National report of Korea

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1. Jack mackerel fishery

Description of the fishery

Korean trawl fishery targeting for jack mackerel was commenced in 2003 for the scientific research survey by R/V Tamgu No. 1 and two commercial mid-water trawl vessels. Since then the Korean jack mackerel fishery has operated in this fishing ground until recent years. The numbers of fishery vessels were 2-3 vessels during 2004-2009 (Table 1).

Table 1. Number of vessels and size for jack mackerel fishery in the SPRFMO area

Years	Number of vessels	Gross registered Tonnage		
		2,000-2,999	3,000-3,999	4,000-4,999
2004	3	1	1	1
2005	2	1	1	-
2006	3	1	1	1
2007	3	1	1	1
2008	3	1	1	1
2009	2	-	1	1

Catch, effort and CPUE summary

In 2009, 2 Korean trawler were operated in the SPRFMO area and caught a total of 13,759 ton, which was increased compared to those of the previous year. Trends in annual jack mackerel catch from 2004 – 2009 are summarized in Table 2 and shown in Figure 1. Almost 95% of the total catches were jack mackerel in the SPRFMO area. Fishing season was March to August in 2009 in this area(33°S~47°S, 80°W~116°W). Geographical distributions of the CPUE for jack mackerel catch are shown in Figure 2.

Table 2. Catches and efforts for jack mackerel fishery in the SPRFMO area

Years	No. of fishing days	Catch(ton)	Catch per day(ton)
2004	205	7,438	36
2005	170	9,126	54
2006	232	10,474	45

2007	237	10,940	46
2008	249	12,600	51
2009	182	13,759	76

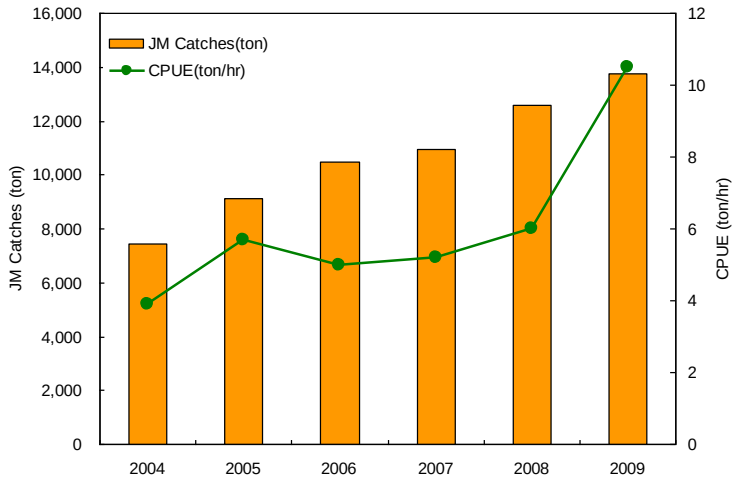

Figure 1. Trends in jack mackerel catch and catch per unit effort(ton/hr) of jack mackerel in the SPRFMO area from 2004 – 2009.

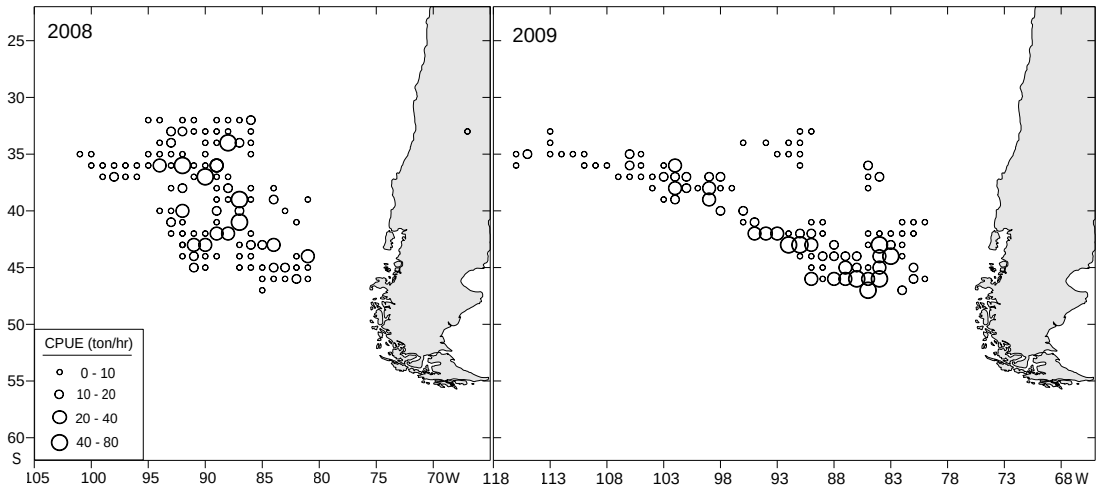

Figure 2. Distribution of Korean jack mackerel fishing ground in the SPRFMO area in 2008 and 2009.

2. Bottom fishery

Description of the fishery

Korean bottom trawl fisheries were operated in high seas by 1-2 vessels during last five years (Table 3). Since 2008, Korean trawler has no fishing activity in this area.

Table 3. Number of vessels and size for bottom fishery in the SPRFMO area

Years	Number of vessels	Gross registered Tonnage		
		600-699	700-799	800-899
2004	2	1	-	1
2005	-	-	-	-
2006	1	-	-	1
2007	1	-	-	1
2008	-	-	-	-
2009	-	-	-	-

Catch, effort and CPUE summary

Table 4 represents total annual catches and fishing effort (number of fishing days) for the Korean bottom trawl vessels during 2004-2009 in the SPRFMO area. The decrease in orange roughy catch over 2004 – 2009 is shown in Figure 3.

Table 4. Annual catches for bottom fishery in the SPRFMO area

Years	No. of fishing days	Catches (ton)	Orange roughy (ton)	Others
2004	51	143.8	137.9	5.9
2005	-	-	-	-
2006	32	83.1	77.2	5.9
2007	29	48.8	44.2	4.4
2008	-	-	-	-
2009	-	-	-	-

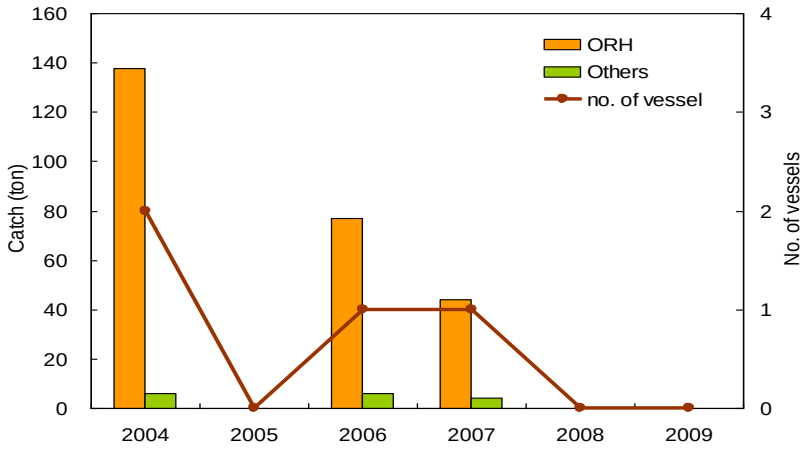

Figure 3. Trends in annual orange roughy catch by Korean bottom trawl vessels in the SPRFMO area from 2001 – 2009.

3. Fisheries data collection and research activities

Official catches by distant-water fishery is obtained from two sources of data reports. Korea Overseas Association (KOFA) collects total catches by gear type from Korean distant-water fishery industries, which are used as our official total catch. National Fisheries Research and Development Institute (NFRDI) collects logbook data from vessels. The logbook contains location, catches by species and effort data, etc. It is current domestic regulation that distant-water fishery vessels are obliged to report their catch statistics to NFRDI when they returns to home based port.

NFRDI introduces a new logbook in recent year for collection bycatch species data and VME encounters data.

Data collection by captain

Each commercial vessel of distant-water fisheries submits the "Catch Report and Biological Report (logbook)" which recorded data on vessel, fisheries and biological information by domestic regulation. The data provided by captain were input to the statistical DB system for Korean official catch.

Data collection by observer at sea

For the analysis of the biological characteristics for jack mackerel, fork length, body weight, sex and reproduction indices have been collected from the commercial vessels.

Biological sampling for mid-water trawl catch has been carried out by on-board observer to obtain size data and information on reproductive biology of jack mackerel in 2008. In 2009, scientific observer was not dispatched in this area.

4. Summary of observer program

Korea began to develop observer program for distant-water fisheries in 2002. The purpose of this program is to meet the requirements of relevant regional fisheries bodies and therefore the mission of trained observers are similar to those set out in the convention of the fisheries bodies. Two Korean vessels operated in the SPRFMO area in 2009 but scientific observer was not deployed on these trips.