Proposal to Re-Asses Indonesia's Annual Catch Quota

Submitted by Indonesia

to

20th Annual meeting of the Commission, incorporating the Extended Commission
Adelaide Australia, October 2013

Ministry of Marine Affairs and Fisheries
Republic of Indonesia
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A. Introduction

1. Indonesia has a long experience in harvesting of southern bluefin tuna (SBT). This is reflected by historical annual catch of Indonesia included in the Global Southern Bluefin Tuna Catch by Flag, published by CCSBT, as shown in Table 1 below:

Tabel 1 : Annual Catch Estimates for Indonesia

No	Year	Catch Estimates (tonnes)	No	Year	Catch Estimates (tonnes)
1	1976	12	19	1994	904
2	1977	4	20	1995	829
3	1978	6	21	1996	1614
4	1979	5	22	1997	2210
5	1980	5	23	1998	1324
6	1981	1	24	1999	2504
7	1982	2	25	2000	1203
8	1983	5	26	2001	1632
9	1984	11	27	2002	1701
10	1985	3	28	2003	565
11	1986	7	29	2004	633
12	1987	14	30	2005	1726
13	1988	180	31	2006	598
14	1989	568	32	2007	1077
15	1990	517	33	2008	926
16	1991	759	34	2009	641
17	1992	1232	35	2010	471
18	1993	1370	36	2011	673

In Indonesian tuna fisheries, SBT is commonly caught by the longline fleet consisting of two (2) categories such as : (a) large-scale longliners, where SBT is caught as a target species and (b) small-scale longliners (artisanal vessels), where SBT is considered as bycatch or un-intended catch.

2. In fact, after implementing the catch quota system since 2008, Indonesia has had difficulties controlling catch limits based on a reserved quota system, although it has made various efforts in this regards, such as, distribution of catch quotas by association, issuing an early warning letter to the associations if the catch estimates reach 70% of the reserved quota, and implementation of CDS validation. However, it is considered that these efforts can not limit a total catch particularly by artisanal vessel. Therefore, Indonesia wishes to propose establishing cooperation to conduct a re-assessment of Indonesia annual catch quota, through a joint-study between Indonesia and the CCSBT which is aimed to improve and analyse comprehensively information Indonesian SBT fisheries, because the current annual catch quota is considered too small. The proposed joint-study is also very important in supporting an attainment CCSBT management objective as referred to in article 3 of the convention for the conservation of southern Bulefin Tuna, namely the objective of this Convention is to ensure, through appropriate

management, the conservation and optimum utilization of southern bluefin tuna. This joint-study is proposed in accordance with the following consideration.

3. Indonesian tuna fisheries has a very important role in socio-economic context. Tuna industries have made a tangible contribution both to national income as well as to employment opportunities. For this reason, Indonesia is greatly concern about undertaking sustainable management of tuna fisheries. In this regards, Indonesia has established a Research Institute for Tuna Fisheries in Benoa, Bali (Regulation of the Minister of Marine Affairs and Fisheries, Republic of Indonesia No. 27 of 2010).

B. Objectives of Joint-Assessment

4. The objective of Joint-Assessment inter alia is to:
   a. Analyze the state of Indonesian SBT fisheries comprehensively to explore the possibility of Indonesia having more realistic SBT annual catch quota as the current catch quota is considered too low, and
   b. Protect the livelihood of existing artisanal fishers who are harvesting SBT as bycatch or un-intended catch.

C. Tuna Fleet Structure

5. The Indonesia fishing fleet which is harvesting SBT generally based at Benoa Port, Bali or at the Oceanic Fishing Port Nizam Zachman, Jakarta. The Fishing fleet based in Bali is generally a member of the Association of Indonesian Tuna Longline (ATLI) Bali or Integrated Capture Fisheries Association (ASPERTADU), while the other fleet based in Jakarta is generally members of the Association of Tuna Indonesian (ASTUIN), although some of ASTUIN members are also based at Benoa Port, Bali.

a. Fleet structure base in Bali

6. Description of the fishing fleet by vessel size and gear type based in Benoa Port, Bali is presented in Table 3 below:

Table3 : Number of Vessel at Benoa Port Bali in 2012, by vessel size and gear type

No	Fishing Gear	Vessel Size					Total
		≤ 5	6-30	31-60	61-100	>100	
1	Longline	**1**	**359**	**134**	**167**	**102**	**763**
2	Squid Jigging	0	0	5	27	63	95
3	Handline	0	37	0	1	0	38
4	Other Handline	0	8	0	0	0	8
5	Gillnet	0	5	18	2	10	35
6	Purse Seine	0	14	5	12	9	40
7	Bouke Ami	0	7	7	1	1	16
8	Light Boat	0	48	0	0	0	48
9	Fish Net	0	1	0	3	2	6
10	Huhate	0	0	1	0	0	1
11	Carrier Vessel	2	35	11	34	71	153
	Total	3	514	181	247	258	1203

Source : Annual Report of Surveillance Unit at Benoa Port, 2012.

7. From the above table, it can be seen that the number of longliners which are potentially fishing for SBT is 763 vessels. In tems of fishing permits, there are 403 vessels permits issued by the central government and the other 360 artisanal vessels permits (30 GT below) are issued by Bali province government. The fishing fleet which is 30 GT or smaller not yet included in the CCSBT List of Vessels Authorized to Fish for SBT. This fleet is mostly fishing in coastal waters (territorial) and IEEZ targetting mainly yellowfin tuna and bigeye tuna, but SBT is also caught in ~~a~~ small amount.

b. Fleet Structure Base in Jakarta

8. The Longliner fishing vessels based in Jakarta are generally members of ASTUIN consisting of 2 (two) categories such as large-scale and artisanal vessels. Large-scale fishing vessels are fishing particularly in the IEEZ and in the high seas. This fleet targeting SBT in their fishing operations. Therefore, ASTUIN has allocated SBT annual catch quota by company basis, so that, like other members, we may be able to carried out a catch control mechanism appropriatelly. The Number of large-scale longliner is 8 (eight) vessels. In addition, the number of small-scale longliners where SBT is considered caught as an un-intended bycatch is 52 vessels

D. Distribution of Catch

9. Annual catch estimates for the longliner fleet by species landed at Benoa Port, Bali for the past 3 years are persented in Table 4 below:

Table 4 : Catch Estimates (tonnes) by Longliners at Benoa Port, Bali

Code	Name	Scientific Name	2010	%	2011	%	2012	**%**
BET	*Bigeye tuna*	*Thunnus obesus*	2167.62	23.85	2503.81	39.58	2719.15	41.17
YFT	*Yellowfin tuna*	*Thunnus albacares*	5372.33	59.11	3006.25	47.52	2049.63	31.03
SBT	*Southern bluefin tuna*	*Thunnus maccoyii*	566.02	6.22	432.37	6.83	613.96	9.30
ALB	*Albacore*	*Thunnus alalunga*	983.14	10.82	384.33	6.07	1221.70	18.50
Total			9089.11	100.00	6326.76	100	6.604.44	100

Source : Reserach Institute for Tuna Fisheries, Bali (Enumerator Report, 2010, 2011,2012)

10. From the above table, it can be seen that the catch estimates of SBT both in weigth and percentage (%) are relatively stable each year such as in 2010 (6.22%), in 2011 (6.83%) and in 2012 (9.3%) of total catch. This may be evidence that SBT caught by tuna vessels based at Benoa Port, Bali could be considered as bycatch or un-intended catch.

E. CCSBT Statistical Area of Catch

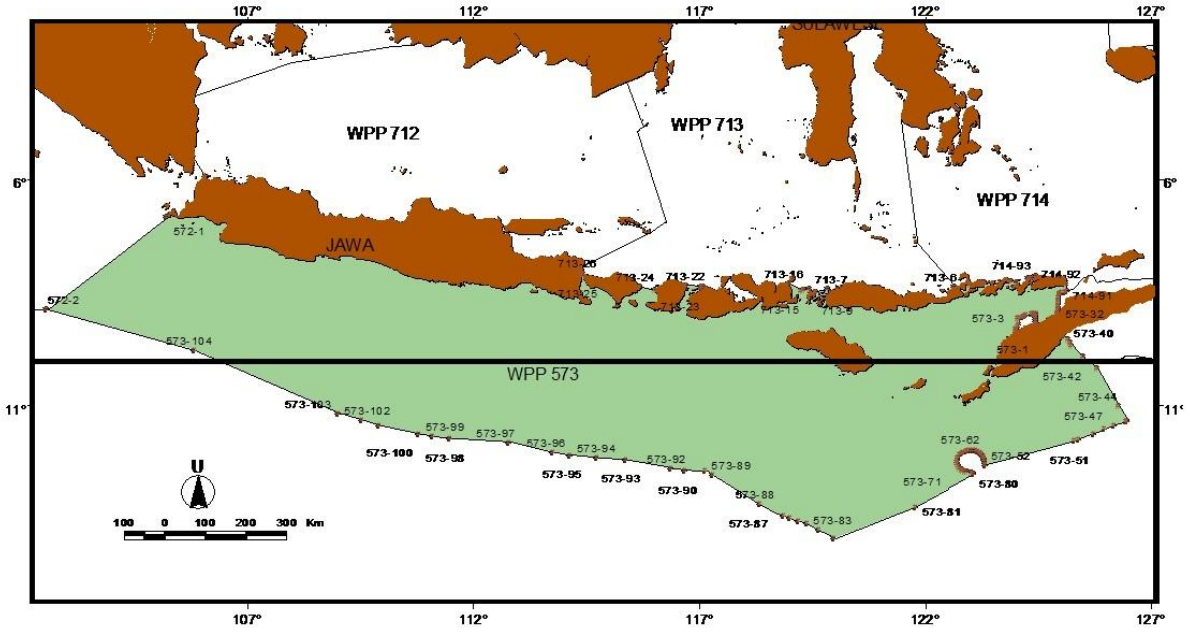
11. In accordance with the CCSBT Southern Bluefin Tuna Statistical Document Program, there are 15 (fifteen) SBT statistical areas, and the coordinate of each area are shown in table 5 below.

Table 5 : Coodinate of CCSBT Statistical Areas

Area of Catch	Altitude	Latitude
1	10 S – 20 S	100 E - 130 E
2	20 S – 35 S	80 E – 120 E
3	35 S – 40 S	120 E – 140 E
4	30 S – 40 S	140 E – 160 E
5	30 S – 40 S	170 E - 170 W
6	40 S - 60 S	160 E – 170 W
7	35 S – 60 S	120 E – 160 E
8	35 S – 60 S	60 E – 120 E
9	35 S – 60 S	40 W – 60 E
10	35 S – 60 S	70 W – 40 W
11	Not Applicable	Not Applicable
12	Not Applicable	Not Applicable
13	Not Applicable	Not Applicable
14	20 S – 35 S	20 E – 80 E
15	20 S – 35 S	40 W – 20 E

12. Under the Minister of Marine Affairs and Fisheries Regulation No. Per.01/Men/2009 on Indonesia Fisheries Management Zone (IFMZ), CCSBT statistical area number 1 is, in fact, a part of IFMZ-573 (see illustration map below).

Gambar 1 : Illustration map of IFMZ-573 and CCSBT Ststistical Area No.1



This area is a prime fishing ground for the Indonesian tuna fishing fleet including artisanal vessels, with the target species being yellowfin tuna and bigeye tuna.

13. Based on catch data taken from Catch Tagging Form (CTF), it is understood that the distribution of the Indonesia fishing fleet operating in the CCSBT Statistical Area of Catch is as shown in Table 6 below:

Tabel 6 : Number of Vessels (unit) and Catch (kg) by CDS basis
In the CCSBT Statistical Area

CCSBT Statistical Area	2010		2011		2012		2013	
	Vessel	Catch	Vessel	Catch	Vessel	Catch	Vessel	Catch
1	180	529538	169	615756	140	661837	86	556886
2	5	90094	15	30593	4	217922	1	17441
3								
5								
6								
7								
8			5	175418	6	10106	2	8688
9	1	15923	1	16741	1	5698	2	4263
10								
11								
12								
13								
14			1	3889				
15								
Total	186	635555	191	842397	151	895563	91	587279

Note:
1. *Catch based on CTF multiplied with conversion factor (1,15)*
2. *Year 2012 and 2013 is temporary figure*
3. *Year 2013, Catch as of May.*

14. Vessel numbers and total catch estimates in percent (%) by CCSBT statistical area, are presented in the table 7 below:

Tabel 7 : Vessel number and catch estimates (%)
By CCSBT Statistical Area

Year	CCSBT Statistical Area	Percentage (%)	
		Vessel Number	Catch
2010	1	96,78	83,54
	2	2,69	13,99
	9	0,54	2,47
2011	1	88,49	73,10
	2	7,86	3,63
	8	2,62	20,82
	9	0,53	1,99
	14	0,53	0,46
2012	1	92,27	73,90
	2	2,65	24,33
	8	3,97	1,13
	9	0,66	0,64
2013	1	94,51	94,82
	2	1,10	2,97
	8	2,20	1,48
	9	2,20	0,73

Table 7 above indicates that most of the Indonesian fleet are fishing within IFMZ-573 (territorial and IEEZ beyond *CCSBT statistical area* number 1) or in a part of *CCSBT statistical area* number 1, as consequently most of the catch is harvested from this prime fishing area.

F. Catch Quota Allocation

15. As soon as the catch quota system was adopted in 2008, Indonesia put in place a follow-up measures to allocate SBT catch quota by association basis. There were two (2) associations dealing with SBT fisheries at the time such as ATLI Bali and ASTUIN. Under an agreement made in Surabaya on 4-5 February 2008, each association was allocated 50% of the Indonesia annual catch quota or 375 ton in 2008. The agreement is still considered valid today, because it has not been modified yet. In 2010, several members of ATLI Bali established a new association namely Integrated Capture Fisheries Association (ASPERTADU).

16. A comparison between the reserved annual catch quota and Indonesia annual catch estimates (2008-2013), are presented in Table 8 below:

Tabel 8 : A comparison between reserved catch and catch estimates

Year	2008	2009	2010	2011	2012	2013
Initial National Quota (kgs)	750000	750000	651000	651000	685000	709000
Association Quota (kgs)						
ATLI	375000	375000	325500	325500	342500	354500
ASTUIN	375000	375000	325500	325500	342500	354500
ASPERTADU						
Catch Estimates			635555	842397	895563	587279
ATLI			490648	617022	638949	534544
ASTUIN			144907	225375	235091	30392
ASPERTADU					21522	22342

Note:
1. *Conversion Factor 1,15*
2. *Data in year 2012 and 2013, is temporary data.*

17. The estimation of the Indonesia's conversion factor is proposed 1,05 which is based on the average weight of discarded of body parts of SBT landed at Benoa Port, Bali. Based on observers' records (at port and on-board), weight estimates of gut, gonads, gills and fins removed for the GG type of product are presented in Table 9 below:

Table 9 : Weight estimates of discard for GG type of product

No	Weight of SBT (kg) /Individual	Weight Estimates (kg) gut, gonad, gill and fin	Remarks
1	< 60	<4	Average 5%
2	60-85	4-5	
3	85-120	5-7	

Source : Observer Report, 2012

18. Observers also recorded, the average weight of SBT unloaded at Benoa Port, Bali ranges 60-85 kg /individual, so that to estimate the whole weight of SBT that were landed at the Benoa Port, Bali a conversion factor 1.05 is appropriate. CCSBT Secretariat requested that Indonesia present a paper on this topic to the CCSBT scientific meeting. In case conversion factor presented by Indonesia is acceptable to the members, the whole weight of Indonesia's annual catch estimates will be re-calculated in due course.

19. From the data in Table 8 above, it can be seen that the whole catch of ATLI Bali members exceeded the reserved quota (over-catch) each year, while ASTUIN tended to under catch the reserved quota and the balance of the quota was subsequently transferred to ASPERTADU and ATLI Bali.

20. For this year, it is indicated that the whole weight of Indonesia's catch estimates as of June 2013 have reached as much as 587279 Kgs . This means that the balance of total allowable catch against the reserved annual quota is as much as 121721 Kgs. However based on existing historical catch, for the September-December period each year, Indoneisa catches tend to increase during this time. In this case, a contribution of artisanal vessels should not be ignored. This situation creates a dilemma for tuna fisheries in Indonesia, which is very difficult to settle. The issue is, once the balance of catch quota is limited, but fishing season is begun, as well as for artisanal vessels. Under this condition, we believe that Indonesia total catch estimates in 2013 will also exceed the reserved catch quota.

21. With regards to Indonesia's overcatches in the past, DGCF has conducted a series of meetings involving concerned tuna stakeholder such as ATLI Bali, ASTUIN, ASPERTADU and the research unit. The meeting made the following conclusions:

    a. The overcatches can probably be attributed to the 360 artisanal vessels (30 GT below) of which 322 vessels are members of ATLI Bali and 38 vessels are members of ASPERTADU. This fleet is most commonly fishing in the territorial waters and EEZ of Indonesia, and setting their longline gear in fishing ground where yellowfin tuna and bigeye tuna as the main target species, and
    b. At the time being, it is difficult to accurately determine the actual catch taken by artisanal vessels because they cooperative with vessels that have already been registered on the CCSBT Vessel List of Authorized to Fish for SBT. Nevertheles, we propose to provide a best estimate that artisanal vessels will have an equal chance of catching 1 (one) SBT each month. Taking the 360 artisanal vessels based in Bali and assuming the average weight estimates of SBT is about 70 Kgs/vessel, the catch contribution of artisanal vessels could be estimated to be as much as 300 ton/year.
    c. From a fishing technology point of view, artisanal fishers do not know how to avoid capturing SBT when they are intending to fish for yellowfin tuna and bigeye tuna in territorial waters and IEEZ (beyond CCSBT statistical area Number 1) or in CCSBT statistical area Number 1, and
    d. Artisanal fishers have less knowledge and skill about using mitigation measures to ensure SBT could be caught alive, and
    e. Artisanal fishers do not have information on bait species to use to prevent capture of SBT, but to still efectively fish for yellowfin tuna and bigeye tuna, and
    f. In case where SBT are caught as bycatch or un-intended catch, artisanal fishers will not release them because they are commonly already dead or almost dead, when brought on board.

Based on the above facts, we expect that the catch quota policy in SBT management should also be intended to protect the interest and livelihood of artisanal fishermen.

G. Issues and Concern

22. In principle, Indonesia has a strong commitment to implement the SBT catch quota approach. Indonesia recognizes that the catch quota approach is aimed to ensure the sustainable utilization of the resource both by large-scale fishers as well as artisanal fishers.

23. Due to the geographical area of Indonesia, some of it's waters are a migration area for SBT, and therefore SBT can be caught as bycatch or un-intended catch by artisanal vessels eventhough they are fishing in the territorial waters adjacent to and within the EEZ of Indonesia (beyond CCSBT statistical area No. 1) or CCSBT statistical area No. 1. Basically, they are intending to fish for yellowfin tuna and bigeye tuna as target species. This condition should be considered as a special feature of Indonesia which distinguishes Indonesia from other Parties to CCSBT who also have a long history as SBT resource users.

24. Based on the above facts and a special feature of artisanal vessels who cannot avoid capturing of SBT in their longline fishing operations, Indonesia proposes that a preference policy should apply to them. As member of CCSBT, Indonesia requests CCSBT and it's parties, to work together with Indonesia to seek a solution within the framework of the preference policy. In this regards, implementation of a catch quota system should not directly eliminate the livelihood of artisanal vessels in Indonesia.

25. Based on the Indonesian constitution, the state is obligated to protect the livelihood of all Indonesia citizens including artisanal vessels (fishermen). In this regards, Indonesia does not have instruments to take ~~a~~ legal action against the artisanal vessels (fishermen), if we cannot provide them with alternatives to help them to avoid the capture of SBT as bycatch/un-intended catch as well as to their livelihood.

26. At this stage, in order to obtain an accurate picture of SBT fisheries in Indonesia, it is necessary to consider the existence of Indonesia artisanal fishermen in the SBT catch quota scheme, rather than applying a corrective action policy due to Indonesia's past overcatches. This policy is very important to ensure that their catch can be properly and accurately recorded in order to support the effective management of SBT by quota. Acommodating the interest of Indonesian artisanal fishers, will definitely affect SBT management measures, at least in the area of stock status estimates.

27. A preferencial policy for Indonesia artisanal vessels (fishermen) could be promoted by providing them a separate annual catch quota. Indonesia proposes this be as much as 300 tonnes/year. This additional catch quota could be properly assessed during a comprehensive joint-study. By granting annual catch quota transparently to artisanal fishermen, we believe, it could greatly contribute to the achieving SBT management objective.

H. Implications of application of the corrective action policy

28. In principle, Indonesia strongly supports the application of the corrective action policy which is aimed at ensuring effective implementation of the SBT management on a catch quota basis. However, its application should objectively consider the circumtances

of each members of the CCSBT. By having described SBT fisheries issues in Indonesia, we think that, application of the corrective action policy in the form of quota reduction due to the overcatches-quota in the previous years, could result in Indonesia's catch quota becoming zero or even minus. This will have negative social and economic implications to Indonesia. Furthermore, a zero or minus catch quota, may also have non-productive implications to the achievement of SBT management objectives. For instance, in stock status review, since SBT will be keep caught as an un-intended catch by Indonesia artisanal vessels that are fishing in Indonesia territorial waters and IEEZ (IFMZ-573 beyond CCSBT statistical area No.1).

I. Recommendation

29. To support an effective in achieving the SBT management objectives as referred to in article 3 of the convention, we propose that:

    a. Indonesia could conduct a joint-study with CCSBT and/or it's members to re-assess the annual catch quota allocation for Indonesia, since the currenct nominal annual catch quota is considered too small. This joint-study should take into account the existence of artisanal vessels (fishermen) who cannot avoid capturing SBT as bycatch/un-intended catch.
    b. CCSBT adopt a preferential policy application to Indonesia artisanal vessels (fishermen), by providing them with an annual catch quota allocation which is as much as 300 tonnes/year and that, this should be separated from the initial nominal catch quota of Indonesia.
    c. Indonesia plans to register artisanal vessels on the CCSBT List of Vessel Authorized to Fish for SBT.
    d. While we are waiting for recommendations made by the joint-study, it is proposed that members consider postponing the application of corrective action policy or that it is ignored due to the application of preferential policy.

J. Closure

30. This proposal is submitted in accordance with article 8.4 (c) of the Convention for the Conservation of Southern Bluefin Tuna, which entered into force on 20 May 1994.

August 2013
Ministry of Marine Affairs and Fisheries,
Republic of Indonesia