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PROPOSAL A

QUOTA ALLOCATION SYSTEM FOR INDIAN OCEAN TUNA FISHERIES

PROPOSED BY: INDONESIA

Background

The IOTC Resolution 10/01, which was adopted in 2010, requires the development of quota allocation system or any other relevant measure for the sound management of main targeted species falling under the IOTC competence, such as Bigeye, Yellowfin, and Albacore stocks. To meet such requirement, the IOTC Technical Committee has invited proposal and held meeting to discuss the quota allocation system.

This proposal is the revised version of the late proposal submitted during the 2nd Session of the Technical Committee on Allocation Criteria (TCACO2) in Muscat – Oman on 18-20 February 2013. In this proposal in the development of the quota allocation system, Indonesia maintain the importance of historical engagement of the country in fishing the resources, the legitimate and aspiration of the coastal country and the socio-economic importance of fisheries activity for the country.

In this revised version, Indonesia also continues to acknowledge the importance of allocating certain percentage of the resource as a reserve stock or for allocation for the new entrance and for the compliance to the IOTC resolution.

The Indian Ocean Tuna Commission

Recognizing – that based on past experience in the fishery, the potential production from the resource can be negatively impacted by excessive fishing effort;

Recognizing – that during the 18th IOTC scientific meeting, the committee recommended the Bigeye, Yellowfin, and Albacore catches should not exceed the MSY levels which have been estimated at 132,000 tones for Bigeye, 421,000 ton for Yellowfin and 47,600 for Albacore;

Recognizing – that IOTC Resolution 10/01 requires the development of quota allocation system for Yellowfin and Bigeye tuna stocks;

Taking into account – the soverign rights of coastal states for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, within their respective exclusive zones in accordance with Article 56 (1) of the United Nation Convention on the Law of the Sea, Montego Bay of 10 December 1982;

Taking into account – the available scientific information and advice, in particular the IOTC Scientific Committee conclusions whereby the Yellowfin stocks may have been over exploited (Catch in 2014 has reached 430,327 ton, whereas MSY is estimated 421,000 ton);

Acknowledging – that the implementation of TAC without a quota allocation system would result in an inequitable distribution of the catches and fishing opportunities among the CPSs and non CPCs;

Noting – the importance of applying the precautionary approach for the management of the tropical tuna and swordfish stocks;

Noting – the 13th Scientific Committee recommendation to develop a Compliance Monitoring Scheme;

Adopts, in accordance with the provision of Article IX, paragraph 1 of the Agreement establishing the IOTC, the proposed quota allocation system is as follows.

Basic Principle and Consideration

1. Sustainable Fisheries – the development and implementation of quota allocation system should ensure the sustainability of fish stock. For that matter, the best available scientific data and method of analysis should be used to determine the MSY and TAC. A portion of the stock should be allocated to reserve stock or for the new entrance The sum of all countries quota should not exceed the TAC.
2. Distribution of Benefits – the utilization of the resources should be distributed among members that consider historical engagement, geographic location/proximity to the resources, the fisherman livelihood and the socio-economic level of development of the country
3. Membership and Compliance – the quota allocated for each country should be given to the member country based on their membership statute and their level of compliance to the IOTC resolutions.

Proposed Main Criteria for Allocation

There are seven main criteria proposed for quota allocation for each country, namely:

(1) Catch history
(2) Dependence of fisheries sector to the national economy
(3) Human Development Index
(4) Coastal state of Indian Ocean
(5) Bio-ecological Significance of the waters within the national jurisdiction of the country (spawning area, nursery ground and strategic migration path)

(6) IOTC membership
(7) Compliance with IOTC rule and regulation

Step by Step Allocation

1. Total Allowable Catch (TAC)
   - TAC is determined based on the best available data and method by the scientific panel of IOTC
   - TAC is allocated for member country as well as for new entrance.
   - 2.5% of the TAC will be allocated to stock reservation or for new entrance as a starting percentage and will be increase gradually up to 10%.

2. Quota Allocation for each country (QA_i) is allocated based on the following simple formula:

$$QA_i = Ave\_Catch_i(W_1 + W_2 + W_3 + W_4)(CF_1 + CF_2)$$

where

Ave_Catch_i is average catch (in tons) of the country reported to the IOTC for the last five years,

W_1 is dependence of fisheries sector to the national economy (high = 0.3, medium = 0.25, and low = 0.2),

W_2 is Human Development Index, HDI (underdeveloped=0.20, developing=0.15, develop=0.10),

W_3 is Coastal State of the Indian Ocean (yes = 0.25, no=0.15)

W_4 is Bio-ecological Significances (spawning ground, nursery ground, strategic migration path) within the country's ZEE (available = 0.25, none = 0.15)

CF_1 is IOTC membership (yes = 0.90, no = 0.85)

CF_2 is degree of compliance (full = 0.1, partial = 0.05, no = 0.0).

Table 1. Proposed weight score for each variable

Variable	Criteria	Score		
W1	**Fisheries dependency**	High: **0.3**	Medium: **0.25**	Low: **0.2**
W2	**HDI**	Underdeveloping: **0.2**	Developing: **0.15**	Develop: **0.10**
W3	**Coastal state**	Yes: **0.25**		No: **0.15**
W4	**Bio-ecological Significancy**	Yes: **0.25**		None: **0.15**
CF1	**Membership**	Yes: **0.90**		No: **0.85**
CF2	**Compliance**	Full: **0.1**	Partial: **0.05**	Not: **0.0**

3. Adjusted Quota to MSY (Q_{i_adjust})

To ensure the total allocation for all the countries do not exceed the TAC, then the QA_i must be adjusted, as follows:

$$QA_{i\_adjust} = \frac{QA_i}{(QA_1 + QA_2 + QA_3 + \cdots + QA_n)} \times TAC_{97.5}$$

where $TAC_{97.5}$ is the total allowable catch after 2.5% deduction for the new entrance or to stock reservation.