

Review of Taiwan's SBT Fishery of 2003/2004

1. INTRODUCTION

Taiwan has traditionally been fishing for southern bluefin tuna (SBT) since 1970s. The SBT was caught partly by seasonal target fishery and partly by albacore/bigeye fisheries as a by-catch. Seasonal target fishery was conducted mainly by longliners equipped with super cold freezers, fishing in two seasons, i.e. one from June to September and the other from October to February of the following year, in the waters around 30°S-35°S. However, no year-round target fishing has yet been conducted. The annual catch in 2003 was preliminarily estimated to be 1,128 M.T.

2. OPERATIONAL CONSTRAINTS ON EFFORT

Regulatory Measures

Taiwan has become a member of the Extended Commission of CCSBT in 2002, and agreed to national catch limit of 1,140 M.T. Two groups of fishing vessels for seasonal target fishery and by-catch on SBT are differentiated and each of those authorized vessel is allocated with individual quota. Each vessel is required to register with the Taiwan Tuna Association either for target or by-catch fishery, and those vessels have to be reviewed and approved by the government before catching SBT. About 95% of the annual catch was allocated to the seasonal target fishery vessels, while the remaining 5% to the by-catch vessels in 2003.

In order to collect SBT catch information in a timely way and to manage the total SBT catch not exceed the catch limit, every vessel that catches SBT

has been required to weekly report it's catches of SBT in weight and fishing location to the fisheries authorities since 1996. This system has been refined in 2002 to obtain more accurate catch information including the length measurement of each fish caught. Taiwan has undertaken issuing of SBT Statistical Document to export of SBT from June 2000 to comply with the requirement of Trade Information Scheme (TIS). All vessels fishing for SBT have also been required to be equipped with Vessel Monitoring System (VMS) for transmitting the vessel location in near real time to the monitoring center since 2002. Fishing in spawning area of SBT suggested by Scientific Committee is prohibited and document of TIS will not be issued to any catch from this area to protect the spawning stock.

3. CATCH AND EFFORT

In the 2003 fishing season, catch limit of 1,140 tons was set, and the actual catch was 1,128 tons caught by 101 vessels including seasonal target and by-catch fishery. About 93% of the Taiwanese SBT catch was caught in the southern and central Indian Ocean, 7% was caught in the southern and western Indian Ocean extending to the eastern boundary of the Atlantic Ocean. There are 134 vessels approved as seasonal target or by-catch fishery in 2004.

4. HISTORICAL CATCH AND EFFORT

In early 1980s, annual catch of SBT was relatively small as less than 250 M.T. With continuously expanding of tuna longliners fleet, fishing grounds, increase in annual catches was prominent afterwards. Between 1989 and 1992, there was significant increase of SBT annual catch exceeding 1,100 M.T. of which drift net fishery accounted for about 1/4 of the catches. With the prohibition of drift net fishery on the high seas since 1993 in compliance with United Nations Gillnet Moratorium, the annual catch of SBT decreased

to a stable level fluctuating between 800 and 1,600 M.T. during the last decade (Table 1).

5. ANNUAL FLEET SIZE AND DISTRIBUTION

In 2003, 101 longline vessels were approved for catching SBT, of which, 92 operated in the Indian Ocean, while the remaining 9 operated in the Atlantic Ocean. Their fishing grounds were mainly in the waters of 20°S - 40°S, seasonally distributed in the southern and central Indian Ocean from June to September, and in the southern and western Indian Ocean extending to the eastern boundary of the Atlantic Ocean from October to February of the following year.

6. HISTORICAL FLEET SIZE AND DISTRIBUTION

SBT was caught only by longline fishery after 1992 in the three oceans, but mainly in the Indian Ocean. According to the weekly reports from the fishing vessels and trader's information, about 140 Taiwanese deep sea longliners landed SBT each year during 1998-2002, and most of them operated in the Indian Ocean.

7. FISHERIES MONITORING

Intensive efforts have been continuously exerted for better understanding and monitoring the fishery through the following measures:

1. The weekly report for SBT catch is required through the Taiwan Tuna Association to submit to the Fishery Agency. Provision of daily records, including catch, fishing location and discards in the weekly report has been required for applying SBT statistical document since 2002.
2. From April 2002, it is mandatory for the vessels that catch SBT to be equipped

with VMS in order to monitor location of the vessels.

3. The experimental scientific observer program has been launched since 2003.
4. TIS program has been implemented to collect more updated and detailed catch information. While applying for TIS document, the applicant is required to submit the transshipment document issued by the cargo carriers. After unloading catch in Japan, the applicant is required to submit to Fisheries Agency the unloading documents issued by the Japanese Customs for further verification of catch statistics.

8. OTHER FACTORS

Markets

Currently, SBT caught by Taiwanese vessels is mainly exported to Japan for its sashimi market. Due to lack of sufficient super cold storage and low domestic consumption, the domestic SBT market in Taiwan is still in a low level in the year of 2003.

Table 1. Annual SBT catches by Taiwanese deep-sea longline and drift net fisheries during 1971-2003. (Data of 2003 is preliminary.)

Unit: metric ton

Year	Deep Sea Longline	Drift Net	Sum
1971	30		30
1972	70		70
1973	90		90
1974	100		100
1975	15		15
1976	15		15
1977	5		5
1978	80		80
1979	53		53
1980	64		64
1981	92		92
1982	171	11	182
1983	149	12	161
1984	244	0	244
1985	174	67	241
1986	433	81	514
1987	623	87	710
1988	622	234	856
1989	1,076	319	1,395
1990	872	305	1,177
1991	1,353	107	1,460
1992	1,219	3	1,222
1993	958		958
1994	1,020		1,020
1995	1,431		1,431
1996	1,467		1,467
1997	872		872
1998	1,446		1,446
1999	1,513		1,513
2000	1,448		1,448
2001	1,580		1,580
2002	1,137		1,137
2003*	1,128		1,128