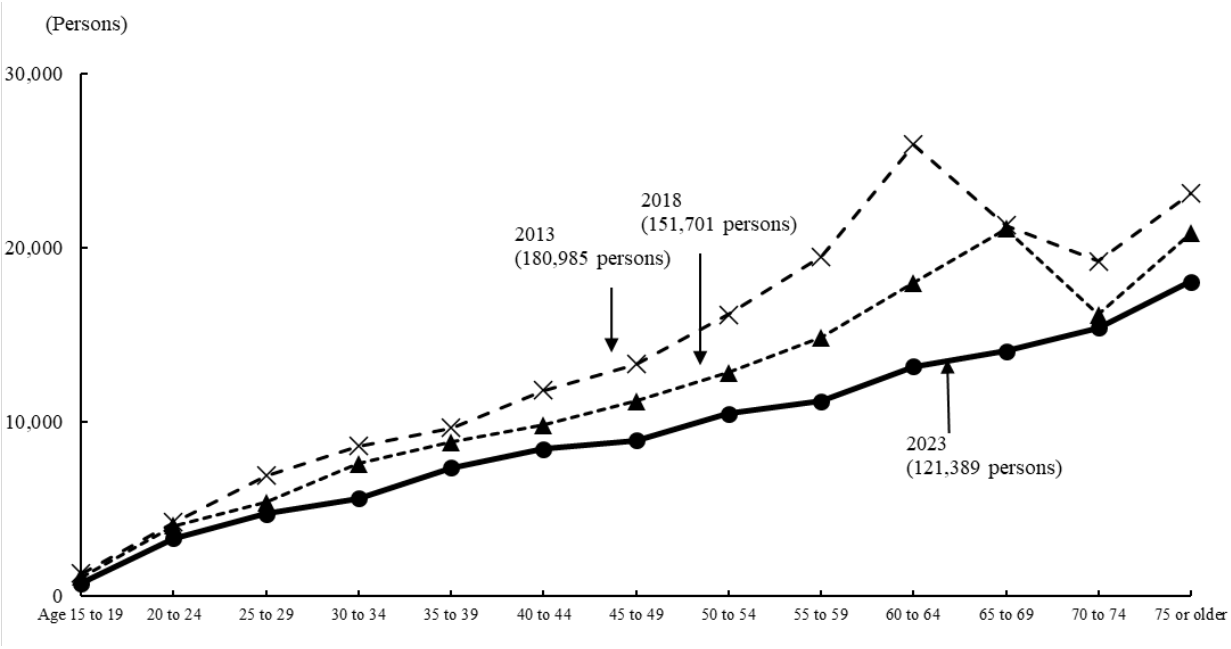
iii. Number of Persons Mainly Engaged in Fishery

A “person mainly engaged in fishery” is a person aged 15 years or older engaged in work at sea in own fishery for 30 days or more annually during the year prior to the survey date.

The number of persons mainly engaged in fishery was 121,389, decreased 30,312 (20.0%) from 5 years ago.

Looking at this by age group, the number decreased from 5 years ago for all classes, with the largest decrease in the class of age 65 to 69.

Chart 2: Changes in Number of Persons Mainly Engaged in Fishery by Age Group



c. Fishery Management Activities

i. Export of Captured/Harvested Fishery Products

“Shipping (exporting) products overseas” refers to cases where captured/harvested fishery products were shipped (exported) directly to overseas wholesalers, restaurants, retailers such as supermarkets, or consumers, etc. by themselves or shipping them to fishery cooperatives, trading companies, or wholesalers, etc. for the purpose of export during the year prior to the survey date.

This includes cases where the shipped products were not intended for export but were confirmed to have been exported at the shipping destinations.

The number of fishery management entities that shipped (exported) products overseas was 2,045, accounting for 3.1% of the total.

Of them, the number of fishery management entities that were aware of sales amount or volume of products shipped (exported) overseas was 394, accounting for 0.6% of the total.

Table 8: Status of Activities for Exporting Captured/Harvested Fishery Products (Multiple Answers Accepted)

Classification	Total	Shipping (exporting) products overseas (multiple answers accepted)			Not shipping (exporting) products overseas
		Sub-total (actual)	Aware of sales amount or volume	Not aware of sales amount or volume	
Number (entities)	65,662	2,045	394	1,652	63,617
Percentage (%)	100.0	3.1	0.6	2.5	96.9

ii. Acquisition of Fishery Eco-Label Certification

"Fishery eco-label" refers to a mechanism of displaying labels on products to allow consumers to select and purchase fishery products captured/harvested by methods that consider the sustainability of ecosystems and resources.
In addition to cases where the certification is acquired in own fishery as of the survey date, cases where it is acquired by fishery cooperatives or groups are also included if it is related to own fishery.

The number of fishery management entities that had acquired fishery eco-label certification was 2,150, accounting for 3.3% of the total.

Of them, the number of fishery management entities that had acquired MEL (Marine Eco-Label Japan) certification was 1,764, accounting for 2.7% of the total.

Table 9: Status of Acquisition of Fishery Eco-Label Certification (Multiple Answers Accepted)

Classification	Total	Acquired (multiple answers accepted)							Not acquired
		Sub-total (actual)	MEL	MSC	ASC	BAP	Alaska RFM	GLOBAL G.A.P	
Number (entities)	65,662	2,150	1,764	242	189	5	-	-	63,512
Percentage (%)	100.0	3.3	2.7	0.4	0.3	0.0	-	-	96.7

iii. Subscription to Fishery Mutual Aid

"Fishery mutual aid" refers to the following mutual aid services intended to contribute to ensuring fishery reproduction and stabilizing fishery management by compensating for losses that small- and medium-sized fishermen may suffer due to extraordinary events or unforeseen accidents, such as losses when the monetary value of catches is reduced due to poor catches, etc.
- Fish catch mutual aid covering fishing vessel fishery, set net fishery, and some shellfish/seaweed collecting
- Aquaculture mutual aid and specific aquaculture mutual aid covering cultured fish, etc.
- Fishery facility mutual aid covering aquaculture facilities and fishing tools

"Tsumitate Plus" refers to a budgetary project for fishermen who are engaged in systematic resource management, etc. to compensate for a decrease in their income from a reserve fund contributed by fishermen and a fund created with government funds based on the Guidelines for Granting Subsidies for Fishery Income Stabilization Project (22 FF No. 2323 Notice by Order of Administrative Vice Minister of Agriculture, Forestry and Fisheries dated March 29, 2011).

The number of fishery management entities subscribed to fishery mutual aid was 28,920.

Of them, fishery management entities subscribed to Tsumitate Plus was 20,986.

Table 10: Status of Subscription to Fishery Mutual Aid

Classification	Total	Subscribed to Fishery Mutual Aid			Not subscribed to fishery mutual aid
		Sub-total	Subscribed to Tsumitate Plus	Not subscribed to Tsumitate Plus	
Number (entities)	65,662	28,920	20,986	7,934	36,742

d. Fishing Vessels

Of fishing vessels that fishery management entities used during the year prior to the survey date, the number of fishing vessels, including fishing vessels with outboard motor and non-powered fishing vessels, that they own as of the survey date was 109,283, decreased 22,918 (17.3%) from 5 years ago.

Of them, the number of powered fishing vessels was 58,906. Looking at this by fishery type with the highest sales amount, angling was the largest in number at 13,111, followed by gill net at 6,664 and trawl at 5,635.

Table 11: Number of Fishing Vessels by Type of Vessel and by Fishery Type with the Highest Sales Amount

Classification	Number of fishing vessels		
	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Vessels	Vessels	%
Total (by type of fishing vessel)	132,201	109,283	△ 17.3
Non-powered fishing vessel	3,080	2,439	△ 20.8
Fishing vessel with outboard motor	59,201	47,938	△ 19.0
Powered fishing vessel	69,920	58,906	△ 15.8
Sub-total (by fishery type with the highest sales amount)	69,920	58,906	△ 15.8
Trawls	7,183	5,635	△ 21.6
Vessel seine	4,815	3,979	△ 17.4
Surrounding nets	1,727	1,369	△ 20.7
Gill net	8,789	6,664	△ 24.2
Saury stick-held dip net	131	69	△ 47.3
Large set net	1,180	969	△ 17.9
Salmon set net	660	646	△ 2.1
Small set net	2,385	1,871	△ 21.6
Other net fisheries	1,207	1,312	8.7
Longlines	2,569	2,156	△ 16.1
Anglings	16,590	13,111	△ 21.0
Small-scale whaling	4	4	0.0
Diving apparatus fishery	650	547	△ 15.8
Shellfish/seaweed collecting	2,959	2,734	△ 7.6
Other fisheries	5,105	4,933	△ 3.4
Marine aquacultures			
Coho salmon culture	90	99	10.0
Yellow-tails culture	1,716	1,594	△ 7.1
Red sea bream culture	1,132	894	△ 21.0
Bastard halibut culture	24	10	△ 58.3
Pufferfish culture	305	202	△ 33.8
Bluefin tuna culture	346	360	4.0
Rainbow trout culture	…	21	
Other salmons/trouts culture	…	6	8.5
Other fishes culture	189	178	
Common scallop culture	2,401	2,141	△ 10.8
Oysters culture	2,111	1,947	△ 7.8
Other shellfishes culture	139	128	△ 7.9
Kuruma prawn culture	4	7	75.0
Sea squirts culture	118	63	△ 46.6
Other aquatic animals culture	21	42	100.0
Kelps culture	74	69	△ 6.8
Seaweeds ("wakame") culture	727	660	△ 9.2
Lavers ("nori") culture	3,241	3,285	1.4
Other seaweeds culture	493	479	△ 2.8
Pearl culture	771	662	△ 14.1
Mother-of-pearl shell culture	64	60	△ 6.3

Note: In the 2023 survey, “rainbow trout culture” and “other salmons/trouts culture” were separated from “other fishes culture” and added as a new survey item, whereas the 2018 figure of “other fishes culture” includes “rainbow trout culture” and “other salmons/trouts culture.” In addition, the increase/decrease rate from the

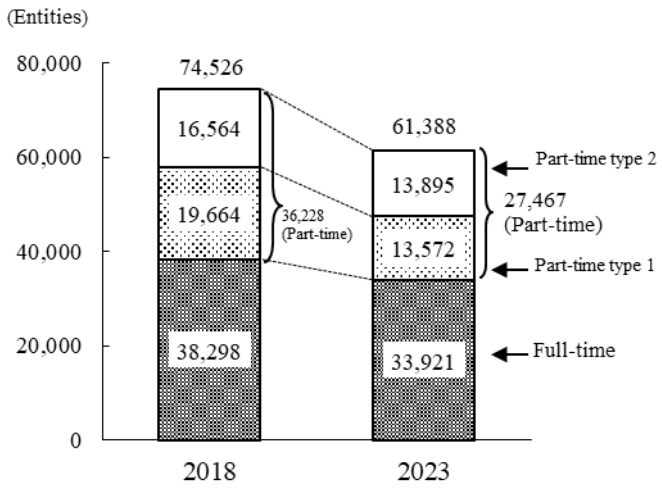
previous survey was calculated based on the total of “rainbow trout culture,” “other salmons/trouts culture,” and “other fishes culture” to allow comparison between the 2018 and 2023 figures.

e. Individual Management Entities

i. Number of Fishery Management Entities by Full-Time/Part-Time Status

Looking at individual management entities by full-time/part-time status, the number of those with full-time status was 33,921 and the number of those with part-time status was 27,467, decreased 4,377 (11.4%) and 8,761 (24.2%), respectively, from 5 years ago.

Chart 3: Number of Fishery Management Entities by Full-Time/Part-Time Status



ii. Number of Fishery Management Entities with a Successor by Class of Management Entity

"Successor" refers to a person who is scheduled to become the manager of the own fishery in the future regardless of household members, among the persons aged 15 years or older engaged in fishery during the year prior to the survey date.

"Class of management entity" is classified to large set nets, salmon set nets, small set nets, and marine aquaculture by major engaged-in fishery type. Other management entities are classified by type of fishing vessels used or total tonnage of used powered fishing vessels.

"Other aquaculture" includes coho salmon culture, other fish culture, other shellfish culture, kuruma prawn culture, sea squirt culture, other aquatic animal culture, other seaweed culture, pearl culture, and mother-of-pearl shell culture.

Of individual management entities, the number of those with a successor in their own fishery was 10,358, accounting for 16.9% of the total, decreased 0.1 points from 5 years ago.

Looking at this by class of management entity, the percentage of management entities with a successor was high for those engaged in yellow-tails culture, common scallop culture in the coastal fishing class, and the small/mid-scale fishing class at 40.9%, 37.9%, and 36.4%, respectively.

Table 12: Number of Fishery Management Entities with a Successor by Class of Management Entity

Classification	2018			2023		
		With a successor	Percentage of management entities with a successor		With a successor	Percentage of management entities with a successor
	Entities	Entities	%	Entities	Entities	%
Total	74,526	12,699	17.0	61,388	10,358	16.9
(Coastal fishing class)						
Marine fisheries using fishing vessels						
Using non-powered fishing vessel only	47	5	10.6	59	4	6.8
Fishing vessel with outboard motor	17,287	1,904	11.0	14,225	1,427	10.0
Using powered fishing vessel (total of less than 10 tons)	36,488	4,713	12.9	29,638	3,977	13.4
Large set net	82	34	41.5	58	20	34.5
Salmon set net	148	60	40.5	214	72	33.6
Small set net	1,969	510	25.9	1,518	385	25.4
Class without using fishing vessel	2,590	228	8.8	2,089	170	8.1
Marine aquacultures						
Yellow-tails culture	279	122	43.7	193	79	40.9
Red sea bream culture	297	94	31.6	231	71	30.7
Bastard halibut culture	24	7	29.2	14	3	21.4
Pufferfish culture	84	32	38.1	63	19	30.2
Bluefin tuna culture	3	-	-	2	1	50.0
Common scallop culture	2,390	948	39.7	2,122	805	37.9
Oysters culture	1,880	568	30.2	1,649	482	29.2
Kelps culture	912	255	28.0	775	195	25.2
Seaweeds ("wakame") culture	1,813	495	27.3	1,607	417	25.9
Lavers ("nori") culture	2,864	1,019	35.6	2,243	765	34.1
Rainbow trout culture	…	…		1	-	
Other salmons/trouts culture	…	1,960 …	416	21.2	-	1,817 -	422	23.2
Other aquacultures	1,960	416		1,816	422	
(Small/mid-scale fishing class)						
Using powered fishing vessel (total of 10 tons or more but less than 1,000 tons)	3,408	1,288	37.8	2,870	1,044	36.4
(Large-scale fishing class)						
Using powered fishing vessel (total of 1,000 tons or more)	1	1	100.0	1	-	-

Note: In the 2023 survey, "rainbow trout culture" and "other salmons/trouts culture" were separated from "other fishes culture" and added as a new survey item, whereas the 2018 figure of "other fishes aquaculture" includes both

In this table, "other fishes culture" is included in "other aquacultures." In addition, the percentage of management entities with a successor was calculated based on the total of "rainbow trout culture," "other salmons/trouts culture," and "other aquacultures" to allow comparison between the 2018 and 2023 figures.

(2) Results of Community Survey for Marine Fisheries

a. Resource Management/Fishing Ground Improvement Activities

i. Number of Fishery Zones by Number of Activities

A fishery zone is a zone in which fishery is conducted based on 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.

"Survey target fishery zone for the Community Survey for Marine Fisheries" refers to a fishery zone (fishery zone under the jurisdiction of a fishery cooperative) located within the zone range provided in the articles of incorporation of the fishery cooperative among 2,182 fishery zones nationwide.

The number of survey target fishery zones (as of November 1, 2023) was 2,068.

Of them, the number of fishery zones that conducted activities for the purpose of resource management or fishing ground improvement involving fishery cooperatives was 1,918, increased 97 (5.3%) from 5 years ago.

In contrast, the number of activities was 4,957, decreased 519 (9.5%) from 5 years ago.

Table 13: Number of Fishery Zones by Number of Resource Management Activities, Number of Activities

Classification	Total	Number of activities in which resource management was implemented					Resource management is not implemented	Number of activities
		Sub-total	1	2	3	4 or more		
Actual	Zones	Zones	Zones	Zones	Zones	Zones	Zones	Activities
2018	2,066	1,821	532	470	283	536	245	5,476
2023	2,068	1,918	776	423	273	446	150	4,957
Increase/decrease rate from the previous survey (%)	0.1	5.3	45.9	△ 10.0	△ 3.5	△ 16.8	△ 38.8	△ 9.5
Component ratio (%)								
2018	100.0	88.1	25.8	22.7	13.7	25.9	11.9	-
2023	100.0	92.7	37.5	20.5	13.2	21.6	7.3	-

ii. Number of Activities by Content of Management

Looking at resource management or fishing ground improvement activities by content of management, the number was the largest for regulation on fishing periods at 2,283 (46.1%), followed by regulation on the size of catches (captures/harvests) at 2,023 (40.8%), and regulation on number of fishing days and operating hours at 2,004 (40.4%).

Table 14: Number of Activities by Content of Management (Multiple Answers Accepted)

Classification	2018	2023	Percentage		Increase/decrease rate from the previous survey (2023/2018)
			2018	2023	
	Activities	Activities	%	%	%
Total (actual)	5,476	4,957	100.0	100.0	△ 9.5
Setting quotas (captures/harvests)	872	800	15.9	16.1	△ 8.3
Breeding of fishery resources	1,930	1,463	35.2	29.5	△ 24.2
Other managements of fishery resources	681	590	12.4	11.9	△ 13.4
Preservation of fishing grounds	1,025	1,072	18.7	21.6	4.6
Maintenance and management of seaweed beds and tidal flats	379	378	6.9	7.6	△ 0.3
Activities not to use chemicals, etc.	168	155	3.1	3.1	△ 7.7
Development of fishing grounds	431	331	7.9	6.7	△ 23.2
Rules on the use of fishing grounds	1,135	896	20.7	18.1	△ 21.1
Other preservations/managements of fishing grounds	482	432	8.8	8.7	△ 10.4
Regulation on fishing methods (aquaculture methods)	768	848	14.0	17.1	10.4
Regulation on using fishing vessels	539	507	9.8	10.2	△ 5.9
Regulation on fishing tools	1,447	1,454	26.4	29.3	0.5
Regulation on fishing periods	2,555	2,283	46.7	46.1	△ 10.6
Regulation on number of fishing days and operating hours	1,807	2,004	33.0	40.4	10.9
Regulation on the size of catches (captures/harvests)	2,197	2,023	40.1	40.8	△ 7.9
Regulation on the quantity of catches (captures/harvests)	797	808	14.6	16.3	1.4
Other managements of catches	373	379	6.8	7.6	1.6

iii. Number of Activities by Major Fish Type Targeted for Management

Looking at the conducted fishery resource management by major fish type, the number was the largest for bastard halibut at 880, followed by red sea bream at 772.

Table 15: Number of Activities by Major Fish Type Targeted for Management (Multiple Answers Accepted)

Classification	Nationwide	Hokkaido Pacific Ocean, North	Pacific Ocean, North	Pacific Ocean, Middle	Pacific Ocean, South	Hokkaido Japan Sea, North	Japan Sea, North	Japan Sea, West	East China Sea	Seto Inland Sea
Total (actual)	4,957	289	528	768	327	234	376	446	1,092	897
Bastard halibut	880	9	120	89	36	21	140	140	120	205
Red sea bream	772	-	13	92	58	-	86	147	181	195
Abalones	673	1	97	130	67	12	55	75	135	101
Flounders	568	47	67	35	10	34	106	52	50	167
Squids	524	26	47	49	22	21	43	56	161	99
Octopuses	485	33	36	50	42	30	35	12	75	172
Sea cucumbers	458	13	28	55	41	35	31	26	97	132
Other sea breams	439	5	13	55	15	1	46	80	96	128
Top shell	431	-	2	85	50	-	42	75	106	71
Sea urchins	334	14	50	16	45	23	9	19	122	36
Swimming crabs	270	-	10	30	15	-	14	-	41	160
Spiny lobster	267	-	3	101	69	1	-	-	67	26
Salmons/trouts	261	60	73	1	1	52	52	4	11	7
Shortnecked clams	260	1	13	76	18	1	1	8	65	77
Kelps	161	60	42	6	8	19	5	1	13	7

b. Regional Activation Activities Involving Fishery Cooperatives

i. Assemblies/Meetings, etc. Holding Status in Fishery Zones

Of survey target fishery zones (2,068 zones), the number of fishery zones in which assemblies/meetings, etc. involving fishery cooperatives were held was 1,678, increased 210 (14.3%) from 5 years ago. In addition, looking at this by agenda, the number was the largest for change of specific demarcated fishery rights/common fishery rights at 1,095 zones (65.3%), increased 408 (59.4%) from 5 years ago, followed by social events/ceremonies of fishery zones (festivals, events, etc.) at 532 (31.7%), decreased 79 (12.9%) from 5 years ago.

Table 16: Number of Fishery Zones by Agenda of Assemblies/Meetings, etc. (Multiple Answers Accepted)

	Number of fishery zones in which assemblies/ meetings, etc. were held (actual)	Agenda of assemblies/meetings, etc. (multiple answers accepted)							
		Change of specific demarcated fishery right/common fishery right	Entry of company	Waiver of fishery right	Compensation for fishery-related loss	Management of common property facility of local area	Preservation of natural environment	Social event/ ceremony of local area (festival, event, etc.)	Others
Number (zones)									
2018	1,468	687	19	35	111	166	244	611	931
2023	1,678	1,095	15	58	145	217	263	532	879
Increase/decrease rate from the previous survey (%)	14.3	59.4	△ 21.1	65.7	30.6	30.7	7.8	△ 12.9	△ 5.6
Percentage (%)									
2018	100.0	46.8	1.3	2.4	7.6	11.3	16.6	41.6	63.4
2023	100.0	65.3	0.9	3.5	8.6	12.9	15.7	31.7	52.4

Table ○: Number of Fishery Zones by Agenda of Assemblies/Meetings, etc.

Unit: Zones

	Number of fishery zones in which assemblies/ meetings, etc. were held (actual)	Agenda of assemblies/meetings, etc. (multiple answers accepted)							
		Change of specific demarcated fishery right/common fishery right	Entry of company	Waiver of fishery right	Compensation for fishery-related loss	Management of common property facility of local area	Preservation of natural environment	Social event/ ceremony of local area (festival, event, etc.)	Others
Number (zones)									
2018	1,468	687	19	35	111	166	244	611	931
2023	1,678	1,095	15	58	145	217	263	532	879
Increase/decrease rate from the previous survey (%)	14.3	59.4	△ 21.1	65.7	30.6	30.7	7.8	△ 12.9	△ 5.6
Percentage (%)									
2018	100.0	46.8	1.3	2.4	7.6	11.3	16.6	41.6	63.4
2023	100.0	65.3	0.9	3.5	8.6	12.9	15.7	31.7	52.4

ii. Status of Activities Related to Regional Activation

The number of fishery zones that conducted activation activities involving fishery cooperatives was 1,702, increased 182 (12.0%) from 5 years ago. Looking at this by activity conducted, it was the largest for activities to clean waste (on beach, at sea, bottom of the sea) at 1,521 (89.4%), increased 185 zones (13.8%) from 5 years ago, followed by activities to secure new fishery workers/successors at 542 (31.8%), increased 89 zones (19.6%).

Table 17: Number of Fishery Zones by Activity Related to Regional Activation (Multiple Answers Accepted)

	Number of fishery zones in which activities involving fishery cooperatives were conducted (actual)	Relevant activities (multiple answers accepted)					
		Activity to secure new fishery workers/successors	Activity to clean waste (on beach, at sea, bottom of the sea)	Activity for the sixth industrialization	Activity of blue tourism	Preservation of fishery-related traditional festival/culture/art	Holding of various events
Actual (zones)							
2018	1,520	453	1,336	167	71	416	564
2023	1,702	542	1,521	165	55	404	436
Increase/decrease rate from the previous survey (%)	12.0	19.6	13.8	△ 1.2	△ 22.5	△ 2.9	△ 22.7
Percentage (%)							
2018	100.0	29.8	87.9	11.0	4.7	27.4	37.1
2023	100.0	31.8	89.4	9.7	3.2	23.7	25.6

iii. Exchange Activities with Other Areas and Activities for Fisherman's Markets

The number of fishery zones that conducted exchange activities with other areas involving fishery cooperatives was 237 for fishery experience and 299 for fishery food promotion activity, and the total number of participants during the year prior to the survey date was 71,512 and 365,951, respectively.

In addition, the number of fishery zones with fisherman's markets operated by fishery cooperatives was 267, and the number of facilities was 284. The total number of users during the year prior to the survey date was 9,833,300.

Table 18: Exchange Activities with Other Areas and Activities for Fisherman's Markets

Classification	Exchange activities with other areas				Fisherman's market		
	Fishery experience		Fishery food promotion activity				
	Number of fishery zones in which activities were conducted	Annual total number of participants	Number of fishery zones in which activities were conducted	Annual total number of participants	Number of fishery zones with fisherman's market	Number of facilities	Annual total number of users
Actual	Zones	Persons	Zones	Persons	Zones	Facilities	Persons
2018	320	132,028	377	381,723	316	343	13,145,300
2023	237	71,512	299	365,951	267	284	9,833,300
Increase/decrease rate from the previous survey(%)	△ 25.9	△ 45.8	△ 20.7	△ 4.1	△ 15.5	△ 17.2	△ 25.2

2 Inland Water Fisheries Survey (Results of Survey for Inland Water Fishery Management Entities)

(1) Lake Fishery Management Entities (Organized Management Entities or Individual Management Entities that Engaged in Fishery Work on Lake for 30 Days or More Over the Past Year)

"lake fishery management entity" refers to a household or business entity, etc. that engaged in capturing or culturing aquatic animals/plants in lake with intent to sell products for the purpose of earning a living or profit during the year prior to the survey date.
It should be noted that the survey targets were set to important lakes for fishery production in regions. This survey targeted a total of 57 lakes in 19 prefectures.

The number of lake fishery management entities nationwide (as of November 1, 2023) was 1,654, decreased 276 (14.3%) from 5 years ago.

Looking at this by management organization, the number of individual management entities was 1,594, decreased 254 (13.7%) from 5 years ago. In addition, the number of organized management entities was 60, decreased 22 (26.8%) from 5 years ago.

Table 19: Number of Lake Fishery Management Entities by Management Organization

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total	1,930	1,654	△ 14.3
Individual management entity	1,848	1,594	△ 13.7
Organized management entity	82	60	△ 26.8
Company	34	31	△ 8.8
Fishery cooperative	4	3	△ 25.0
Fishery production cooperative	4	2	△ 50.0
Joint management	40	24	△ 40.0
(Reference)			
Grand total	2,133	1,859	△ 12.8

Note: The "grand total" includes individual management entities engaged in fishery work on a lake for 29 or fewer days over the past year.

Looking at this by engaged-in fishery type, management entities engaged in shellfish/seaweed collecting were the largest in number at 904, followed by gill net at 375 and trawl/vessel seine at 312, decreased 89 (9.0%), 158 (29.6%), and 58 (15.7%), respectively, from 5 years ago.

Table 20: Number of Lake Fishery Management Entities by Engaged-in Fishery Type (Multiple Answers Accepted)

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total (actual)	1,930	1,654	△ 14.3
Net fisheries			
Sub-total (actual)	994	781	△ 21.4
Trawl/vessel seine	370	312	△ 15.7
Gill net	533	375	△ 29.6
Set net	340	218	△ 35.9
Cast net	96	61	△ 36.5
Other net fisheries	65	69	6.2
Other fisheries			
Sub-total (actual)	1,361	1,210	△ 11.1
Angling/longline	237	219	△ 7.6
Shellfish/seaweed collecting	993	904	△ 9.0
Cages	203	167	△ 17.7
Other fisheries	162	160	△ 1.2
Aquacultures			
Sub-total (actual)	58	37	△ 36.2
Fishes culture	32	17	△ 46.9
Other aquacultures	26	20	△ 23.1

Looking at this by sales amount, the number was the largest for 5 to 10 million yen at 348 entities, decreased 32 (8.4%) from 5 years ago.

Table 21: Number of Lake Fishery Management Entities by Sales Amount of Catches

Classification	Total	Less than 100,000 yen	100,000 to 500,000	500,000 to 1 million	1 to 3 million	3 to 5 million	5 to 10 million	10 million yen or more
Number (entities)								
2018	1,930	202	323	248	407	263	380	107
2023	1,654	200	262	204	327	214	348	99
Increase/decrease rate from the previous survey (%)	△ 14.3	△ 1.0	△ 18.9	△ 17.7	△ 19.7	△ 18.6	△ 8.4	△ 7.5
Component ratio (%)								
2018	100.0	10.5	16.7	12.8	21.1	13.6	19.7	5.5
2023	100.0	12.1	15.8	12.3	19.8	12.9	21.0	6.0

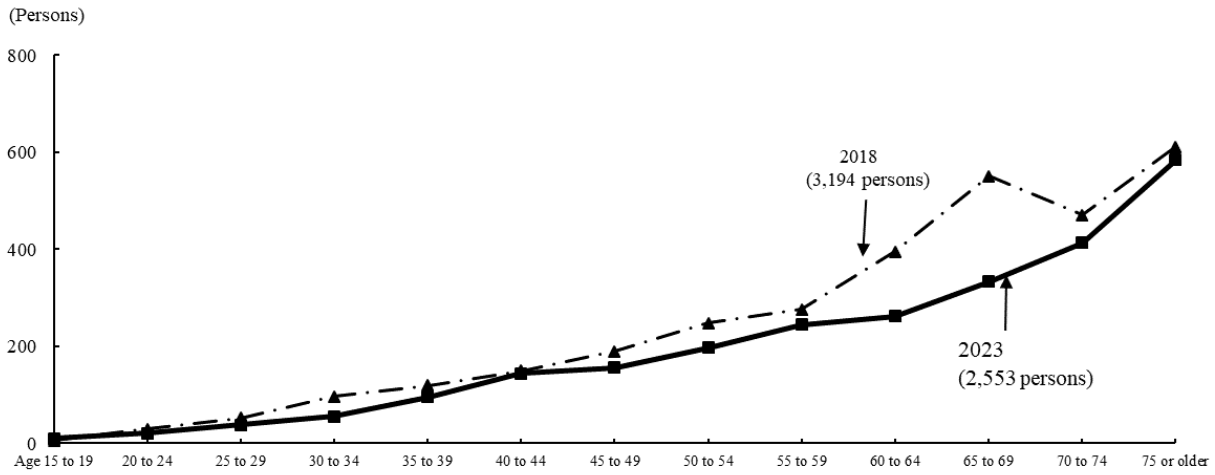
Note: “Less than 100,000 yen” includes “no sales amount.”

(2) On-Lake Fishery Workers

“On-lake fishery worker” refers to a person who engaged in fishery work on lake during the year prior to the survey date, including those who worked temporarily to perform a specific task (excluding land work).

Looking at those engaged in fishery work on lake during the year prior to the survey date by age group, the number decreased in each group of age 20 or older with a significant decrease observed for the group of age 65 to 69 from 5 years ago.

Chart 4: Changes in Number of On-Lake Fishery Workers by Age Group

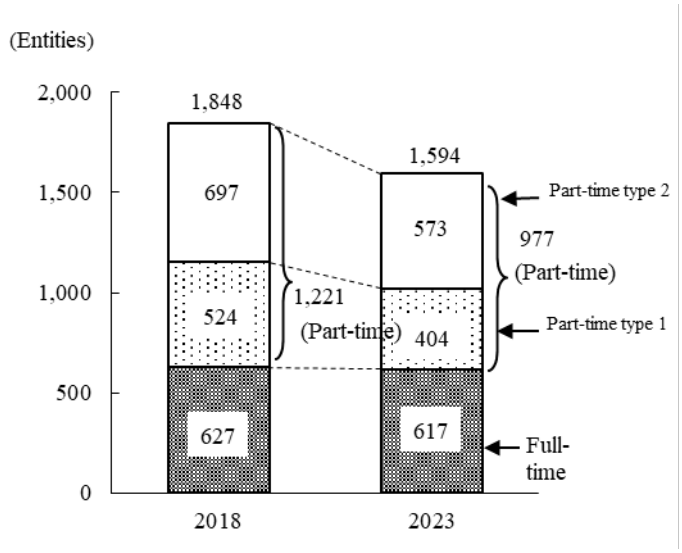


(3) Individual Management Entities (Lake Fishery)

a. Number of Fishery Management Entities by Full-Time/Part-Time Status

Looking at the number of fishery management entities by full-time/part-time status, the number of those with full-time status was 617 and the number of those with part-time status was 977, decreased 10 (1.6%) and 244 (20.0%), respectively, from 5 years ago.

Chart 5: Number of Lake Fishery Management Entities by Full-Time/Part-Time Status



b. Number of Management Entities with a Successor by Fishery Type

Of 1,594 individual management entities of lake fishery management entities, the number of those with a successor in their own fishery was 380, accounting for 23.8% of the total individual management entities, increased 0.2 points from 5 years ago.

Looking at this by fishery type with the highest sales amount, the percentage of management entities with a successor was high for those engaged in other aquacultures, fishes culture, and shellfish/seaweed collecting at 72.7%, 33.3%, and 30.0%, respectively.

Table 22: Number of Management Entities with a Successor by Fishery Type with the Highest Sales Amount

Classification	2018			2023		
		With a successor	Percentage of management entities with a successor		With a successor	Percentage of management entities with a successor
	Entities	Entities	%	Entities	Entities	%
Total	1,848	436	23.6	1,594	380	23.8
Net fisheries						
Trawl/vessel seine	274	28	10.2	251	55	21.9
Gill net	260	24	9.2	167	23	13.8
Set net	141	18	12.8	103	21	20.4
Cast net	38	5	13.2	16	1	6.3
Other net fisheries	15	3	20.0	17	2	11.8
Other fisheries						
Angling/long line	58	7	12.1	77	5	6.5
Shellfish/seaweed collecting	927	318	34.3	831	249	30.0
Cages	58	7	12.1	48	5	10.4
Other fisheries	41	7	17.1	61	7	11.5
Aquacultures						
Fishes culture	20	7	35.0	12	4	33.3
Other aquacultures	16	12	75.0	11	8	72.7

(4) Inland Water Aquaculture Management Entities

"Inland water aquaculture management entity" refers to a household or business entity, etc. engaged in conducting aquaculture in inland water with intent to sell for the purpose of earning a living or profit during the year prior to the survey date.

The number of inland water aquaculture management entities nationwide (as of November 1, 2023) was 2,265, decreased 439 (16.2%) from 5 years ago.

Looking at this by management organization, the number of individual management entities was 1,394, decreased 474 (25.4%) from 5 years ago. In contrast, the number of organized management entities was 871, increased 35 (4.2%) from 5 years ago.

Table 23: Number of Inland Water Aquaculture Management Entities by Management Organization

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total	2,704	2,265	△ 16.2
Individual management entity	1,868	1,394	△ 25.4
Organized management entity	836	871	4.2
Company	597	651	9.0
Fishery cooperative	71	69	△ 2.8
Fishery production cooperative	54	44	△ 18.5
Joint management	49	38	△ 22.4
Others	65	69	6.2

Looking at this by sales amount, the number of management entities with the sales amount of 100 million yen or more was 251, increased 47 (23.0%) from 5 years ago.

Table 24: Number of Inland Water Aquaculture Management Entities by Sales Amount of Harvests

Classification	Total	Less than 100,000 yen	100,000 to 500,000	500,000 to 1 million	1 to 3 million	3 to 5 million	5 to 10 million	10 to 50 million	50 to 100 million	100 million yen or more
Number (entities)										
2018	2,704	380	302	244	389	196	311	486	192	204
2023	2,265	319	241	164	278	197	256	420	139	251
Increase/decrease rate from the previous survey (%)	△ 16.2	△ 16.1	△ 20.2	△ 32.8	△ 28.5	0.5	△ 17.7	△ 13.6	△ 27.6	23.0
Component ratio (%)										
2018	100.0	14.1	11.2	9.0	14.4	7.2	11.5	18.0	7.1	7.5
2023	100.0	14.1	10.6	7.2	12.3	8.7	11.3	18.5	6.1	11.1

Looking at this by engaged-in aquaculture type, the number of management entities engaged in other salmons/trouts culture for food was the largest at 450, followed by those engaged in nishikigoi carp culture for display at 399 and eel culture for food at 397.

Table 25: Number of Aquaculture Management Entities by Engaged-in Aquaculture Type (Multiple Answers Accepted)

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Entities	Entities	%
Total (actual)	2,704	2,265	△ 16.2
For food			
Rainbow trout	325	287	△ 11.7
Other salmons/trouts	558	450	△ 19.4
Sweetfish	154	135	△ 12.3
Common carp	137	90	△ 34.3
Crucian carp	129	88	△ 31.8
Eel	407	397	△ 2.5
Softshell turtle	54	44	△ 18.5
Saltwater fishes (actual)	31	40	29.0
Rainbow trout	…	4	nc
Other salmons/trouts	…	8	nc
Others	…	28	nc
Others	417	314	△ 24.7
For seed			
Salmons/trouts	183	216	18.0
Sweetfish	62	69	11.3
Common carp	27	26	△ 3.7
Others	43	45	4.7
For ornamental			
Nishikigoi carp	536	399	△ 25.6
Others	332	241	△ 27.4
Pearl	10	9	△ 10.0

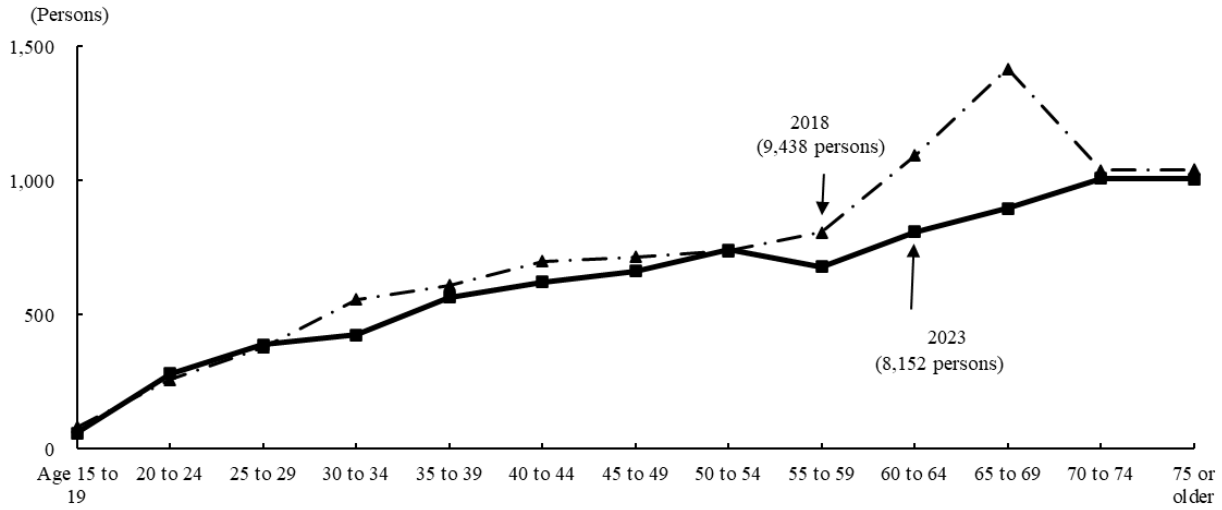
Note: 1. In the 2023 survey, “rainbow trout culture,” “other salmons/trouts culture,” and “others” were separated/subdivided from “saltwater fishes” and added as new survey items.
2. “For food, others” includes silver carp, grass carp, sturgeon, honmoroko, catfish, pond-snail, and weatherfish, etc.
3. “For seed, others” includes seed in “for food, others” as well as seed of saltwater fishes, softshell turtles, and crucian carps, etc.
4. “For ornamental, others” includes goldfish, killifish, and red-eared turtle, etc.

(5) Aquaculture Workers

〔 "Aquaculture worker" refers to a person engaged in aquaculture work during the year prior to the survey date, including persons who worked temporarily to perform a specific task. 〕

Looking at those engaged in aquaculture during the year prior to the survey date by age group, the number decreased from 5 years ago for each group, except for the groups of age 20 to 29 and age 50 to 54, with a significant decrease observed for the group of age 65 to 69.

Chart 6: Changes in Number of Aquaculture Workers by Age Group

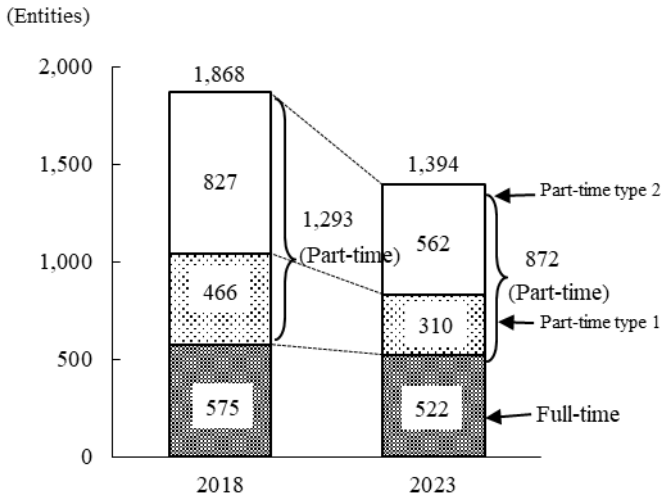


(6) Individual Management Entities (Aquaculture)

a. Number of Fishery Management Entities by Full-Time/Part-Time Status

Looking at the number of fishery management entities by full-time/part-time status, the number of those with full-time status was 522 and the number of those with part-time status was 872, decreased 53 (9.2%) and 421 (32.6%), respectively, from 5 years ago.

Chart 7: Number of Aquaculture Management Entities by Full-Time/Part-Time Status



b. Number of Management Entities with a Successor by Aquaculture Type

Of 1,394 individual management entities of aquaculture management entities, the number of those with a successor in their own fishery was 321, accounting for 23.0% of the total individual management entities, increased 1.8 points from 5 years ago.

Looking at this by aquaculture type with the highest sales amount, the percentage of management entities with a successor was the highest for eel culture for food at 54.2%, increased 7.8 points from 5 years ago.

Table 26: Number of Management Entities with a Successor by Aquaculture Type with the Highest Sales Amount

Classification	2018			2023		
		With a successor	Percentage of management entities with a successor		With a successor	Percentage of management entities with a successor
	Entities	Entities	%	Entities	Entities	%
Total	1,868	396	21.2	1,394	321	23.0
For food						
Rainbow trout	116	37	31.9	101	37	36.6
Other salmons/trouts	279	47	16.8	207	38	18.4
Sweetfish	51	12	23.5	34	10	29.4
Common carp	75	23	30.7	45	12	26.7
Crucian carp	99	17	17.2	67	10	14.9
Eel	194	90	46.4	179	97	54.2
Softshell turtle	26	3	11.5	14	2	14.3
Saltwater fishes	17	12	70.6	19	8	42.1
Rainbow trout	…	…	…	-	-	-
Other salmons/trouts	…	…	…	3	-	-
Others	…	…	…	16	8	50.0
Others	277	43	15.5	182	26	14.3
For seed						
Salmons/trouts	14	3	21.4	13	1	7.7
Sweetfish	2	-	-	4	1	25.0
Common carp	6	1	16.7	5	1	20.0
Others	4	-	-	10	3	30.0
For ornamental						
Nishikigoi carp	458	63	13.8	320	50	15.6
Others	249	44	17.7	193	25	13.0
Pearl	1	1	100.0	1	-	-

3. Distribution and Processing

(1) Results of Survey for Fish Markets

"Fish market" refers to a market where fishery products are directly landed by fishing vessels, and a market 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 year prior to the survey date.

The number of fish markets nationwide (as of January 1, 2024) was 759 decreased 44 (5.5%) from 5 years ago.

In addition, a total of 4.26 million tons of fishery products with a monetary value of 2.5849 trillion yen were handled.

Table 27: Number of Fish Markets, Yearly Throughput Volume, and Monetary Value

Classification	Unit	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
				%
Number of fish markets	Markets	803	759	△ 5.5
Yearly throughput volume	10,000 tons	504	426	△ 15.5
Yearly handled monetary value	100 million yen	26,347	25,849	△ 1.9

(2) Results of Survey for Cold Storage/Refrigerating Plants and Fishery Processing Plants

a. Cold Storage/Refrigerating Plants

("Cold storage/refrigerating plant" refers to a business entity that owns cold storage/refrigerating facilities with at least 7.5 kW on land, and froze or refrigerated fishery products during the year prior to the survey date.)

The number of cold storage/refrigerating plants nationwide was 4,049 (as of January 1, 2024) and the number of workers was 129,122, decreased 855 plants (17.4%) and 12,424 workers (8.8%), respectively, from 5 years ago.

In addition, among the workers, the number of foreigners was 16,787, increased 2,771 (19.8%) from 5 years ago.

Table 28: Number of Cold Storage/Refrigerating Plants and Number of Workers

Classification	Unit	2018	2023	Component ratio		Increase/decrease rate from the previous survey (2023/2018)
				2018	2023	
				%	%	%
Number of cold storage/refrigerating plants	Plants	4,904	4,049	-	-	△ 17.4
Number of Workers						
Total	Persons	141,546	129,122	100.0	100.0	△ 8.8
Male	〃	67,148	64,531	47.4	50.0	△ 3.9
Female	〃	74,398	64,591	52.6	50.0	△ 13.2
Foreigner (included)	〃	14,016	16,787	9.9	13.0	19.8

b. Fishery Processing Plants

("Fishery processing plant" refers to a business entity that processed/manufactured aquatic animals/plants for the purpose of sales during the year prior to the survey date.)

The number of fishery processing plants nationwide (as of January 1, 2024) was 5,967, decreased 1,322 (18.1%) from 5 years ago.

Looking at this by type of engaged-in processing, the number was the largest for others (baked or dried products, fish powder for food, etc.) of other processed foods at 1,227 plants, followed by frozen fresh fishery products at 1,217 and salted dried products at 1,174, decreased 563 (31.5%), 183 (13.1%), and 471 (28.6%), respectively, from 5 years ago.

In addition, the number was 1,007 for frozen food and 164 for canned/bottled products, increased 88 (9.6%) and 3 (1.9%), respectively, from 5 years ago.

Table 29: Number of Fishery Processing Plants by Type of Engaged-in Processing (Multiple Answers Accepted)

Classification	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
	Plants	Plants	%
Total (actual)	7,289	5,967	△ 18.1
Frozen fresh fishery products	1,400	1,217	△ 13.1
Canned/bottled products	161	164	1.9
Roasted/flavored laver	312	299	△ 4.2
Agar	30	25	△ 16.7
Oils and fats	27	22	△ 18.5
Fish pastes			
Steamed fish pastes ("Kamaboko")	1,130	874	△ 22.7
Fish hams/sausages	26	18	△ 30.8
Frozen food	919	1,007	9.6
Natural dried products	550	338	△ 38.5
Salted dried products	1,645	1,174	△ 28.6
Boiled and dried products	1,049	816	△ 22.2
Salted preserved products	770	574	△ 25.5
Smoked products	215	147	△ 31.6
Cured fish products	528	438	△ 17.0
Other processed foods			
Fermented squid	246	173	△ 29.7
Pickled fishery products	574	383	△ 33.3
Kelp tsukudani	312	190	△ 39.1
Dried/roasted/fried products (squid products)	187	135	△ 27.8
Others (baked or dried products, fish powder for food, etc.)	1,790	1,227	△ 31.5
Feeding stuff and fertilizer	114	94	△ 17.5

Looking at the production volume by processing type, the volume was the largest for frozen fresh fishery products at 985,880 tons, followed by steamed fish pastes ("Kamaboko") at 366,023 tons and feeding stuff and fertilizer at 359,809 tons, decreased 411,323 tons (29.4%), 82,838 tons (18.5%), and 41,545 tons (10.4%), respectively, from 5 years ago.

In addition, the number was 53,970 tons for oils and fats and 263,668 tons for frozen food, increased 3,845 tons (7.7%) and 7,780 tons (3.0%), respectively, from 5 years ago.

Table 30: Production Volume by Processing Type

Classification	Unit	2018	2023	Increase/decrease rate from the previous survey (2023/2018)
				%
Frozen fresh fishery products	tons	1,397,203	985,880	△ 29.4
Canned/bottled products	〃	104,258	79,293	△ 23.9
Roasted/flavored laver	1,000 sheets	6,558,385	6,536,922	△ 0.3
Agar	tons	751	592	△ 21.2
Oils and fats	〃	50,125	53,970	7.7
Fish pastes				
Steamed fish pastes ("Kamaboko")	tons	448,861	366,023	△ 18.5
Fish hams/sausages	〃	60,709	55,333	△ 8.9
Frozen food	〃	255,888	263,668	3.0
Natural dried products	〃	7,051	5,846	△ 17.1
Salted dried products	〃	139,569	97,002	△ 30.5
Boiled and dried products	〃	59,031	56,788	△ 3.8
Salted preserved products	〃	181,630	141,648	△ 22.0
Smoked products	〃	6,843	3,309	△ 51.6
Cured fish products	〃	79,595	66,186	△ 16.8
Other processed foods				
Fermented squid	tons	12,055	8,732	△ 27.6
Pickled fishery products	〃	53,808	41,716	△ 22.5
Kelp tsukudani	〃	31,729	24,846	△ 21.7
Dried/roasted/fried products (squid products)	〃	18,873	11,825	△ 37.3
Others (baked or dried products, fish powder for food, etc.)	〃	231,163	193,800	△ 16.2
Feeding stuff and fertilizer	〃	401,354	359,809	△ 10.4

The number of workers in fishery processing plants was 148,311, decreased 23,043 (13.4%) from 5 years ago.

In addition, among the workers, the number of foreigners was 21,112, increased 3,776 (21.8%) from 5 years ago.

Table 31: Number of Workers in Fishery Processing Plants

Classification	2018	2023	Component ratio		Increase/decrease rate from the previous survey (2023/2018)
			2018	2023	
	Persons	Persons	%	%	%
Total	171,354	148,311	100.0	100.0	△ 13.4
Male	68,357	61,709	39.9	41.6	△ 9.7
Female	102,997	86,602	60.1	58.4	△ 15.9
Foreigner (included)	17,336	21,112	10.1	14.2	21.8