

Japan's report on Paragraph 10, CMM2018-02

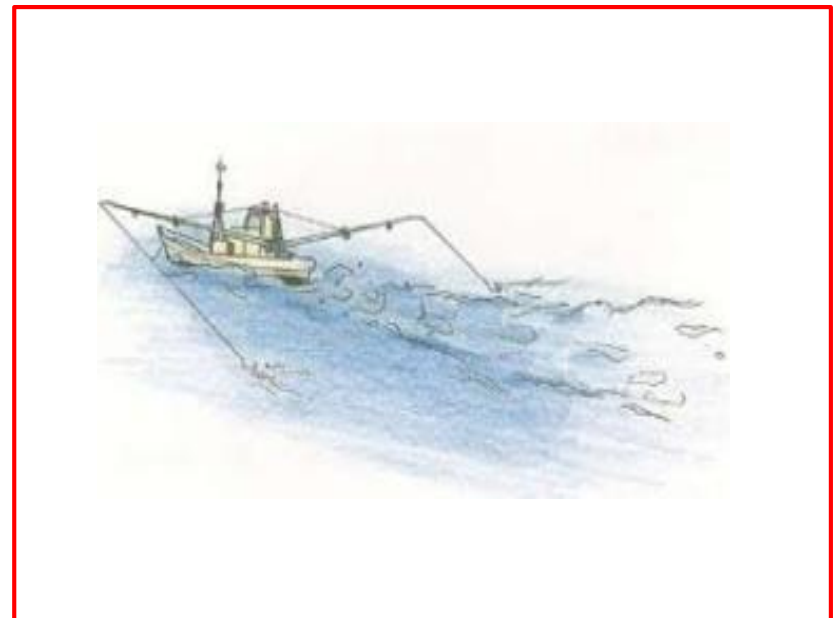
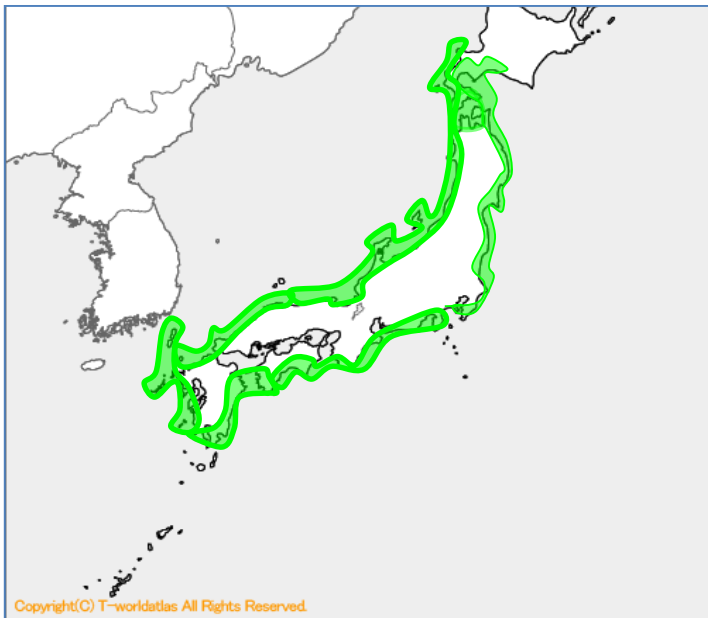


**Northern Committee 15th Regular Session
September, 2019
Portland, USA**

I. General overview of Japan's PBF fisheries

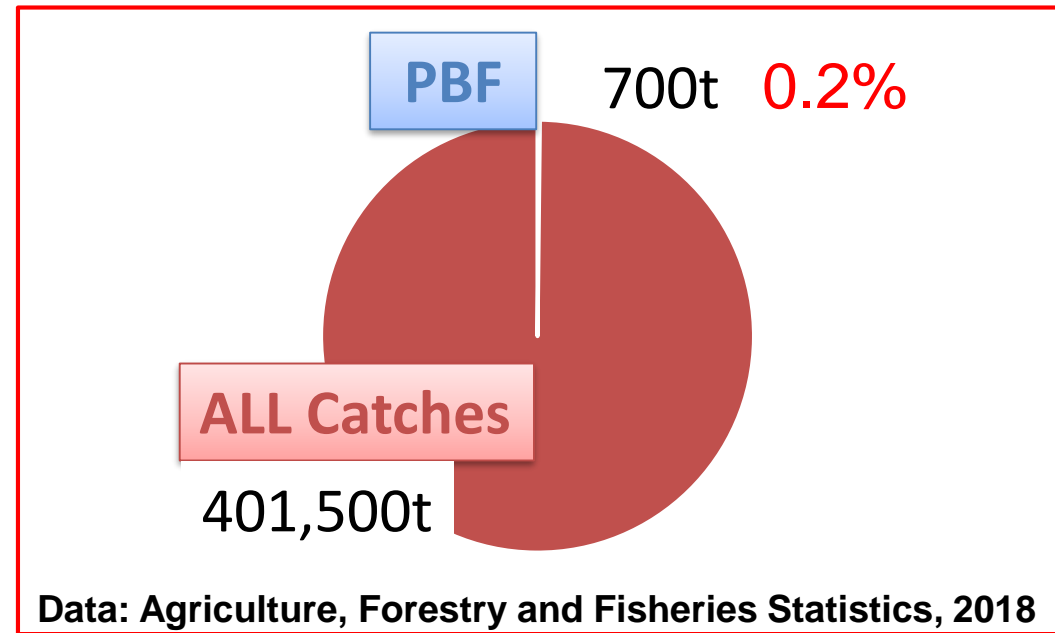
I-1. Artisanal Fisheries (Troll, Jigging, Handline, etc.)

- # of licenses went down from 24,086 vessels in 2015 to 18,147 vessels in 2018
- Mostly troll fishery:
 - Traditional and Artisanal
 - One day fishing trip within territorial waters
 - Seasonal
 - Catch depends on migration of PBF, which fluctuates drastically



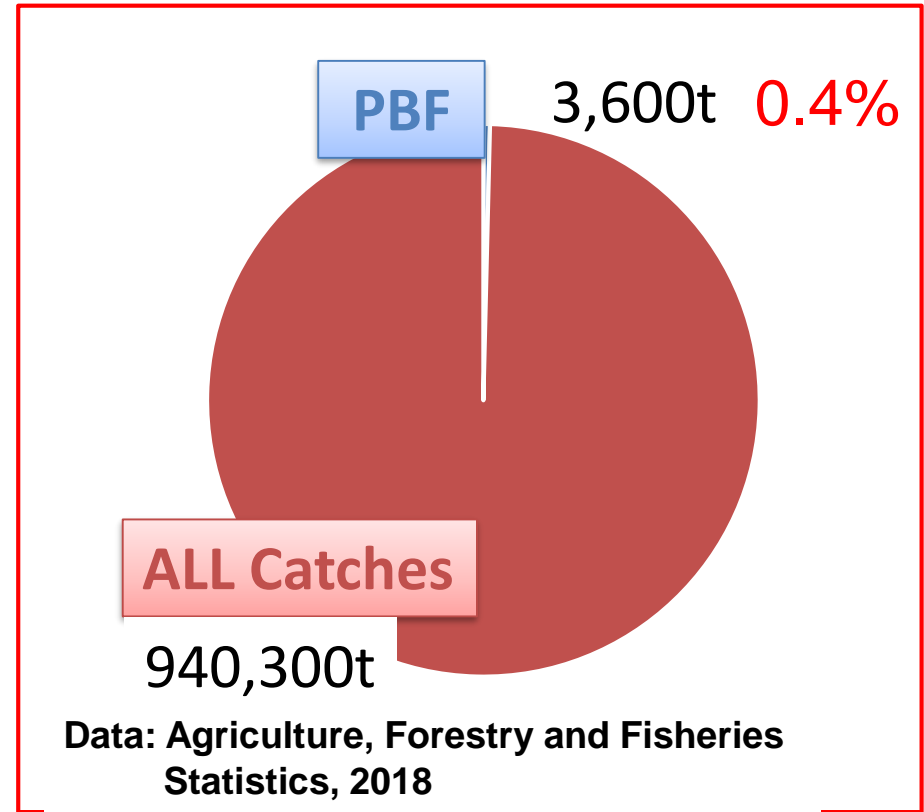
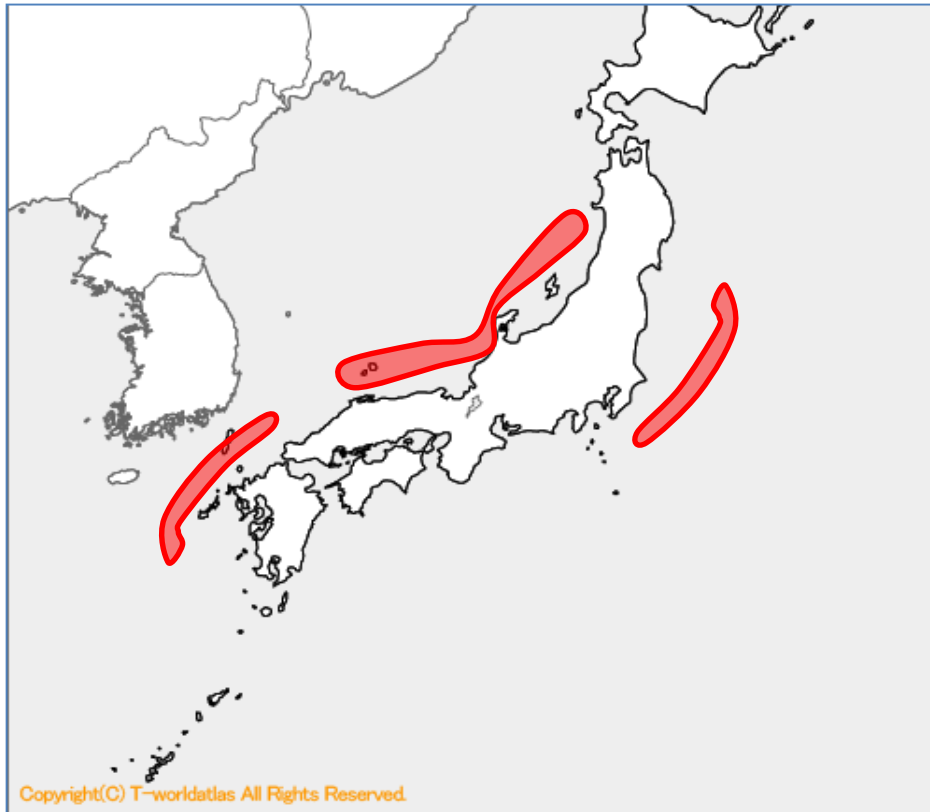
I-2. Set Nets

- Approximately 1,800 throughout Japan
- **Passive fishing method waiting for any fish to swim into the net**
- **Catch depends on fish migration**
- **Not easy for fishers to control the catch.**
- PBF catches are less than 1% of all catches.
- All the set nets are located in either internal waters or territorial waters.



I-3. Purse seine fishery

- Main target are jack mackerel and chub mackerel: PBF is caught only during its migration season
- PBF catches are less than 1% of all catches.



II. Measure to implement Paragraph 2 & 3: Effort and Catch Control in 2018 fishing season

II-1. Change of management period from 4th management period

Coastal Fisheries:

1st July to 30th June



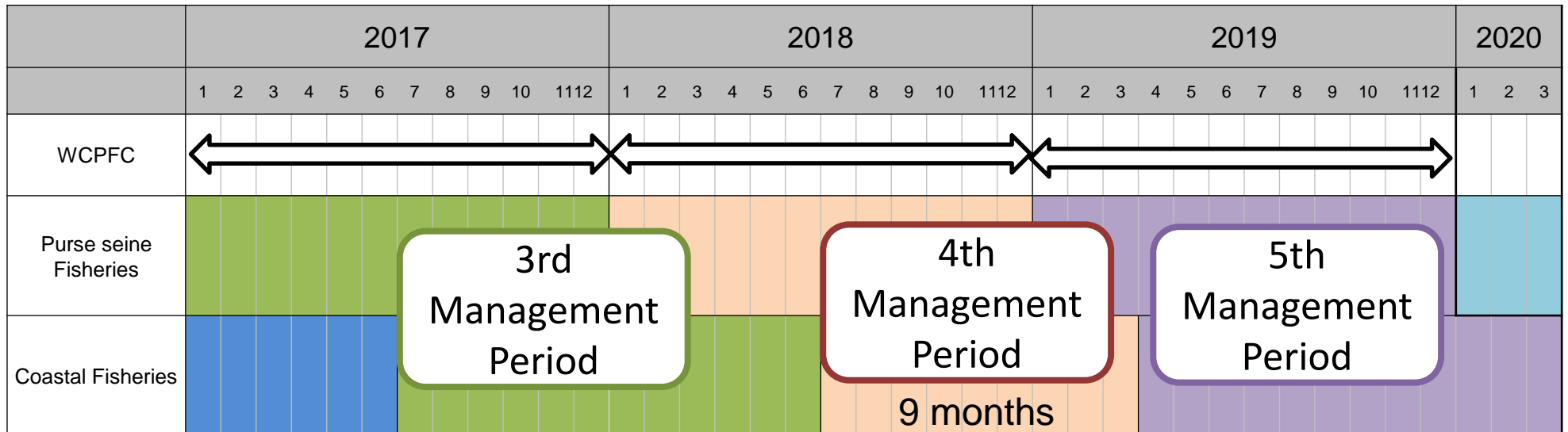
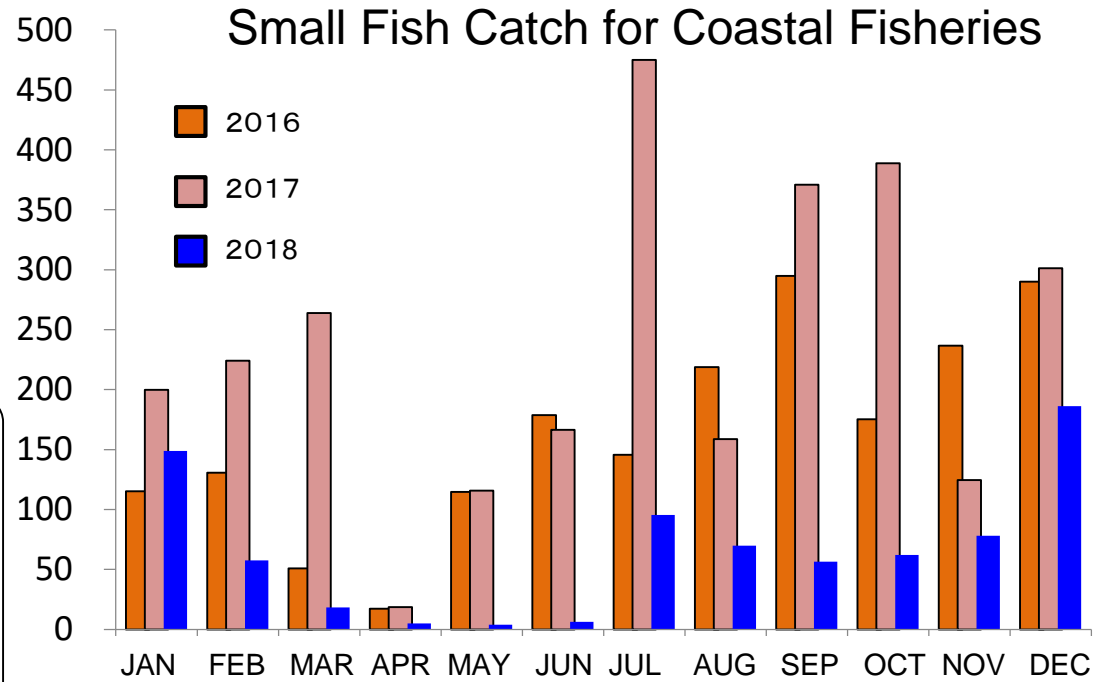
1st April to 31st March

4th period:

from 1st July 2018 to 31st March 2019,

5th period:

from 1st April 2019 to 31st March 2020



II-2. Small fish in 4th Management period

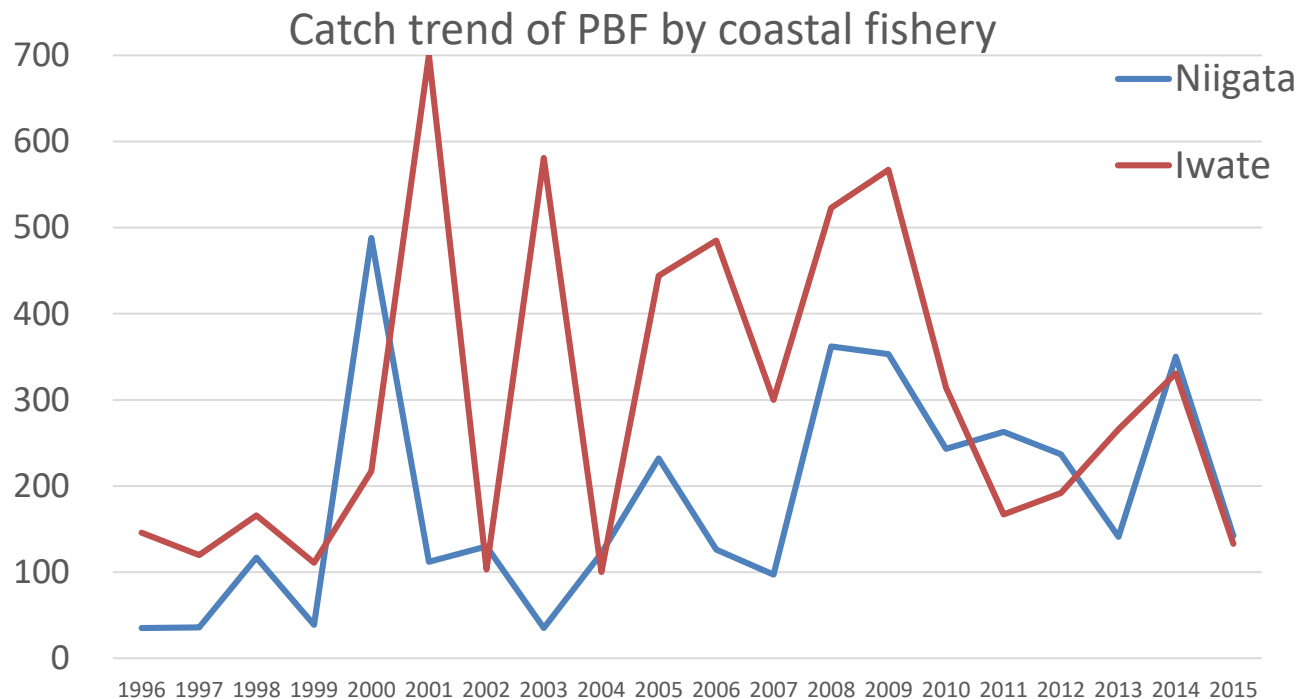
		Catch	
Small fish	Purse seine Fisheries (1 year)	1,071t	< 1,583t
	Coastal Fisheries (9 months)	1,206t	< 1,422t (1,896 X 9/12)

II-3. Management of coastal fisheries

Management period	Management measures	Problems
1 st (Jan 2015 – Jun 2016) For small fish only	6 management areas	Certain set nets consumed large part of the area catch limit
2 nd (Jul 2016 – Jun 2017) For small fish only	6 management areas and a separate scheme for set nets	Large catch by set nets caused overshooting of small fish limit
3 rd (Jul 2017 – Jun 2018) For small fish only	Individual limit for 26 prefectures, one common limit for 13 prefectures and a separate scheme for set nets	Large catch by set nets in one area consumed large part of small catch limit (but not caused overshooting)
4 th (Jul 2018 – Mar 2019) For small and large fish	Individual limit for 39 prefectures Each prefecture sets a reserve and monthly target Some prefectures divide limit among fisheries cooperatives, some of which further divide it among fishers	Each management unit could not catch up to the limit, and the sum of unused limit is substantial

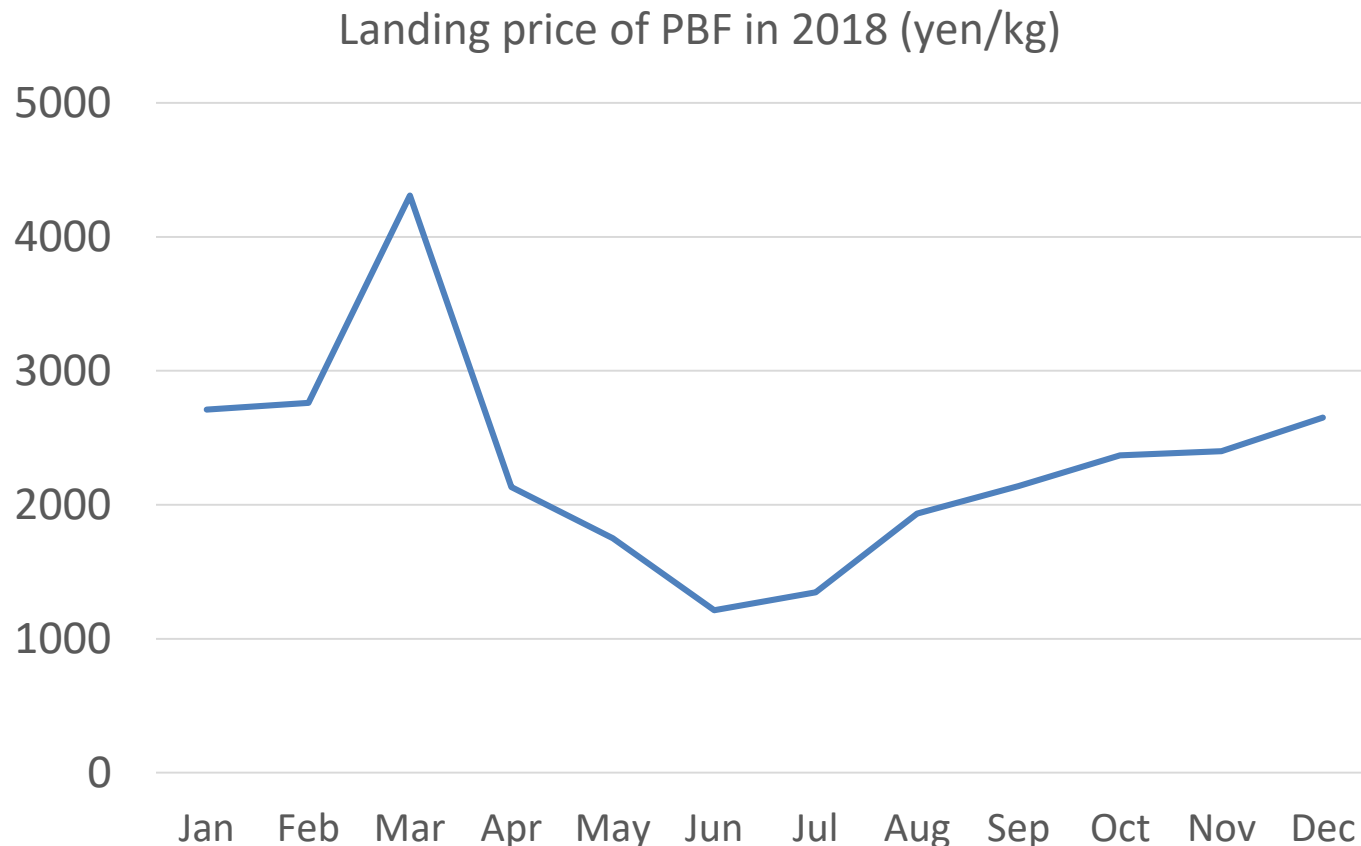
Why the limit could not be fully utilized? (1)

1. Fishers hesitate to transfer unused allocation to others because migration pattern changes from year to year and fishers cannot predict whether they will not be able to utilize their allocation until the last moment.



Why allocation could not be fully utilized? (2)

2. In general, PBF prices are lower in summer and higher in winter. As business decision, fishers tend to save their quota in summer, but PBF does not necessarily migrate to the region in winter.



What can be done to increase the usage of the limit?

- An Olympic system (first come, first serve basis) would be an easiest solution.
- It may cause overshooting, however, because it is not easy to control in a timely manner catches of 20,000 fishers using different gears
- The Olympic system will also cause unfairness among different regions: fishers in areas where PBF migrate earlier will catch more than other areas.



Japan will continue division of allocation into small units with better transfer systems, but there is a limitation due to drastic changes of migration from year to year and area to area.

II-4. Challenges for coastal fisheries due to increasing migration

While the catch limit cannot be fully utilized, increasing PBF migration in coastal areas continue to cause interference with fisheries targeting other species:

(1) Squid jigging

Squid jigging fishing boats use fishing lights to attract squid, but many PBFs aggregate to eat those squids and fishers cannot catch squid. Recently, squids remain near the bottom to avoid PBF. Jigging boats cannot catch squid while they are caught by bottom trawlers.

(2) Yellowtail longline

PBF has not been incidentally caught by Yellowtail longline fishery for last 30 years, but recently, many PBFs (9-10kg) were hooked and some PBF cut the fishing line.

II-5. Challenges for set nets due to increasing migration

The problem is more serious for set nets since more PBF swim into the nets. To avoid overshooting, fishers make various efforts such as:

- (1) releasing PBF alive by pushing down the floating line (please see the vide);
- (2) reducing the number of net retrievals; and
- (3) no net retrieving or even closing the entrance of set nets



All these efforts cause tremendous sacrifice of other species for conservation of PBF.

クロマグロ小型魚選別放流技術研究開発コンソーシアム

CONSORTIUM ON DEVELOPMENT OF RELEASE TECHNIQUES FOR JUVENILE PACIFIC BLUEFIN TUNA



II-6. Measures to alleviate problems faced by set nets

1. Development of gear configurations to avoid bycatch of PBF

⇒ Still ongoing

2. Installation of fish finders to check if PBF is in the net

⇒ Effective if PBF is found occasionally, but must give up other species anyway

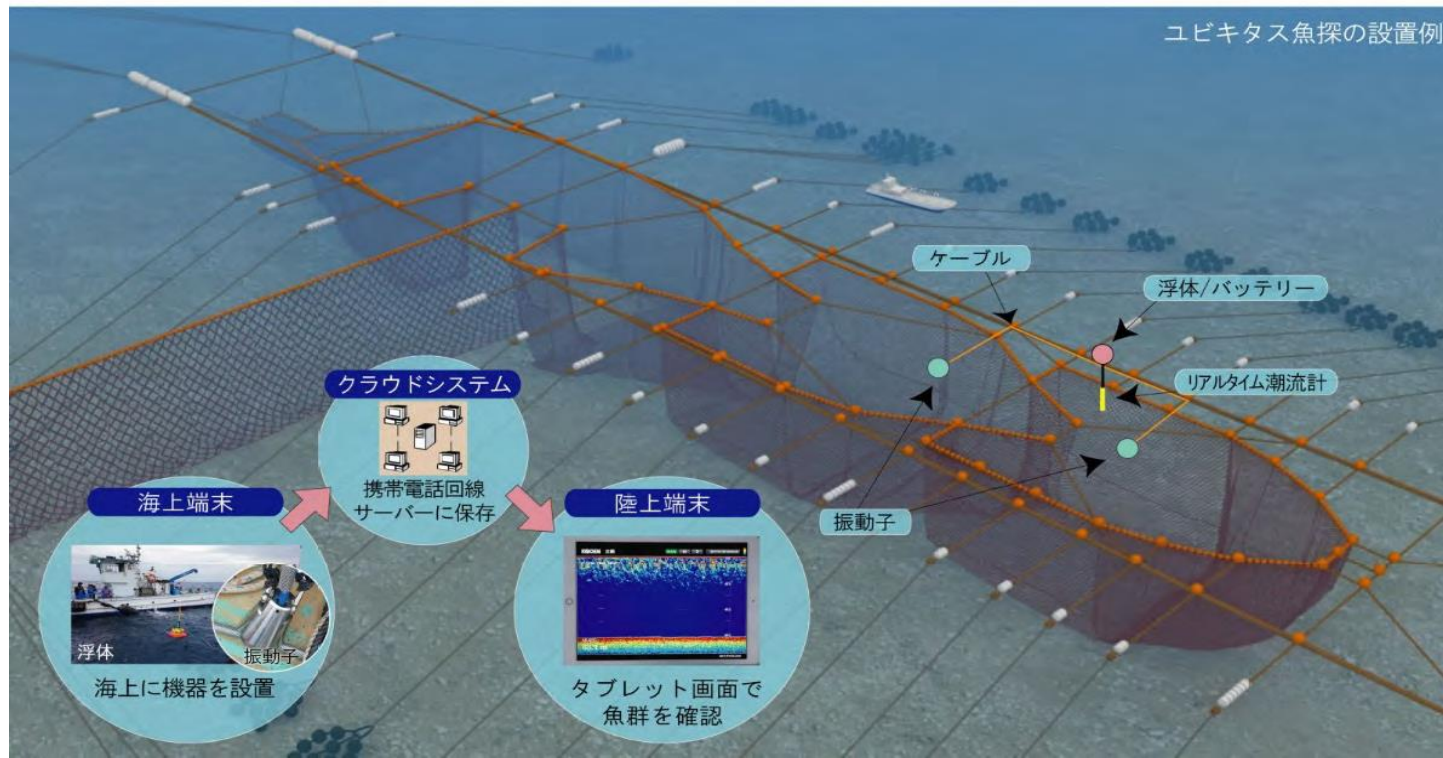
3. Development of techniques for live release

⇒ Not difficult to release PBF, but difficult to release only PBF

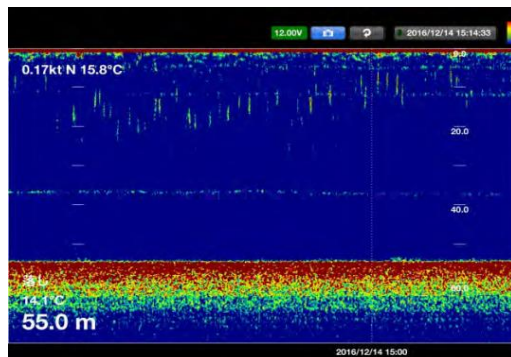
4. Compensation for loss of income caused by catch limit

⇒ Can compensate to some extent, but not 100%

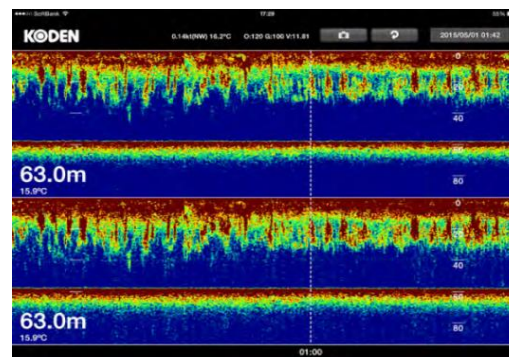
Fish finders to detect PBF before retrieving net



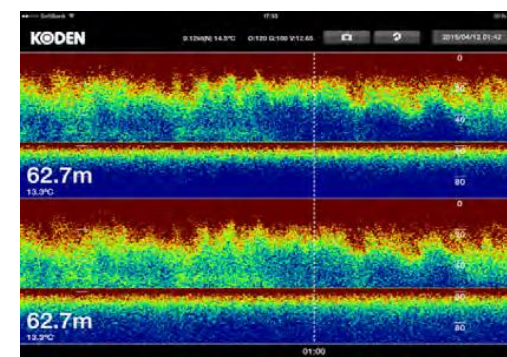
魚探画像の例



PBF



Yellowtail

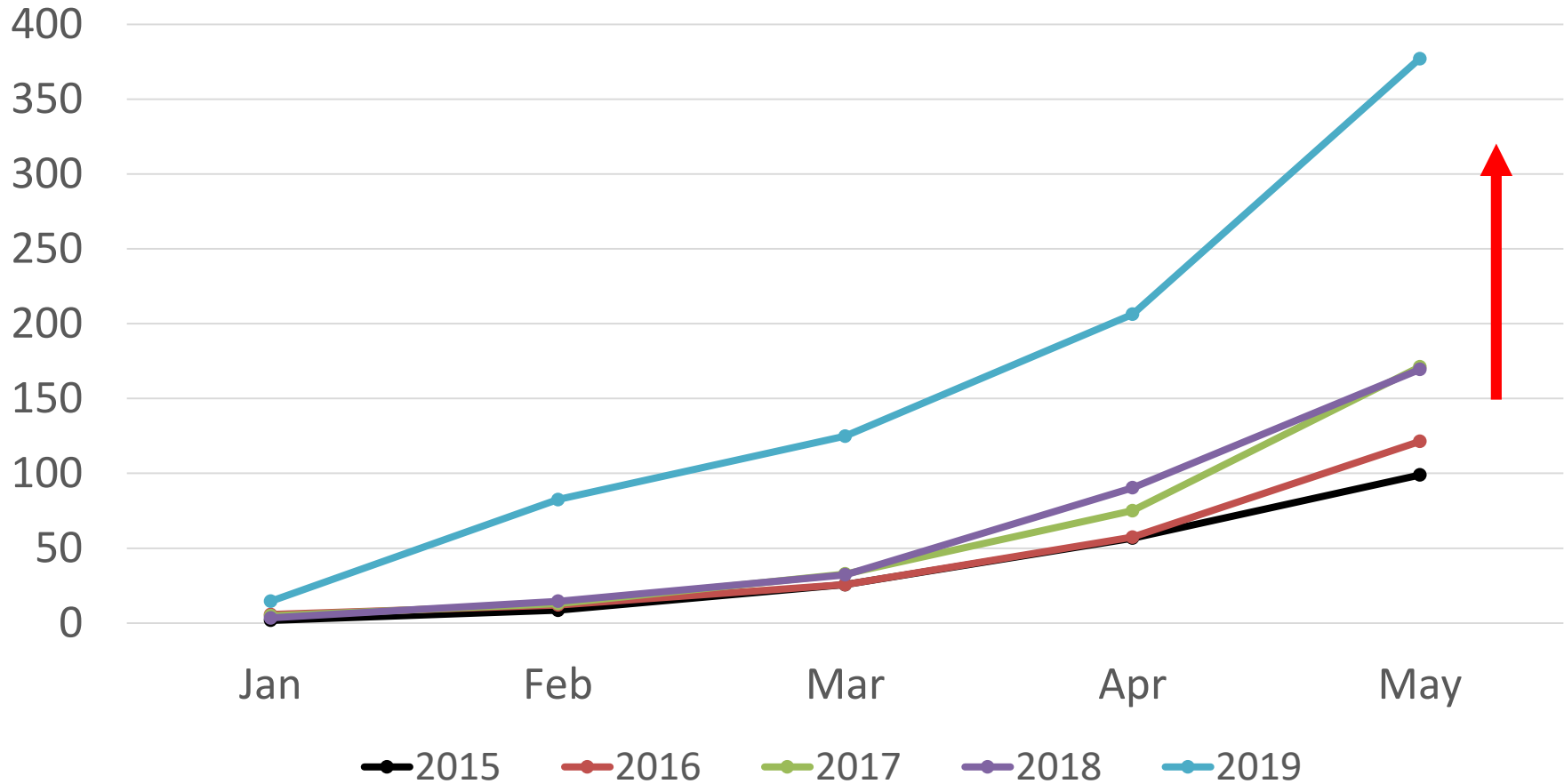


Sardine

II-7. Large fish in 4th Management Period

		Catch	
Large fish	Purse seine Fisheries (1 year)	3,218t	< 3,282t
	Coastal Fisheries (9 months)	592t	< 1,185t (1,580 X 9/12)

An increasing catch trend of large fish by Long Line.



II-8 Regulation of Aquaculture

- Starting in April 2011, all PBF aquaculture sites are required to register and report their farming activities, including information on caging and harvest. As of December 2017, 177 aquaculture sites were on the registration.
- To prevent an increase in fry catches, the Minister of Agriculture, Forestry and Fisheries instructed prefectural governments in October 2012 not to increase the capacity of PBF farms which use wild seeds.



III. Measures to implement Paragraph 6: Monitoring of Recruitment of Juvenile

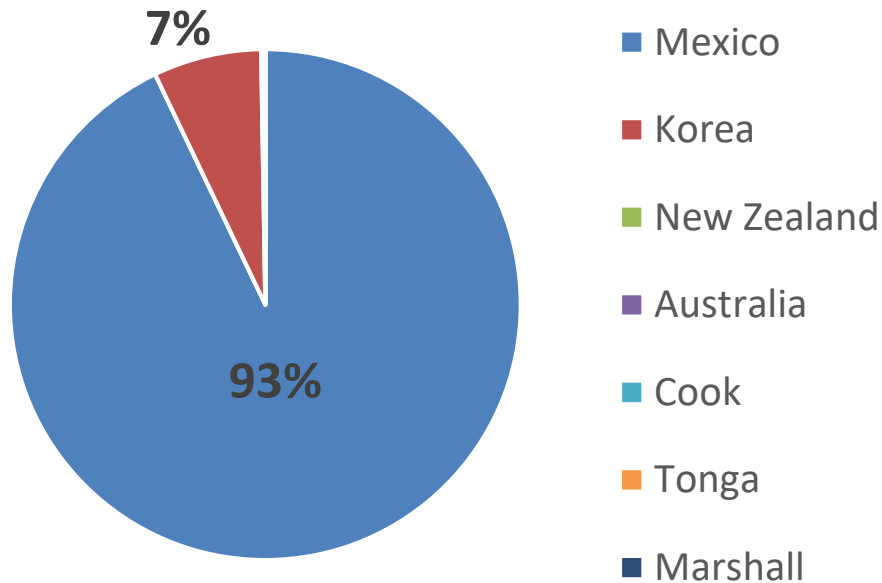
III-1. Recruitment Monitoring in a Timely Manner

- A monitoring survey using troll fishing boats has been conducted since 2011 in order to monitor recruitment abundance of age-0 fish in a timely manner.
- In 2018, 74 troll boats equipped with data logger and transmitter were monitored in 6 monitoring sites.
- The preliminary results indicated that the recruitment in 2018 is better than the average level since the start of the monitoring survey (2011).

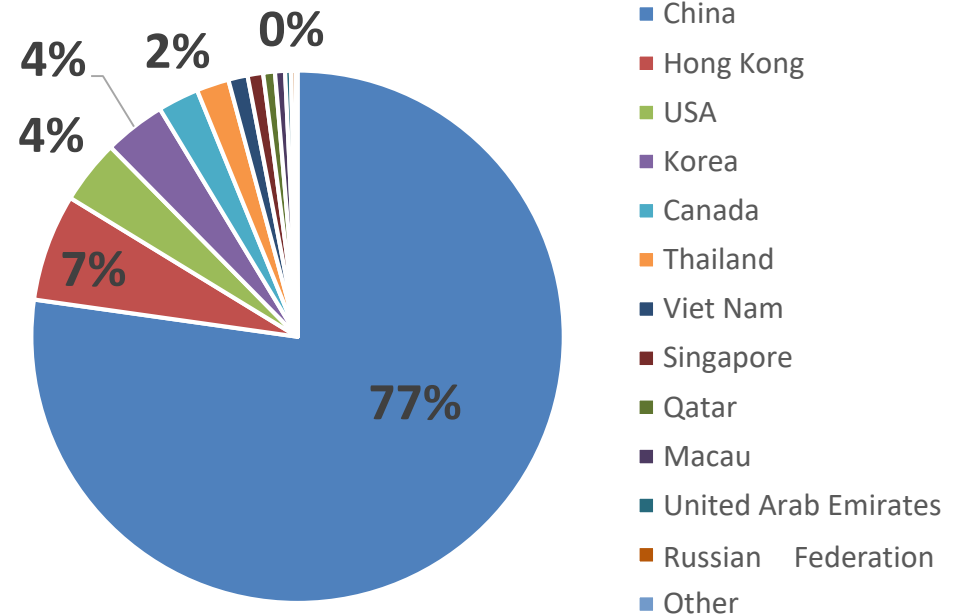
IV. Measures to implement Paragraph 7:
Commercial Transaction
&
Report of the monitoring of the PBF trade

IV-1. PBF Import & Export in 2018

Import: 6,230 t



Export: 416 t



A data collection system was established to require importers to make mandatory reporting for each import transaction when they import PBF from Korea since 2010, and from Mexico since 2011.

V. Measures to implement Paragraph 9: Data Collection

V-1. Collection and Compilation of Catch Data

Purse seine fishery:

- Every time of landing, purse seine associations compile sales slips of designated landing ports and send them to Japan Fisheries Information Service Center (JAFIC).

Artisanal fisheries, set nets and other local fisheries:

- Prefectural governments monitor and collect the catch information from regional fisheries, including artisanal fisheries, set nets and other small scale fisheries, at least every month. When more than 1 t of PBF is harvested, daily reporting is required.
- Compiled data is submitted to the JAFIC.

The data submitted to the JAFIC is monitored by JFA.

VI-2. Collection and Compilation of aquaculture data

- The JFA collects the data about PBF aquaculture, including size and number of cages, the number of fries to be input, the sources of fries, the date of input and the amount of final products.
- The number of fries put into aquaculture pond from purse seine fishery is monitored by stereo video cameras. Regarding fries from troll fishery, troll fishers directly sell them to aquaculture farmers, and sometimes brokers involved in the transaction. In any cases, the number of fries to be sold is reported.