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Peru's Annual Report No 1 – SPRFMO Area

Ministerio de la Producción & Instituto del Mar del Peru

**South Pacific Regional Fisheries Management Organisation
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Peru National Report N° 1

PERU

**REPORT ON THE FISHING ACTIVITIES OF THE
PERUVIAN FLEET IN THE AREA OF
APLICACION OF THE CONVENTION ON THE
CONSERVATION AND MANAGEMENT OF
HIGH SEAS FISHERY RESOURCES IN THE
SOUTH PACIFIC OCEAN,
PERIOD JANUARY 2016 – JULY 2017**

2017

SUMMARY

None of the 98 Peruvian vessels registered and authorized to fish within the SPRFMO Convention area participated in the jack mackerel (*Trachurus murphyi*) fishery in the Convention area during 2016 or the first part of 2017 and there are there are no jack mackerel fishing activities or jack mackerel catches to report for this period. A limited catch of 1122.31 t of chub mackerel (*Scomber japonicus*) was taken in the SPRFMO Convention area off Peru during a short 5-day period between 12 and 16 October 2016 by 5 Peruvian vessels with holding capacities between 450 and 600 m³ that were part of a large local industrial purse seine fleet participating in a typically more coastal chub mackerel fishery. The sizes of chub mackerel caught in the Convention area were between 22 and 32 cm (fork length) with modal size in 28 cm.

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1. DESCRIPTION OF THE FISHERY

1.1 Structure of the fleet and annual catches

The Peruvian fleet registered and authorized to fish within the area of application of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (SPRFMO Convention) is comprised of 98 fishing vessels, including 89 purse seiners with an average holding capacity of 505 m³, 4 trawlers with an average holding capacity of 3535 m³ and 5 multipurpose vessels (purse seine/trawler) with an average holding capacity of 1786 m³ (Table 1).

Table 1. Peruvian fleet registered and authorized to fish within the SPRFMO Convention area

Number of vessels	Types of fishing gear	Total holding capacity (m ³)	Average holding capacity (m ³)
89	Purse seine	44 976	505
4	Trawl	14 139	3 535
5	Purse seine/trawl	8 929	1 786

None of the 98 registered vessels were specifically authorized or set sail to participate in the jack mackerel (*Trachurus murphyi*) fishery in the SPRFMO Convention area during 2016 or the first part of 2017 and for this period there are no jack mackerel directed fishing activities and no jack mackerel catches to report (Table 2). Figure 1 shows the annual catches of jack mackerel by the Peruvian fleet in the SPRFMO Convention area since 2009. A maximum annual catch of 40 516 t was obtained in 2010 and no catches (0 t) have been obtained between 2015 and 2017.

Table 2. Peruvian fleet that operated in the jack mackerel fishery in the SPRFMO area during the period January 2016 - July 2017

Year	Number of vessels	Types of fishing gear	Total holding capacity (m ³)	Average holding capacity (m ³)	Jack mackerel catch (t)
2016	0	n/a	n/a	n/a	0
2017*	0	n/a	n/a	n/a	0

* January-July only

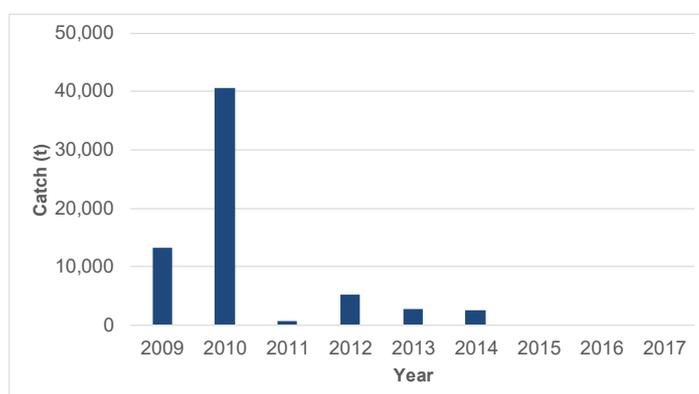


Figure 1. Annual Peruvian catches of jack mackerel in the SPRFMO Convention area, years 2009 to 2017 (to July).

It is noted that in this period there was also a limited catch of 1122.31 t of chub mackerel (*Scomber japonicus*) in the SPRFMO Convention area, which resulted from the temporary and inadvertent dislocation of 5 of the more than 100 local industrial purse seine vessels participating in a more coastal chub mackerel fishery typically taking place entirely within Peruvian jurisdictional waters. The vessels involved were timely notified and proper steps were taken by the Ministry of Production (PRODUCE) to ensure that further fishing activities in the Convention area were in line with applicable SPRFMO adopted conservation and management measures. Further information about these chub mackerel catches are provided in section 3 below.

2 CATCH, EFFORT AND CPUE IN THE JACK MACKEREL FISHERY

2.1 Catch trends

Figure 2 shows the monthly trend in catches of jack mackerel by the Peruvian fleet in the SPRFMO Convention area since 2012. As noted, no catches were made in 2015, 2016 and 2017.

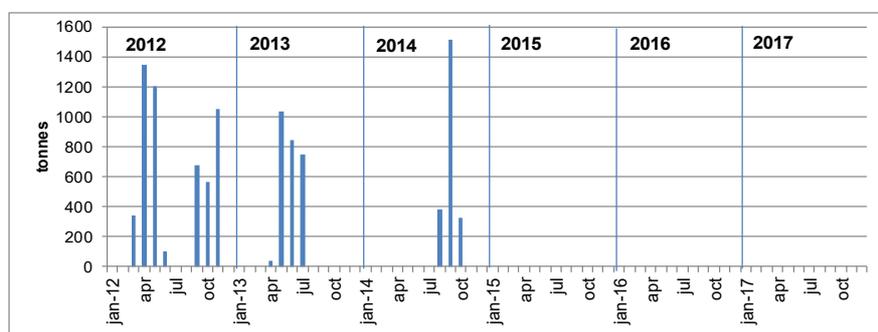


Figure 2. Jack mackerel monthly catches by the Peruvian fleet in the SPRFMO Convention area, 2012 – 2017

2.2 Fishing effort trends

Figure 3 shows the trend of the fishing effort directed to jack mackerel exerted by the Peruvian fleet in the SPRFMO Convention area since 2012. As noted, the number of vessels and holding capacity has been highly variable, with 6 vessels in 2012, 1 vessel in 2013, 5 vessels in 2014 and 0 vessels (no fishing effort exerted) in 2015, 2016 and 2017. Therefore, there are no cpue estimates available for the last three years.

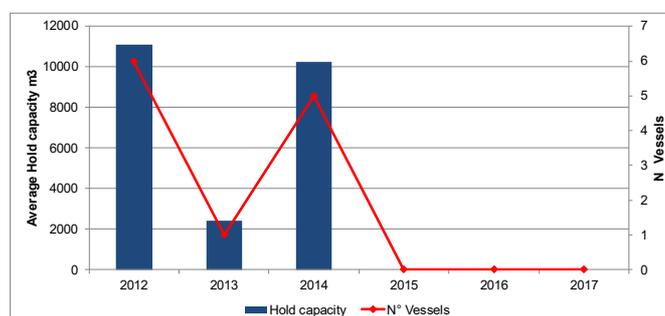


Figure 3. Total holding capacity and number of vessels in the Peruvian fleet that operated in the jack mackerel fishery in the SPRFMO area, by year 2012–2017

3 BIOLOGICAL INFORMATION

3.1 Chub mackerel catches during October 2016

The reported chub mackerel catch of 1122.31 t was taken during a short 5-day period between 12 and 16 October 2016 by 5 vessels with holding capacities between 450 and 600 m³ that were part of a large local industrial purse seine fleet participating in a typically more coastal chub mackerel fishery. A total of 14 purse seine hauls were made at between 200 and 220 miles from the coast in a general area between 07°50'S - 08°00'S and 84°00'W - 84°15'W in relatively warm water masses, with sea surface temperatures between 20° and 21°C (Figure 4). The main cpue estimated indices for this restricted area and time-frame are 80.2 t/haul and 224.5 t/trip. The records and samplings of these catches indicate that 100% of these catches were chub mackerel with sizes between 22 and 32 cm (fork length) and main mode in 28 cm.

There are indications that while following the main concentrations of chub mackerel between August and October 2016 the fleet gradually moved off-shore and this caused 5 vessels to inadvertently exit the Peruvian 200 miles. This general off-shore displacement of the main fishing areas of chub mackerel between August and October 2016 followed by an in-shore move in November is shown in Figure 5. There was no fishing for chub mackerel by the industrial fleet in December 2016 since the whole fleet switched gears and strategy to participate in the anchoveta (*Engraulis ringens*) fishery that opened in December.

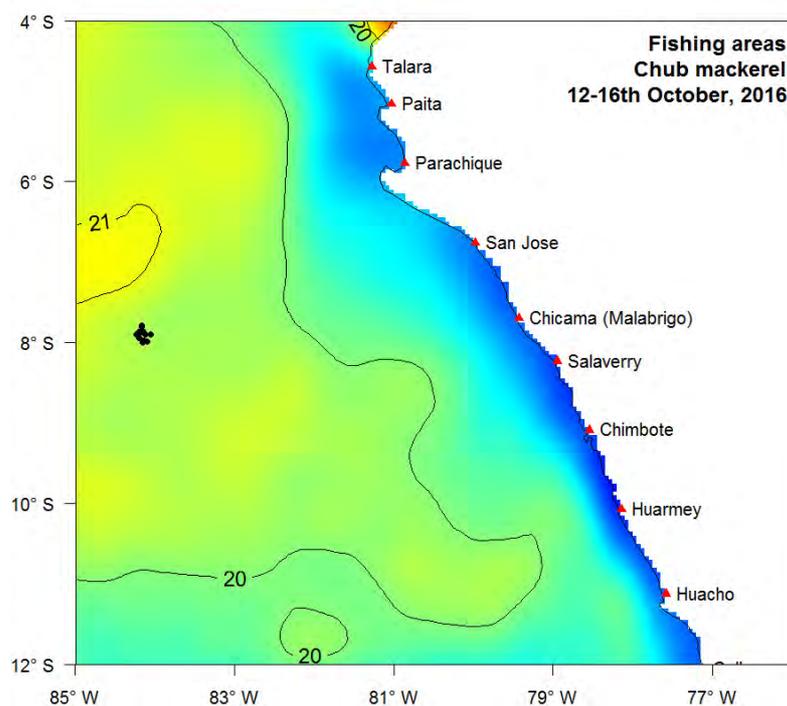


Figure 4. Fishing areas of chub mackerel in the SPRFMO Convention area during the period 12 – 16 October 2016 and observed sea surface temperature (°C)

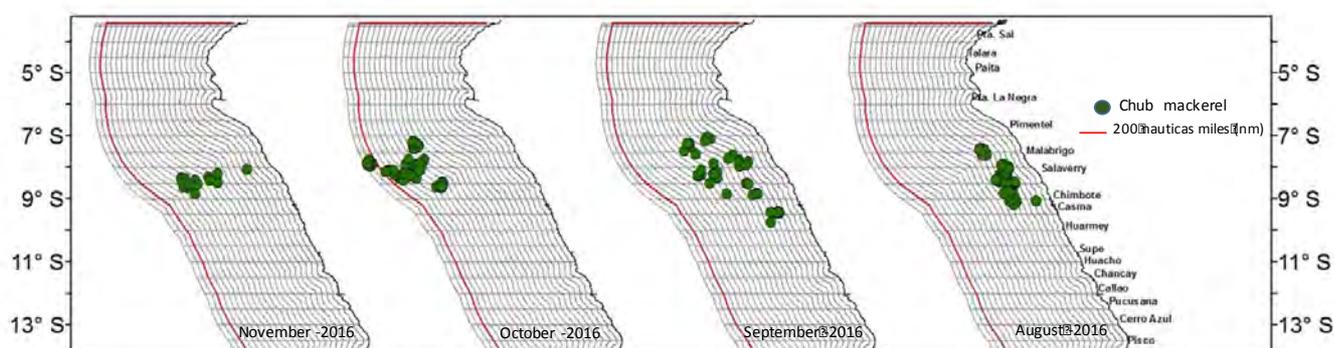


Figure 5. Distribution of the fishing areas of chub mackerel by the Peruvian industrial purse seine fleet, by month, August to November 2016

4 RESEARCH ACTIVITIES AND DATA COLLECTION (Observations onboard and sampling program)

The research activities in the SPRFMO Convention area are mostly based on the activities undertaken under the Onboard Observer Program, which aims at monitoring the fishing fleet and obtaining biological information from their catches and areas of operation. When operational, this programme has almost a full coverage of the Peruvian fishing fleet operating in the SPRFMO Convention area but no Peruvian fleet has been programmed to operate in the Convention area since 2015. Therefore, the Onboard Observer Program is on hold until regular fishing activities can resume. The monitoring of the fleet is set to provide reliable information on fishing effort, catch volumes, species composition of the catches, fishing areas, horizontal and vertical distribution of the target species, and sea surface temperature in the fishing area, in addition to the biological information through an onboard sampling programme.

The sampling program is aimed at obtaining biological information of the species caught, including total length, total weight, gonad weight and sexual maturity, and to also obtain samples of ovaries, otoliths and stomachs to undertake further studies of spawning activity, growth and feeding. This is done using a stratified two-stage sampling, where 10 individuals are taken for each range of sizes.

The program also provides for the observation and identification of seabirds, based on prior training of observers and the use of a species identification guide. These observations are carried on board, mainly during fishing trawls, and they are recorded in the form of seabird interactions with the jack mackerel's fishery in the high seas.