

**Consideration of decision rules based on the feedback
from Korean tuna industry**

Dae-Yeon Moon, Jeong-Rack Koh, and Soon-Song Kim
National Fisheries Research and Development Institute
Republic of Korea

Introduction

To manage southern bluefin tuna (SBT) by the agreed scientific scheme among member countries, CCSBT has recognized a need to develop decision rules to calculate TACs upon agreement by all member countries. This idea was dated back to the year of 2000 when the Management Strategy Workshop was held to discuss on the future SBT management measures. Since that time, a series of discussions have been placed in the form of Management Procedure Workshops and Stock Assessment Group meetings. Members agreed that the development of management procedure would be completed in 2004 after candidate management procedures have been selected in the 3rd Management Procedure Workshop to be held in April in Busan, Korea.

As a member country to CCSBT since 2001, Korea was allocated a fishing quota of 1,140mt and became formally responsible for contributing to the management of SBT by implementing decisions adopted by the CCSBT. The development of management procedure is one of the important tasks to be conducted by member countries. However, it is unfortunate that we were not able to develop our own management procedure by this time. Therefore, in this paper we simply present the concept of Korea's decision rule based on the feedback from Korean tuna industry, which are to be considered in the selection of candidate management procedures.

Feedback from Korean tuna industry on future TAC changes

It was common understanding that in developing management procedures, feedback from industry and/or managers of each country was essential. To hear the views of each member country, Dr. Hilborn and the executive secretary of CCSBT made consultations with member industry on the development of a CCSBT management procedure. During the consultation on July 2003, Korean tuna industry expressed their thoughts on future TAC changes in relation to stock variation.

The major point raised by the industry at the consultation was the stability of SBT catch, noting that they wish to remain the constant level of catch with little annual changes. This may be related to the annual plan of fishing operation by SBT fishing

fleet. Currently the number of registered vessels to fish for SBT is 16 and the number of actual fishing vessels is subject to the size of annual TAC agreed in the annual meeting of the commission. They were concerned about the future decrease in the catch quota, but they were flexible to some extent with the decrease in TAC in the case SBT stock decreases. They desired that at the initial stage of TAC implementation based on the accepted management procedure a certain period of stable harvest should be allowed.

Another important point of discussion was the economy of their fishery that is the main purpose of their fishing activities. In the case the SBT resources shows an increasing trend, their attitude is somewhat conservative and do not wish to increase the TAC. They expressed concern that increases in catch could result in lower prices because of oversupply of SBT. Since most of the Korean SBT catch are destined to a single Japanese market, industries are very sensitive to the market price of SBT. Therefore, Korean industry insisted that economic factor reflecting industry's sustainability also should be considered in the development of management procedure.

Factors to be considered on the development of management procedures

It is our view that the accepted management procedures should meet both the conservation and optimum utilization objectives of the Convention and that to reflect Korean industry's feedback on the development of management procedure, the following factors should be considered.

First, the best option for our industry is to maintain the current TAC level. However, it was noted from initial trial of management procedure that under current catches (i.e. 16,000mt) the SBT stock is unlikely to rebuild and that short-term abundance declines are evident. Therefore, under the current assumptions and scenarios this option seems not be plausible.

Second, as addressed in previous meetings, to take into account social and economic considerations the management procedures are to foster industrial stability by minimising TAC variation and to seek to achieve relatively small changes in effort levels from year to year. In the case of Korean SBT longline industry, less frequent TAC changes would be desirable. For example, every 3 or 5 year interval would be better than annual update policy, although less frequent changes require larger changes in TAC. To make smoother changes in TAC level, reconsideration of target year of the management objective, from 2020 to 2030 or 2040, would be one possible solution.

Third, the maximum changes in TAC i.e. 3,000mt, should be set so that our industry receives less impact by the TAC changes, by following a general principle that under high productivity scenarios, TAC increases, while TAC decreases in low productivity

scenarios.

Last point to consider is to set the minimum level of catch quota for each member country. It is based on the concept that to make our SBT fishery operational, the catch quota needs to be set at least above the minimum level under which the industry can not be sustainable. The minimum level may vary by type of fishery and by member country.