Overview of the 2013 Fishery Census

(As of November 1, 2013)

Outline of survey results

1. Outline of Marine Fisheries

– The number of fishery management entities decreased by 18.0% compared to that of 5 years ago, partly due to the influence of the Great East Japan Earthquake. However, the number of fisheries management organizations that manage fishery resources increased by 5.0%. –

(1) Number of Fishery Management Entities

The total number of fishery management entities in marine fisheries in Japan was 94,507, which was a decrease of 20,689 (18.0%) compared to the previous survey (2008 survey, hereinafter the previous survey), partly due to the influence of the Great East Japan Earthquake.

(2) Number of Fisheries Management Organizations

The number of fisheries management organizations that manage fishery resources in a systematic manner, such as restrictions on the period and methods of fishing, and maintenance and management of seaweed beds and tidal flats, was 1,825, an increase of 87 (5.0%) compared to the previous survey. The number of fishery management entities that participate in a management organization was 124,595, which remained to be a decrease of 4,891 (3.8%) compared to the previous survey while the number of fishery management entities in Japan decreased at a high percentage.

Figure 1: Change in Number of Fishery Management Entities

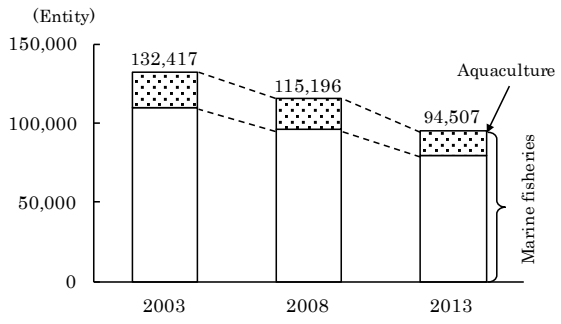
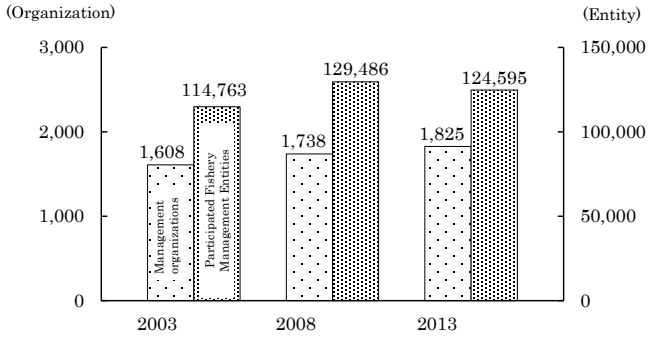


Figure 2: Change in the Number of Fisheries Management Organizations, etc.

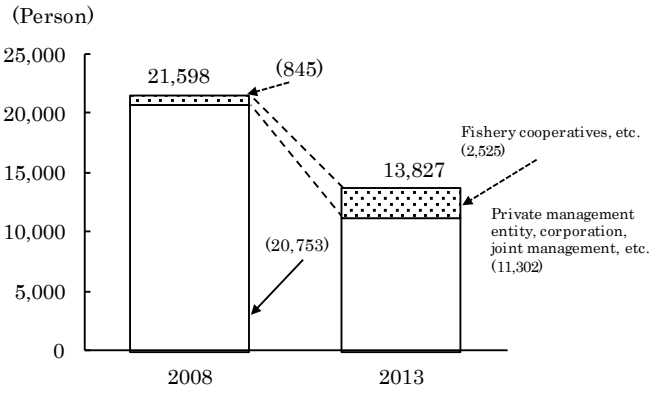


2. Outline of three Earthquake-stricken Prefectures

– "Ganbaru Fisheries and Aquaculture Restoration Support Project" has a good influence on the restoration of the number of fishery workers –

The number of fishery workers in the 3 quake-hit prefectures was 13,827, which was a decrease of 7,771 (36.0%) compared to the previous survey. The number of fishery workers in organizations operated by fishery cooperatives (including branches, hereafter the same) showed an increase of 2,525 (298.8%) compared to the previous survey, thanks to the use of "Ganbaru Fisheries and Aquaculture Restoration Support Project," which is a restoration support project for the Great East Japan Earthquake.

Figure 3: Number of fishery workers in the 3 quake-hit prefectures



Related Information and Data

Application of Survey Results

- Used by the Ministry of Internal Affairs and Communications in calculation of ordinary allocation tax based on the Local Allocation Tax Law (Law No. 211 of May 30, 1950).
- Used as a basic reference for the calculation of allocation tax to prefectures for use as a financial resource to cover costs pertaining to fisheries coordination committees based on the Fishery Act (Law No. 267 of December 15, 1949).
- Number of Fishery management entities and Number of Fishery workers are used to present a vision for a desirable production structure for coastal fisheries based on the basic Plan for Fisheries.
- Used as the population for various Fishery statistics surveys.

◎ Relevant data

1. Change in Marine Fishery Production Volume

Unit: 1,000 tons

Classification	Total	Fisheries				Aquaculture
		Sub-total	Distant water	Offshore	Coastal	
2008	5,520	4,373	474	2,581	1,319	1,146
2009	5,349	4,147	443	2,411	1,293	1,202
2010	5,233	4,122	480	2,356	1,286	1,111
2011	4,693	3,824	431	2,264	1,129	869
2012	4,798	3,759	458	2,210	1,090	1,040

Source: Statistics Department, MAFF "Annual Statistics of Fishery and Fish Culture"

2. Change in Marine Fishery Production Value

Unit: 100 million yen

Classification	Total	Fisheries	Aquaculture
2008	15,428	11,250	4,178
2009	13,814	9,719	4,095
2010	14,001	9,717	4,284
2011	13,274	9,400	3,874
2012	13,290	9,158	4,132

Source: Statistics Department, MAFF "Fishery Production Value"

Survey Results

1. Marine Fisheries

(1) Fishery Management Entities

"Fishery management entity" refers to a household (individual management entity) or business body (organized management entity) that engaged in fishery activity at sea for the purpose of selling products to gain profit in the past one year. This excludes a household that did not engage in fishery activity at sea for more than 30 days in the past one year.

The total number of fishery management entities in Japan was 94,507, which was a decrease of 20,689 (18.0%) compared to the previous survey.

Looking at fishery management entities by management organization, individual management entities numbered 89,470, while organized management entities numbered 5,037. These figures represented decreases of 18.3% and 12.3%, respectively.

The number of fishery cooperatives in organized management entities increased by 2.4% compared to the previous survey, thanks to the use of "Ganbaru Fisheries and Aquaculture Restoration Support Project," which is a restoration support project for the Great East Japan Earthquake.

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%
Total	115,196	94,507	△ 18.0
Private management entity	109,451	89,470	△ 18.3
Organized management entity	5,745	5,037	△ 12.3
Company	2,715	2,534	△ 6.7
Fishery cooperative	206	211	2.4
Fishery production association	105	110	4.8
Joint management	2,678	2,147	△ 19.8
Other	41	35	△ 14.6

Note: Fishery cooperatives include fishery cooperatives and their branches. Hereinafter the same.

Table 1: Numbers of Fishery Management Entities by Management Organization

Looking at fishery management entities by sea region, the number of management entities was 8,297 (decrease by 4,747 (36.4%) compared to the previous survey) in "Pacific Ocean, North" that was greatly hit by the Great East Japan Earthquake.
The decrease rates were 11.5% in "Hokkaido Pacific Ocean, North" and 14.0% in "East China Sea", lower than those in other sea regions. This is because the number of management entities engaged in salmon set net, squid angling on coastal water, trawling line fishery in "Hokkaido Pacific Ocean, North" and the number of management entities engaged in trawling line fishery and tuna culture in "East China Sea" increased.

Table 2: Number of Fishery Management Entities by Sea Region

Unit: Entity

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
2008	115,196	9,115	13,044	15,671	10,191	5,665	6,693	7,946	27,511	19,360
2013	94,507	8,070	8,297	13,346	8,426	4,812	5,523	6,517	23,649	15,867
Increase/decrease rate from the previous survey (%)	△ 18.0	△ 11.5	△ 36.4	△ 14.8	△ 17.3	△ 15.1	△ 17.5	△ 18.0	△ 14.0	△ 18.0

Looked at in terms of engaged-in fishery type, management entities that engaged in shellfish collecting/seaweed collecting were 32,493, which was a decrease of 8,387 (20.5%) compared to the previous survey. The number of management entities engaged in "other gill nets" was 23,398, which was a decrease of 5,450 (18.9%) compared to the previous survey. This is because the number of fishery management entities in the Northern Pacific Ocean that was greatly hit by the Great East Japan Earthquake decreased.
On the other hand, the number of fishery management entities engaged in salmon set net was 1,089, which was an increase of 183 (20.2%) compared to the previous survey because salmon (three to five-year-old fish) ran and provided bountiful catches in Hokkaido. The number of management entities engaged in tuna culture and other seaweed culture increased thanks to the improvement in culture technology. The number of management entities engaged in tuna culture in Nagasaki Prefecture, etc. was 92, which was an increase of 23 (33.3%). The number of management entities engaged in seaweed culture was 744, an increase of 40 (5.7%) compared to the previous survey, mainly in Ehime Prefecture.

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

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)	Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%		Entity	Entity	%
Total (actual)	115,196	94,507	△ 18.0				
Trawl				Angling			
Large trawl on distant water	6	5	△ 16.7	Skipjack pole-and-line on distant water	29	20	△ 31.0
Large trawl in East China Sea	2	2	0.0	Skipjack pole-and-line on offshore water	64	53	△ 17.2
Offshore trawl (one-boat operation)	283	223	△ 21.2	Skipjack pole-and-line on coastal water	767	537	△ 30.0
Offshore trawl (two-boat operation)	20	19	△ 5.0	Squid angling on distant water	4	2	△ 50.0
Small trawl	13,130	10,710	△ 18.4	Squid angling on offshore water	76	59	△ 22.4
				Squid angling on coastal water	9,340	7,567	△ 19.0
Boat seine	4,143	3,348	△ 19.2	Trawling line fishery	7,623	7,031	△ 7.8
				Other angling	32,338	27,024	△ 16.4
Surrounding net							
Large and medium surrounding net				Small-scale whaling	4	4	0.0
Skipjack/tuna on distant water (1-boat operation)	20	17	△ 15.0	Diving apparatus fishery	1,910	1,642	△ 14.0
				Shellfish/seaweed collecting	40,880	32,493	△ 20.5
Skipjack/tuna on off-shore water (1-boat operation)	10	6	△ 40.0	Other fishery	30,643	25,081	△ 18.2
Other surrounding net (1-boat operation)	55	51	△ 7.3	Marine aquaculture			
Surrounding net (2-boat operation)	13	11	△ 15.4	Fish aquaculture			
Small surrounding net	626	514	△ 17.9	Silver salmon	80	18	△ 77.5
				Yellow tail culture	1,007	795	△ 21.1
Gill net				Sea bream	1,105	830	△ 24.9
Salmon drift gill net	130	102	△ 21.5	Bastard halibut	239	120	△ 49.8
Drift gill net for swordfish, etc.	51	45	△ 11.8	Tuna culture	69	92	33.3
Other gill net	28,848	23,398	△ 18.9	Other fish culture	844	695	△ 17.7
				Scallop culture	4,476	2,950	△ 34.1
Saury stick-held dip net	258	237	△ 8.1	Oyster culture	4,222	2,977	△ 29.5
Large set net	490	467	△ 4.7	Other shellfish culture	800	695	△ 13.1
Salmon set net	906	1,089	20.2	Kuruma prawn culture	112	90	△ 19.6
Small set net	6,251	5,142	△ 17.7	Sea squirt culture	839	552	△ 34.2
Other net fishery	5,305	4,401	△ 17.0	Other aquatic animal culture	189	187	△ 1.1
				Kombu tangle culture	2,382	1,980	△ 16.9
Long line				Wakame seaweed culture	4,793	3,794	△ 20.8
Tuna long line on distant water	106	74	△ 30.2	Nori laver culture	5,194	4,021	△ 22.6
Tuna long line on off-shore water	274	217	△ 20.8	Other seaweed culture	704	744	5.7
Tuna long line on coastal water	499	451	△ 9.6	Pearl culture	1,050	722	△ 31.2
Other ling line	5,860	4,575	△ 21.9	Mother shell of pearl culture	742	519	△ 30.1

(2) Fishery Workers (shuugyousha)

"Fishery worker (shuugyousha)" refers to a person aged 15 years or older and who engaged in fishery work at sea for at least 30 days during the past one year.

(a) Number of Fishery Workers

The number of fishery workers was 180,985, which was a decrease of 40,923 (18.4%) compared to the previous survey.

Looking at fishery workers by age group, the proportion of young age groups who are under 44 was higher than that of the previous survey.

Figure 4: Number of Fishery Workers by Age Group

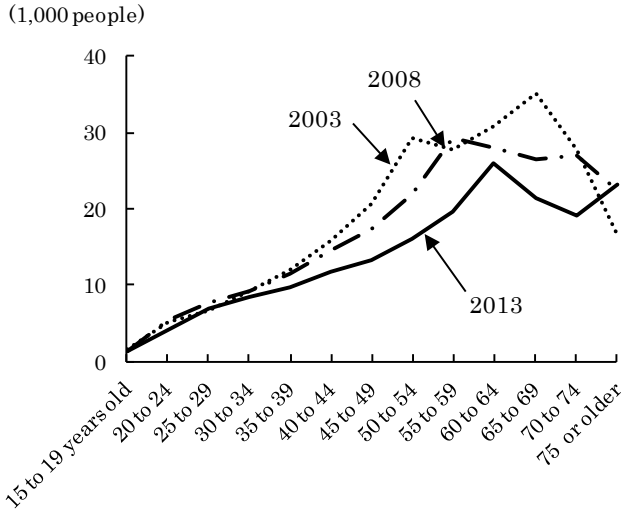


Table 4: Number of Fishery Workers by Age Group

Unit: Person

Classification	Total	15 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old	65 to 74 years old	75 or older
Actual								
2003	238,371	6,743	16,009	27,939	49,913	58,278	62,820	16,669
2008	221,908	6,618	16,940	26,152	39,219	57,169	53,322	22,488
2013	180,985	5,485	15,503	21,445	29,456	45,463	40,508	23,125
Component ratio (%)								
2003	100.0	2.8	6.7	11.7	20.9	24.4	26.4	7.0
2008	100.0	3.0	7.6	11.8	17.7	25.8	24.0	10.1
2013	100.0	3.0	8.6	11.8	16.3	25.1	22.4	12.8

(b) Number of Fishery Workers by Employment Form

Own fishery means workers who engaged only in own fishery and are not in joint management fishery nor hired in fishery.
Hired in fishery refers to a person who was hired in fishery for the purpose of gaining pay and compensation in the past one year and includes a person who is hired in fishery while running own fishery.

The number of fishery workers who engaged only in own fishery was 109,247 and the number of workers who are hired in fishery was 71,738, which decreased by 31,806 (22.5%) and 9,117 (11.3%) compared to the previous survey, respectively.

Table 5: Number of Fishery Workers by Employment Form

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Person	Person	%
Fishery workers	221,908	180,985	△ 18.4
Engaged in own fishery only	141,053	109,247	△ 22.5
New worker	742	615	△ 17.1
Hired in fishery	80,855	71,738	△ 11.3

(3) Fishing Vessels

Management entity classes are classified to large set nets, salmon set nets, small set nets, and marine aquaculture by mainly managed fishery type. Other management entities are classified by type of fishing vessel used or total number of tons used in powered vessels.
Other cultures includes silver 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 shell of pearl culture.

The total number of fishing vessels was 152,998, which was a decrease of 32,467 (17.5%) compared to the previous survey.

On the other hand, looking at the number of used powered vessels by fishery type, the number increased to 110 (60.4%) in tuna culture, to 96 (12.2%) in salmon set net, and 21 (5.2%) in other seaweed culture.

Although the number of fishing vessels decreased, the number of average fishing days per vessel increased by 4.7% in red sea bream culture, 9.8% in pearl culture, 11.2% in other shellfish culture.

Table 6: Number of Fishing Vessels by Type of Vessel and by Fishery Type of Used Powered Vessel

Classification	No. of vessels			Average no. of fishing days		
	2008	2013	Increase/decrease from the previous survey (2013/2008)	2008	2013	Increase/decrease from the previous survey (2013/2008)
	vessel	vessel	%	day	day	%
Total (by type of fishing vessel)	185,465	152,998	△ 17.5	…	…	…
Non-powered vessel	5,327	3,779	△ 29.1	…	…	…
Vessel with outboard motor	81,076	67,572	△ 16.7	…	…	…
Powered vessel used	99,062	81,647	△ 17.6	148	138	△ 6.8
Powered vessel used	99,062	81,647	△ 17.6	148	138	△ 6.8
Trawl	10,532	8,611	△ 18.2	132	122	△ 7.6
Boat seine	5,915	5,173	△ 12.5	123	117	△ 4.9
Surrounding net	2,194	1,832	△ 16.5	178	166	△ 6.7
Gill net	14,127	10,987	△ 22.2	142	132	△ 7.0
Saury stick-held dip net	184	166	△ 9.8	165	138	△ 16.4
Large set net	1,357	1,230	△ 9.4	188	186	△ 1.1
Salmon set net	787	883	12.2	104	104	0.0
Small set net	3,730	3,026	△ 18.9	162	150	△ 7.4
Other net fishery	1,668	1,446	△ 13.3	135	125	△ 8.1
Long line	4,043	3,133	△ 22.5	178	164	△ 7.9
Angling	25,254	20,793	△ 17.7	134	124	△ 7.5
Small-scale whaling	4	5	25.0	131	163	24.4
Diving apparatus fishery	822	786	△ 4.4	127	119	△ 6.3
Shellfish/seaweed collecting	4,378	3,689	△ 15.7	113	106	△ 5.3
Other fishery	6,270	5,523	△ 11.9	127	120	△ 5.5
Marine aquaculture						
Silver salmon culture	92	60	△ 34.8	252	240	△ 2.4
Yellow tail culture	2,217	1,819	△ 18.0	241	241	0.0
Red sea bream culture	1,600	1,219	△ 23.8	234	245	4.7
Bastard halibut culture	94	36	△ 61.7	192	198	3.1
Tuna culture	182	292	60.4	230	237	3.0
Other fish culture	689	615	△ 10.7	239	217	△ 9.2
Scallop culture	3,082	2,455	△ 20.3	211	199	△ 5.7
Oyster culture	2,657	1,964	△ 26.1	179	159	△ 11.7
Other shellfish culture	182	142	△ 22.0	125	139	11.2
Prawn culture	5	5	0.0	139	191	37.4
Sea squirt culture	106	40	△ 62.3	169	155	△ 15.4
Other aquatic animal	29	24	△ 17.2	181	138	△ 23.8
Kombu tangle culture	126	122	△ 3.2	160	152	△ 5.0
Wakame seaweed culture	812	733	△ 9.7	146	128	△ 12.3
Nori laver culture	4,025	3,494	△ 13.2	166	162	△ 2.4
Other seaweed culture	402	423	5.2	169	175	3.6
Pearl culture	1,333	840	△ 37.0	132	145	9.8
Mother shell of pearl	164	81	△ 50.6	188	184	△ 2.1

(4) Individual Management Entities

(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 full-time entities was 44,498 and the proportion of full-time entities to total individual management entities was 49.7% (48.4% in the previous survey), which was higher than that in the previous survey.

Table 7: Number of Fishery Management Entities by Full-Time/Part-Time Status

Classification	2008	2013	Component ratio		Increase/decrease from the previous survey (2013/2008)
			2008	2013	
	Entity	Entity	%	%	%
Total	109,451	89,470	100.0	100.0	△ 18.3
Full-time	53,009	44,498	48.4	49.7	△ 16.1
Part-time	56,442	44,972	51.6	50.3	△ 20.3
Part-time type 1	32,294	24,940	29.5	27.9	△ 22.8
Part-time type 2	24,148	20,032	22.1	22.4	△ 17.0

(b) Number of Management Entities by Generation Structure by Sea Region

Looking at the number of individual management entities by generation structure, the number of one-generation individual management entities was 69,574, which was the highest with the composition ratio of 77.8%.

Looking at the proportion of the number of management entities by generation structure by sea region, the proportion of the number of one-generation individual management entities was more than 80% in “Pacific Ocean, North”, “Japan Sea, West”, “East China Sea” and “Seto Inland Sea”. The number of management entities engaged in angling and gill net in these regions was more than that of other regions.

The proportion of the number of two-generation individual management entities and the number of three-generation individual management entities were the highest in “Hokkaido Pacific Ocean, North” at 40.8% and 6.8%, respectively. The number of management entities engaged in salmon set net, kombu tangle culture and scallop culture was more than that of other regions.

Table 8: Number of Management Entities by Generation Structure by Sea Region

Unit: Entity

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
Actual										
Total	89,470	7,388	7,977	12,854	7,862	4,226	5,309	6,183	22,744	14,927
One-generation private	69,574	3,872	5,319	10,190	6,672	3,013	3,891	5,245	18,660	12,712
Two-generation private	17,930	3,011	2,382	2,448	1,102	1,083	1,263	866	3,723	2,052
Three-generation private	1,966	505	276	216	88	130	155	72	361	163
Component ratio (%)										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
One-generation private	77.8	52.4	66.7	79.3	84.9	71.3	73.3	84.8	82.0	85.2
Two-generation private	20.0	40.8	29.9	19.0	14.0	25.6	23.8	14.0	16.4	13.7
Three-generation private	2.2	6.8	3.5	1.7	1.1	3.1	2.9	1.2	1.6	1.1

(c) Number of Successors

"Successor" refers to "a person aged 15 years or older who engaged in fishery during the past one year, and who is scheduled to become the head of their own fishery in the future." It includes a person who is scheduled to become the head of their own fishery in the future regardless of members of household.

Of a total 89,470 individual management entities, the number of management entities that have a successor of their own fishery was 14,803. The proportion to the total number of individual management entities was 16.5%.

By class of management entity, the proportion of management entities that have a successor is high in management entities engaged in tuna culture (53.8%) and yellow tail culture (45.0%) in the coastal fishing class and the use of powered vessels (40.2%) in the small/mid-sized fishing class.

Table 9: Number of Management Entities that Have a Successor by Class of Management Entity

Classification	2008	Successor exists	Percentage of management entities that have a successor	2013	Successor exists	Percentage of management entities that have a successor
	Entity	Entity	%	Entity	Entity	%
Total	109,451	19,929	18.2	89,470	14,803	16.5
(Coastal fishing)						
Marine fisheries using fishing vessels						
Using non-powered vessel only	156	15	9.6	95	9	9.5
Vessel with outboard motor	24,015	3,128	13.0	20,630	2,227	10.8
Using powered vessel (total of less than 10 tons)	56,014	7,942	14.2	45,612	5,927	13.0
Large set net	97	36	37.1	81	28	34.6
Salmon set net	177	64	36.2	391	116	29.7
Small set net	3,029	878	29.0	2,444	567	23.2
Class not using fishing vessel	3,686	270	7.3	3,025	232	7.7
Marine aquaculture						
Yellow-tail culture	503	233	46.3	353	159	45.0
Red sea bream culture	582	177	30.4	398	126	31.7
Bastard halibut culture	86	31	36.0	33	10	30.3
Tuna culture	11	9	81.8	13	7	53.8
Scallop culture	3,313	1,296	39.1	2,385	934	39.2
Oyster culture	2,734	888	32.5	1,839	541	29.4
Kombu tangle culture	1,283	373	29.1	1,004	253	25.2
Wakame seaweed culture	2,321	627	27.0	1,984	606	30.5
Nori laver culture	4,411	1,389	31.5	3,415	1,093	32.0
Other aquaculture	2,678	656	24.5	1,992	449	22.5
(Small/mid-sized fishing)						
Using powered vessel (total of 10 tons or more and less than 1,000 tons)	4,353	1,916	44.0	3,776	1,519	40.2
(Large-sized fishing)						
Using powered vessel (total of 1,000 tons or more)	2	1	50.0	-	-	-

(5) Fisheries Management Organizations

A fisheries management organization refers to a management organization that manages fishery resources in a systematic manner, such as restrictions on the period and methods of fishing, and maintenance and management of seagrass beds and tidal flats and that meets all of the following conditions. 1) It consists of multiple fishery management entities that handle the same fishing ground or fishery types. 2) It voluntarily manages fishery resources, fishing grounds, or fish catches. 3) It has written agreements pertaining to fishery management. 4) It receives the participation of fishery cooperatives or federations of fishery cooperatives

(a) Number of Fisheries Management Organizations by Management Type

The total number of fisheries management organizations in Japan was 1,825, which was an increase of 87 (5.0%) compared to the previous survey.

Looking at the number by main management type, the number of organizations that regulate fishing period was the largest (1,628), followed by organizations that regulate the size of fish catches (harvests) (1,453).

The number of organizations that engaged in the maintenance of seagrass beds and tidal flats out of those engaged in the preservation of fishing grounds was 376, which was the highest increase at 154 (69.4%) compared to the previous survey.

Table 10: Number of Fisheries Management Organizations by Management Type (Multiple Answers Accepted)

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Organization	Organization	%
Total (actual)	1,738	1,825	5.0
Regulation on fishing period	1,525	1,628	6.8
Regulation on size of fish catches (harvests)	1,387	1,453	4.8
Regulation on fishing method	1,203	1,182	△ 1.7
Regulation on fishing tools	1,131	1,169	3.4
Rules on the use of fishing ground	1,093	1,102	0.8
Breeding of fishery resources	1,125	1,099	△ 2.3
Regulation on operation hours	999	1,046	4.7
Monitoring of fishing grounds	964	863	△ 10.5
Regulation on number of fishing dates	679	790	16.3
Preservation of fishing grounds	654	736	12.5
Maintenance and management of seagrass beds and tidal flats	222	376	69.4
Regulation on the volume of catches (harvests)	504	584	15.9
Tree planting, development of fish-breeding forests	207	233	12.6

(b) Number of Fisheries Management Organizations by Sea Region

Looking at the number of management organizations by sea region, that in "Hokkaido Pacific Ocean, North" was 270, an increase of 26.8% compared to the previous survey as the number of organizations that set a limitation in fish catches and limited fishing period increased. The number of management organizations in "Hokkaido Japan Sea, North" was 191, an increase of 24.8% compared to the previous survey as the number of organizations that limited the

number of fishing vessels and fishing methods increased.

Table 11: Number of Fisheries Management Organizations by Sea Region

Unit: Organization

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
2008	1,738	213	189	234	129	153	139	147	377	157
2013	1,825	270	173	235	137	191	130	148	384	157
Increase/decrease rate from the previous survey (%)	5.0	26.8	△ 8.5	0.4	6.2	24.8	△ 6.5	0.7	1.9	0.0

(c) Number of Fishery Management Entities that Participate in a Fishery Management Organization by Type of Mainly Managed Fishery

The number of fishery management entities that participate in a fishery management organization was 124,595, which remained to be a decrease of 4,891 (3.8%) compared to the previous survey while the number of fishery management entities in Japan decreased at a high percentage.

Looked at in terms of fishery type, management entities that engaged in shellfish collecting/seaweed collecting decreased by 5,660 (9.9%) compared to the previous survey. The number of entities that engaged in other fishery decreased by 8,712 (22.2%) and those that engaged in marine aquaculture increased by 3,378 (40.0%) compared to the previous survey.

Table 12: Number of Fishery Management Entities that Participate in a Fishery Management Organization by Type of Mainly Managed Fishery (Multiple Answers Accepted)

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%
Total (actual)	129,486	124,595	△ 3.8
Trawl			
Small trawl	11,219	11,024	△ 1.7
Other trawl	401	509	26.9
Boat seine	2,210	2,199	△ 0.5
Gill net	21,616	20,499	△ 5.2
Set net	4,025	4,165	3.5
Long line	4,076	3,815	△ 6.4
Angling	18,713	19,129	2.2
Shellfish/seaweed collecting	56,974	51,314	△ 9.9
Other fishery	39,238	30,526	△ 22.2
Marine aquaculture	8,445	11,823	40.0

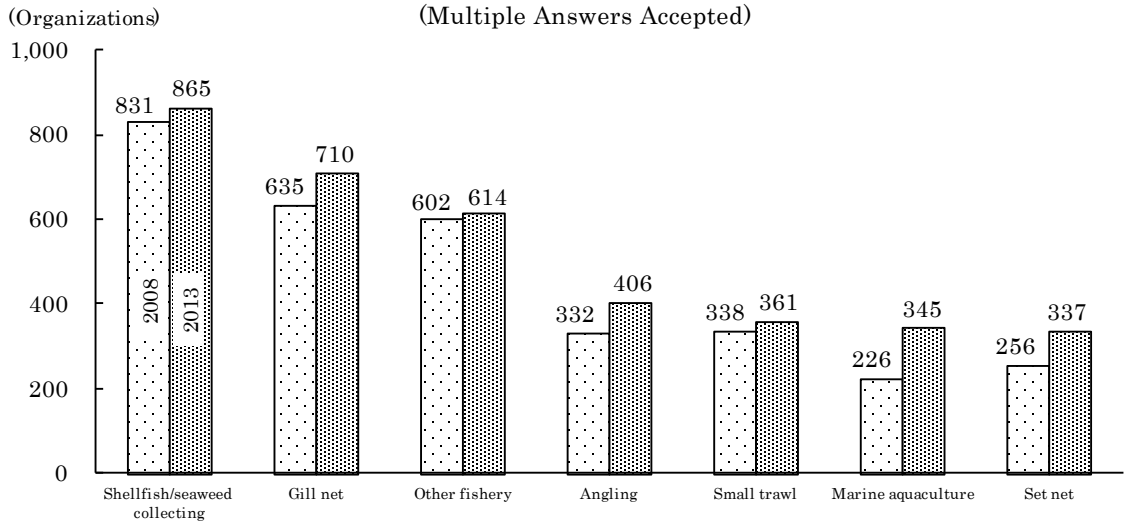
Note: The "participated fishery management entities" include management

(d) Number of Fisheries Management Organizations by Type of Mainly Managed Fishery

Looked at in terms of type of mainly managed fishery, the organizations that engaged in shellfish collecting/seaweed collecting was the most numerous at 865. Next were entities using gill nets at 710.

The number of organizations that manage marine aquaculture was 345, which was the largest increase of 119 (52.7%) compared to the previous survey.

Figure 5: Number of Fisheries Management Organizations by Type of Mainly Managed Fishery
(Multiple Answers Accepted)



(e) Number of Fisheries Management Organizations by Type of Mainly Managed Fish

Looked at in terms of type of mainly managed fish, organizations that managed abalone was the most numerous at 614.

The numbers of organizations that managed octopus and sea cucumber increased by 92 and 86, respectively compared to the previous survey.

Table 13: Number of Fisheries Management Organizations by Type of Mainly Managed Fish
(Multiple Answers Accepted)

Unit: Organization

Classification	2008	2013	Difference from the previous survey (2013-2008)
Total (actual)	1,738	1,825	87
Abalone	594	614	20
Top shell	439	457	18
Sea urchin	428	433	5
Other seaweeds	378	421	43
Sea cucumber	324	410	86
Bastard halibut	318	365	47
Other shellfish	291	343	52
Other fishes	240	312	72
Octopus	210	302	92
Squid	116	172	56
Kombu tangle	102	161	59
Salmon, trout	55	114	59

(6) Regional Activation Activities of Fishery Cooperatives

(a) Number of Cooperatives Engaged in Exchange Activities with Urban Areas and Number of Participants

The number of fishery cooperatives that offered fishery experience as a regional activation activity was 234 and the number of participants was 126,228, an increase of 34 (17.0%) and 5,342 (4.1%), respectively compared to the previous survey.

The number of fishery cooperatives that conducted activities for the promotion of fish food was 310, which was an increase of 39 (14.4%) compared to the previous survey. The number of participants in fish food promotion activities was 611,869, although it decreased by 41.3% compared to the previous year as the management entity of some activities with a large number of participants in the previous survey changed from a fishery cooperative to a company limited.

(b) Number of Fishery Cooperatives that Operated Fishery Product Stands and the Yearly Number of Users

The number of fishery cooperatives that operated fishery product stands in Japan was 247. These cooperatives operated 311 facilities, which was an increase of 29 organizations (13.3%) and 13 facilities (4.4%) compared to the previous survey.

The number of people who used these fishery product stands over the past one year was approximately 13,588,500, which was an increase of 1,112,800 (8.9%) compared to the previous survey.

Table 14: Regional Activation Activities of Fishery Cooperatives (Multiple Answers Accepted)

Classification	Unit	2008	2013	Increase/decrease from the previous survey (2013/2008)
				%
No. of cooperatives that offered fishery experiences	Cooperatives	200	234	17.0
Total No. of participants	10,000 people	12.1	12.6	4.1
No. of cooperatives that offered activity to promote eating of fishery products	Cooperatives	271	310	14.4
Total No. of participants	10,000 people	104.2	61.2	△ 41.3
No. of cooperatives that operate fishery product stand	Cooperatives	218	247	13.3
No. of facilities	Facilities	298	311	4.4
Yearly number of users	10,000 people	1,247.6	1,358.9	8.9
(Reference)				
No. of fishery cooperatives (marine fishery)	Cooperatives	1,041	934	8.9
No. of fishery cooperatives that actually conducted activity	Cooperatives	462	503	8.9

Note: Number of fishery cooperatives with actual activities refers to the number of fishery cooperatives that conducted one of the following activities: fishery experience, activities to promote eating of fishery products, fishery product stands.

Figure 6: Number of Fishery Product Stands Operated by Fishery Cooperatives

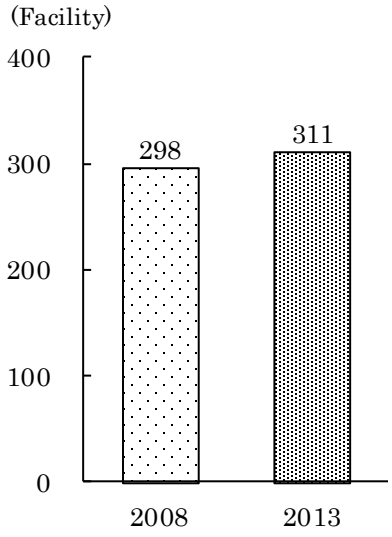
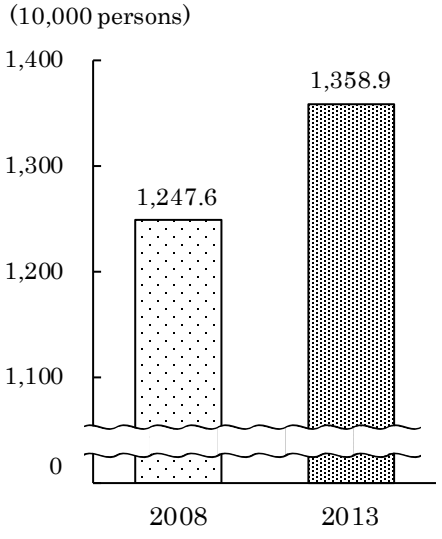


Figure 7: Yearly Number of Users of Fishery Product Stands Operated by Fishery Cooperatives



2. Inland Water Fisheries

(1) Lake fishery management entities (organized management entity or individual management entity that operated on a lake for 30 days or more over the past one year)

A "lake fishery management entity" is a household (individual management entity) or business body (organized management entity) that engaged in capture or aquaculture of aquatic animals and plants on a lake in order to sell products to gain profit in the past one year.
It should be noted that the survey targets important lakes for fishery production in regions. This survey targeted a total of 58 lakes in 19 prefectures.

The total number of lake fishery management entities in Japan was 2,266, which was a decrease of 286 (11.2%) compared to the previous survey.

Looking at lake fishery management entities by management organization, individual management entities numbered 2,162, while organized management entities numbered 104. These figures represented decreases of 280 (11.5%) and 6 (5.5%), respectively compared to the previous survey.

Table 15: Number of Lake Fishery Management Entities by Management Organization

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%
Total	2,552	2,266	△ 11.2
Private management entity	2,442	2,162	△ 11.5
Organized management entity	110	104	△ 5.5
Company	41	42	2.4
Fishery cooperative	5	4	△ 20.0
Fishery production association	4	5	25.0
Joint management	60	53	△ 11.7
(Reference)			
Sum total	2,850	2,484	△ 12.8

Note: The "sum total" includes private management entities that operated on a lake for 29 or fewer days over the course of the year.

Looked at in terms of engaged-in fishery type, the number of management entities that engaged in shellfish collecting/seaweed collecting was most numerous at 1,100, which was an increase of 28 (2.6%) compared to the previous survey. This is because the number of fishery management entities that engaged in freshwater clam fishery mainly in Aomori and Shimane prefectures increased.

Table 16: Number of Lake Fishery Management Entities by Engaged-in Fishery Type

(Multiple Answers Accepted)

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%
Total (actual)	2,552	2,266	△ 11.2
Net fishery			
Sub-total (actual)	1,698	1,363	△ 19.7
Trawl, boat seine	588	471	△ 19.9
Gill net	979	788	△ 19.5
Set net	573	476	△ 16.9
Cast net	229	123	△ 46.3
Other net fishery	169	122	△ 27.8
Other fishery			
Sub-total (actual)	1,587	1,487	△ 6.3
Angling, long line	298	246	△ 17.4
Shellfish/seaweed collecting	1,072	1,100	2.6
Cage	318	268	△ 15.7
Other fishery	274	238	△ 13.1
Aquaculture			
Sub-total (actual)	118	80	△ 32.2
Fish aquaculture	56	35	△ 37.5
Other aquaculture	65	45	△ 30.8

(2) On-lake fishery worker

On-lake fishery worker refers to people who worked on a lake in lake fishery during the past one year (excluding land work).

The number of people working in lake fishery during the past one year was 4,118, which was a decrease of 700 (14.5%) compared to the previous survey.

Looking at fishery workers by age group, the proportion of age groups who are over 65 was higher than that of the previous survey.

Figure 8: Number of On-Lake Fishery Workers by Age Group

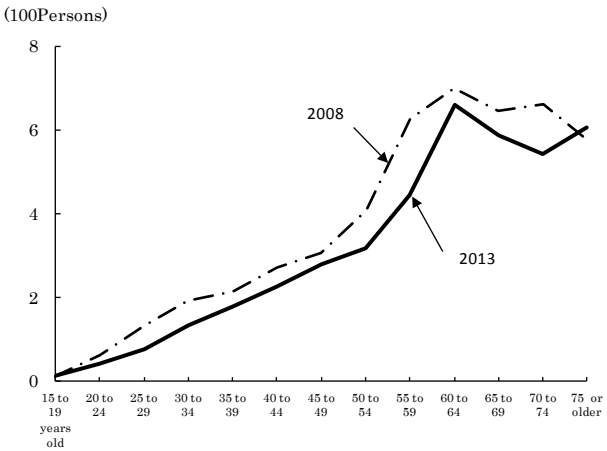


Table 17: Number of On-Lake Fishery Workers by Age Group

Unit: Person

Classification	Total	15 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old	65 to 74 years old	75 or older
Actual								
2008	4,818	73	326	487	719	1,326	1,311	576
2013	4,118	57	210	408	598	1,107	1,132	606
Component ratio (%)								
2008	100.0	1.5	6.8	10.1	14.9	27.5	27.2	12.0
2013	100.0	1.4	5.1	9.9	14.5	26.9	27.5	14.7

(3) Individual Management Entities (Lake Fisheries)

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

Looking at individual management entities by their full-time/part-time status the total number of full-time fishery management entities was 652, which was an increase of 37 (6.0%) compared to the previous survey. This is because the number of fishery management entities that engaged in freshwater clam fishery mainly in Ibaraki and Aomori prefectures and sweet fish for seed in Shiga prefecture increased.

Table 18: Number of Fishery Management Entities by Full-Time/Part-Time Status

Classification	2008	2013	Component ratio		Increase/decrease from the previous survey (2013/2008)
			2008	2013	
	Entity	Entity	%	%	%
Total	2,442	2,162	100.0	100.0	△ 11.5
Full-time	615	652	25.2	30.2	6.0
Part-time	1,827	1,510	74.8	69.8	△ 17.4
Part-time type 1	784	678	32.1	31.4	△ 13.5
Part-time type 2	1,043	832	42.7	38.5	△ 20.2

(b) Number of Successors

Out of total of 2,162 individual management entities in lake fishery, those that have a successor was 525, which was an increase of 56 (11.9%) compared to the previous survey. This is because the number of fishery management entities that engaged in freshwater clam fishery mainly in Shimane prefecture increased.

Table 19: Number of Management Entities that Have a Successor by Main Fishery Type

Classification	2008			2013		
		Successor exists	Percentage of management entities that have a successor		Successor exists	Percentage of management entities that have a successor
	Entity	Entity	%	Entity	Entity	%
Total	2,442	469	19.2	2,162	525	24.3
Net fishery						
Trawl, boat seine	461	55	11.9	353	35	9.9
Gill net	430	48	11.2	346	24	6.9
Set net	262	33	12.6	201	21	10.4
Cast net	79	1	1.3	36	-	-
Other net fishery	25	4	16.0	21	2	9.5
Other fishery						
Angling, long line	42	7	16.7	42	3	7.1
Shellfish/seaweed collecting	936	286	30.6	1,005	412	41.0
Cage	71	3	4.2	39	2	5.1
Other fishery	51	1	2.0	68	6	8.8
Aquaculture						
Fish aquaculture	37	7	18.9	25	7	28.0
Other aquaculture	48	24	50.0	26	13	50.0

(4) Aquaculture management entities

("Aquaculture management entity" refers to a household or business body that conducted aquaculture in inland water for sale to gain profit during the past one year.)

The total number of aquaculture management entities in Japan was 3,129, which was a decrease of 635 (16.9%) compared to the previous survey.

Looking at the management entities by management organization, individual management entities numbered 2,304, while organized management entities numbered 825. These figures represented decreases of 557 (19.5%) and 78 (8.6%), respectively compared to the previous survey.

Table 20: Number of Aquaculture Management Entities by Management Organization

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%
Total	3,764	3,129	△ 16.9
Private management entity	2,861	2,304	△ 19.5
Organized management entity	903	825	△ 8.6
Company	578	554	△ 4.2
Fishery cooperative	102	81	△ 20.6
Fishery production association	76	69	△ 9.2
Joint management	84	52	△ 38.1
Other	63	69	9.5

Looking at the management entities by managed aquaculture type, the number of management entities that engaged in other trout and common carp culture for food decreased by 123 (15.4%) and 89 (32.0%), respectively compared to the previous survey. For seed, the number of management entities that engaged in trout culture decreased by 91 (31.6%).

On the other hand, the number of management entities that engaged in saltwater fish species for food was 28, an increase of 4 (16.7%) compared to the previous survey. Management entities that engaged in other culture and sweet fish culture for seed was 103 and 74, an increase of 7 (7.3%) and 7 (10.4%), respectively.

Table 21: Number of Aquaculture Management Entities by Engaged-in Aquaculture Type
(Multiple Answers Accepted)

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Entity	Entity	%
Total (actual)	3,764	3,129	△ 16.9
For food			
Rainbow trout	461	387	△ 16.1
Other trout	798	675	△ 15.4
Sweet fish	219	186	△ 15.1
Common carp	278	189	△ 32.0
Crucian carp	238	180	△ 24.4
Eel	444	384	△ 13.5
Soft-shelled turtle	68	61	△ 10.3
Saltwater fishes	24	28	16.7
Other	557	481	△ 13.6
For seed			
Trout	288	197	△ 31.6
Sweet fish	67	74	10.4
Common carp	48	47	△ 2.1
Other	96	103	7.3
For display			
Nishikigoi	739	591	△ 20.0
Goldfish	432	406	△ 6.0
Pearl	15	15	0.0

Note: 1. "Saltwater fish species" include bastard halibut, puffer fish and oyster.
2. "For food, others" include silver carp, grass carp, sturgeon, honmoroko, catfish, pond-snail, weatherfish, etc.
3. "For seed, others" include seeds of "others for food," saltwater, softshell turtle, crucian carp, etc.

(5) Aquaculture worker

An aquaculture worker is a person aged 15 years or older who engaged in aquaculture during the past one year regardless of number of days. Includes persons who worked temporarily to perform a specific task.

The number of people working in aquaculture during the past one year was 10,548, which was a decrease of 1,946 (15.6%) compared to the previous survey.
Looking at fishery workers by age group, the proportion of young age groups who are under 25 to 44 and who are over 65 was higher than that of the previous survey.

Figure 9: Number of Aquaculture Workers by Age Group

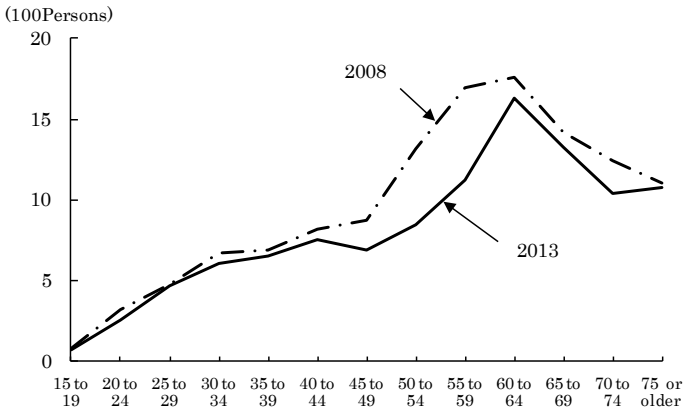


Table 22: Number of Aquaculture Workers by Age Group

Unit: Person

Classification	Total	15 to 24 years old	25 to 34 years old	35 to 44 years old	45 to 54 years old	55 to 64 years old	65 to 74 years old	75 or older
Actual								
2008	12,494	408	1,156	1,509	2,195	3,456	2,664	1,106
2013	10,548	333	1,074	1,407	1,543	2,749	2,362	1,080
Component ratio (%)								
2008	100.0	3.3	9.3	12.1	17.6	27.7	21.3	8.9
2013	100.0	3.2	10.2	13.3	14.6	26.1	22.4	10.2

(6) Individual Management Entities (Aquaculture)

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

Looking at individual management entities by their full-time/part-time status, the number of full-time entities was 688, which was an increase of 26 (3.6%) compared to the previous survey, while that for part-time entities was 1,616, which was a decrease of 531 (24.7%) compared to the previous survey.

Table 23: Number of Aquaculture Management Entities by Full-Time/Part-Time Status

Classification	2008	2013	Component ratio		Increase/decrease from the previous survey (2013/2008)
			2008	2013	
	Entity	Entity	%	%	%
Total	2,861	2,304	100.0	100.0	▵ 19.5
Full-time	714	688	25.0	29.9	▵ 3.6
Part-time	2,147	1,616	75.0	70.1	▵ 24.7
Part-time type 1	696	586	24.3	25.4	▵ 15.8
Part-time type 2	1,451	1,030	50.7	44.7	▵ 29.0

(b) Number of Successors

Out of a total of 2,304 individual management entities in aquaculture, those that have a successor was 494, which was a decrease of 152 (23.5%) compared to the previous survey.

Looking at management entities by aquaculture type, the proportion of management entities that have a successor in saltwater fishes and eel culture is high at 66.7% and 46.3%, respectively.

Table 24: Number of Management Entities that Have a Successor by Main Aquaculture Type

Classification	2008			2013		
		Successor exists	Percentage of management entities that have a successor		Successor exists	Percentage of management entities that have a successor
	Entity	Entity	%	Entity	Entity	%
Total	2,861	646	22.6	2,304	494	21.4
For food	1,792	470	26.2	1,418	362	25.5
Rainbow trout	180	51	28.3	145	43	29.7
Other trout	433	76	17.6	359	64	17.8
Sweet fish	84	26	31.0	62	19	30.6
Common carp	149	35	23.5	108	25	23.1
Crucian carp	180	49	27.2	130	17	13.1
Eel	302	143	47.4	231	107	46.3
Soft-shelled turtle	43	7	16.3	35	2	5.7
Saltwater fishes	22	10	45.5	18	12	66.7
Other	399	73	18.3	330	73	22.1
For seed	95	26	27.4	77	16	20.8
Trout	37	6	16.2	17	3	17.6
Sweet fish	7	2	28.6	6	2	33.3
Common carp	9	-	-	14	2	14.3
Other	42	18	42.9	40	9	22.5
For display	971	148	15.2	808	116	14.4
Nishikigoi	622	89	14.3	497	66	13.3
Goldfish	349	59	16.9	311	50	16.1
Pearl	3	2	66.7	1	-	-

3. Distribution and Processing

(1) Fish Markets

"Fish market" refers to a market at which fishery products are directly landed by a fishing vessel, or, even if it did not directly land fishery products, a market that engaged in initial-stage trade after receiving fishery products from their production areas via ground transportation during the past one year.

The number of fish markets in Japan was 859, which was a decrease of 62 compared to the previous survey. It decreased mainly because of the merger and abolishment of markets related to fishery cooperatives.

A total of 5.87 million tons of fishery products with a monetary value of 2.7626 trillion yen was handled at 859 fish markets in Japan.

Table 25: Number of Fish Markets with Yearly Handled Volume and Monetary Value

Classification	Unit	2008	2013	Increase/decrease from the previous survey (2013/2008)
				%
Number of fish markets	Market	921	859	△ 6.7
Yearly handled volume	10,000 t	720	587	△ 18.5
Yearly handled monetary value	100 million yen	33,067	27,626	△ 16.5

(2) Cold Storage and Refrigerating Plants

"Cold storage and refrigerating plant" refers to a business body that owns cold storage and refrigerating facilities with over 10 horsepower on land, and that froze or refrigerated fishery products in the past one year.

The number of cold storage and refrigerating plants was 5,357 and the number of workers was 150,559, which were a decrease of 512 (8.7%) and 14,005 (8.5%), respectively compared to the previous survey.

The number of foreign fishery workers was 10,154, which was an increase of 1,257 (14.1%) compared to the previous survey. By prefecture, Hokkaido had the most numerous amount of fishery workers at 2,289, followed by Chiba prefecture of 1,299.

Table 26: Number of Cold Storage and Refrigerating Plants and Number of Workers

Classification	Unit	2008	2013	Component ratio		Increase/decrease from the previous survey (2013/2008)
				2008	2013	
				%	%	%
Number of Cold Storage/Refrigerating Plants	Plant	5,869	5,357	-	-	△ 8.7
Number of Workers						
Total	Person	164,564	150,559	100.0	100.0	△ 8.5
Male	Person	72,371	68,916	44.0	45.8	△ 4.8
Female	Person	92,193	81,643	56.0	54.2	△ 11.4
Foreigner	Person	8,897	10,154	5.4	6.7	14.1

(3) Fishery Processing Plants

"Fishery processing plant" refers to a business body that processed fish or aquatic plants for the purpose of sales in the past one year.

(a) Number of processing plants

The total number of fishery processing plants in Japan was 8,514, which was a decrease of 1,583 (15.7%) compared to the previous survey.

Looked at the number of fishery processing plants by engaged-in processing type, the number of plants that processed frozen food increased by 79 (9.8%) compared to the previous survey while the number of plants of many processing types fell.

Table 27: Number of Fishery Processing Plants by Type of Processing Practiced (Multiple Answers Accepted)

Classification	2008	2013	Increase/decrease from the previous survey (2013/2008)
	Plant	Plant	%
Total (actual)	10,097	8,514	△ 15.7
Frozen fishery products	1,880	1,580	△ 16.0
Canned or bottled products	195	155	△ 20.5
Roasted and flavored laver	389	355	△ 8.7
Agar	44	42	△ 4.5
Oils and fats	27	23	△ 14.8
Fish paste			
Kamaboko, steamed fish-paste patties	1,739	1,413	△ 18.7
Fish meat hams and sausages	46	34	△ 26.1
Frozen food	804	883	9.8
Shade-dried products	843	742	△ 12.0
Dried and salted products	2,263	1,922	△ 15.1
Boiled and dried products	1,371	1,280	△ 6.6
Salted products	988	842	△ 14.8
Smoked products	269	206	△ 23.4
Cured products	736	641	△ 12.9
Other processed foods			
Salted guts	566	472	△ 16.6
Fishery products pickled	666	558	△ 16.2
Seasoning processed goods			
Fishery products tsukudani	1,083	910	△ 16.0
Dried, roasted, or fried products	881	652	△ 26.0
Others (Spicy cod roe, seasoned herring roe)_	708	630	△ 11.0
Others (baked or dried products, fish powder for food, etc.)	493	484	△ 1.8
Feed and fertilizer	192	141	△ 26.6

(b) Number of Workers

The number of people working in fishery processing plants was 188,235, which was a decrease of 24,924 (11.7%) compared to the previous survey.

The number of foreign fishery workers was 13,458, which was an increase of 1,829 (15.7%) compared to the previous survey. By prefecture, Hokkaido had the most numerous fishery workers at 2,650, followed by Chiba prefecture of 1,772 and Shizuoka prefecture of 1,569.

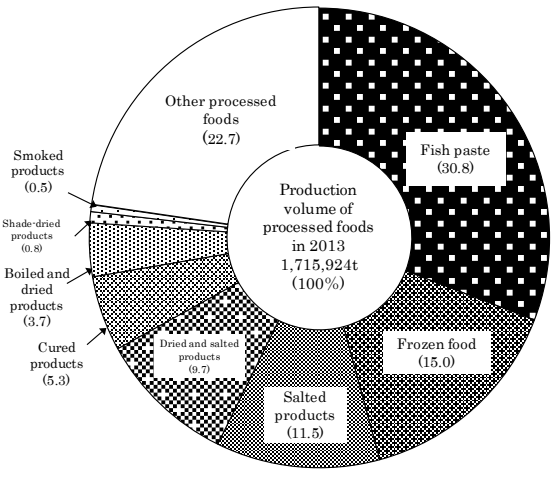
Table 28: Number of Workers in Fishery Processing Plants

Classification	2008	2013	Component ratio		Increase/decrease from the previous survey (2013/2008)
			2008	2013	
	Person	Person	%	%	%
Total	213,159	188,235	100.0	100.0	△ 11.7
Male	77,989	72,057	36.6	38.3	△ 7.6
Female	135,170	116,178	63.4	61.7	△ 14.1
Foreigner	11,629	13,458	5.5	7.1	15.7

(c) Production Volume of Fishery Products

The production volume of fishery products was derived from the 2013 Fishery Census Distribution and Processing Survey (complete survey) for data in 2013 and the Statistical Survey on Fishery Products (published on May 31, 2013, sample survey) for 2012 data.

Figure 10: Composition Ratio of Production Volume of Fishery Products for Food by Processing Type



The production volume of fishery products for food (excluding baked and seasoned -baked laver, hereinafter the same) was 1,715,924 tons, which remained the same level as the previous year.

Looking at the production volume by processing type, fish paste numbered 528,438 tons and frozen food numbered 256,935 tons, which was a decrease of 1.8% and 2.4%, respectively compared to the previous year. The production volume of boiled and dried products was 64,316 tons and that of baked and seasoned -baked laver was 7003.728 million sheets, which was an increase of 5.1% and 4.0%, respectively compared to the previous year.

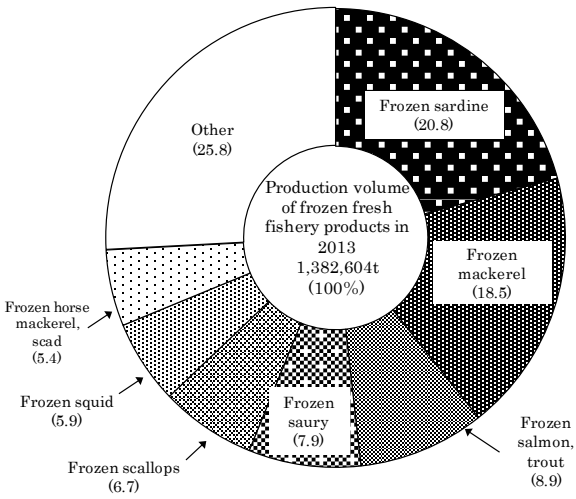
Table 29: Production Volume of Fishery Products for Food by Processing Type

Classification	Unit	2012	2013	Difference from the previous year (2013 - 2012)	Increase/decrease from the previous year (2013/2012)
					%
Processed foods	t	1,727,969	1,715,924	△ 12,045	△ 0.7
Dried and salted products	t	177,678	166,714	△ 10,964	△ 6.2
Fish paste	t	538,329	528,438	△ 9,891	△ 1.8
Frozen food	t	263,212	256,935	△ 6,277	△ 2.4
Boiled and dried products	t	61,167	64,316	3,149	5.1
Shade-dried products	t	15,799	13,466	△ 2,333	△ 14.8
Smoked products	t	9,031	8,178	△ 853	△ 9.4
Cured products	t	91,393	90,623	△ 770	△ 0.8
Salted products	t	198,445	197,845	△ 600	△ 0.3
Other processed foods	t	372,915	389,409	16,494	4.4
Baked and seasoned-baked laver	1,000 sheets	6,736,545	7,003,728	267,183	4.0

The production volume of frozen fresh fishery products was 1,382,604 tons, which was an increase of 10.0% compared to the previous year.

Looking at the production volume by main product type, that of frozen sardine was 287,759 tons and that of frozen scallop was 93,182, which was an increase of 8.4% and 86.3%, respectively compared to the previous year. The production volume of frozen mackerel was 255,618 and that of frozen saury was 109,444 tons, a decrease of 7.7% and 6.7%, respectively compared to the previous survey.

Figure 11: Composition Ratio of Production Volume of Frozen Fishery Products by Main Product Type



Note: The total percentage is not 100 because some figures were rounded.

Table 30: Production Volume of Frozen Fishery Products by Main Product Type

Classification	2012	2013	Difference from the previous year (2013 - 2012)	Increase/decrease from the previous year (2013/2012)
	t	t	t	%
Frozen fresh fishery products	1,257,111	1,382,604	125,493	10.0
Frozen scallops	50,013	93,182	43,169	86.3
Frozen horse mackerel, scad	54,677	74,175	19,498	35.7
Frozen squid	72,095	81,734	9,639	13.4
Frozen salmon, trout	112,807	123,510	10,703	9.5
Frozen mackerel	277,040	255,618	△ 21,422	△ 7.7
Frozen saury	117,350	109,444	△ 7,906	△ 6.7
Frozen sardine	265,441	287,759	22,318	8.4