Review of Taiwan's SBT Fishery of 2002/2003

1. INTRODUCTION

Taiwan has traditionally been fishing for southern bluefin tuna (SBT) since 1970s. The SBT was caught partly by seasonal directed fishery and partly by albacore/bigeye fisheries as a by-catch. Seasonal directed 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 next year, in the waters around 35°S. However, no year-round directed fishing has yet been exerted. The annual catch in 2002 was preliminarily estimated to be 1,137 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. About 71% of the annual catch was allocated to the seasonal directed fishery vessels while 29% to the by-catch vessels. Each vessel is required to register with the tuna association either for directed or by-catch fishery, and subsequently approved by the government before catching SBT.

In order to collect SBT catch information promptly and to manage the total SBT catch within the voluntary catch limit of SBT, every vessel that has caught SBT was required to report weekly it's catches of SBT in weight and fishing location (Weekly Report) 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 TIS (Trade Information Scheme). All vessels fishing for SBT are also required to be equipped with VMS (Vessel Monitoring System) for providing the vessel location to the monitoring center since 2002. Fishing in spawning area of SBT is prohibited and document of TIS will not be issued to any catch from such area to protect the spawning stock.

3. CATCH AND EFFORT

The annual catch in 2002 was preliminarily estimated to be 1,137 M.T. by about 60 vessels including seasonal target and by-catch fishery. There are 152 vessels registered as seasonal directed and by-catch fishery in 2003.

4. HISTORICAL CATCH AND EFFORT

In the early of 1980s, annual catches of SBT were relatively small, less than 250 M.T. With continuously expanding fleet size of tuna longliners, development of deep sea longline fishery and expansion of fishing grounds, increase in annual catches was prominent. Between 1989 and 1992, greater increase of SBT catch was observed, where drift net fishery accounted for about 1/4 of the catches. With the prohibition of drift net fishery since 1993 in compliance with UNGA (United Nations Gillnet Agreement) resolution, the catch of SBT returned 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 2002, there were about 60 longline vessels catching SBT. Their fishing grounds were mainly in the waters of 20°S - 40°S, seasonally distributed in the southern and central Indian Ocean during June to September, and in the southern and western Indian Ocean extending to the eastern limit of the Atlantic Ocean during 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, with more concentration in the Indian Ocean. According to the weekly reports and trader's information, about 140 deep sea longliners landed SBT during 1998-2002, and most of them were operating in the Indian Ocean.

7. FISHERIES MONITORING

Intensive efforts have been exerted for better understanding and monitoring the fishery, for example, the implementation of TIS to collect more updated and detailed catch information. Provision of daily records, including catch, position and discards, in the updated Weekly Report has been required for obtaining the SBT statistical document since 2002. In addition, from April 2002, it is mandatory for the vessels that catch SBT to be equipped with VMS in order to monitor activities of the vessels.

8. OTHER FACTORS

Import/Export Statistics

The trade Information Scheme that records all exported Taiwanese fish has been implemented. This program provides a complete record of SBT exports that can be compared with the Japanese Import Statistics.

Markets

SBT is mainly exported to Japan for its sashimi market. In order to promote SBT in domestic market, the Fisheries Agency is trying to encourage the Taiwan Tuna Association arranging to ship SBT caught by its member back to Taiwan. Due to being lack of sufficient super cold storage and low domestic consumption, the quantity is still in low level in the year of 2002. However, the Fisheries Agency and tuna industries are reviewing all elements required for its domestic market, and will continue the promotion of domestic consumption.

Table 1. Annual SBT catches by Taiwanese deep-sea longline and drift net fisheries during 1971-2002. (Data of 2002 is preliminary.)

Unit: metric tone

| Year | Deep Sea Longline | Drift Net | Total |
|-------|-------------------|-----------|-------|
| 1971 | 100 | | 100 |
| 1972 | 17 | | 17 |
| 1973 | 12 | | 12 |
| 1974 | 1 | | 1 |
| 1975 | 9 | | 9 |
| 1976 | 2 | | 2 |
| 1977 | 1 | | 1 |
| 1978 | 20 | | 20 |
| 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 |