

An Evaluation of the Sustainability of Global Tuna Stocks Relative to Marine Stewardship Council Criteria

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Executive Summary

The Marine Stewardship Council (MSC) has established a program whereby a fishery may be certified as being sustainable. The sustainability of a fishery includes MSC criteria which are embodied in the following three Principles: relating to the status of the stock, the ecosystem of which the stock is a member and the fishery management system. Since many of the MSC issues are comparable for global tuna stocks, the MSC scoring system was used to evaluate nineteen stocks of tropical tunas¹ throughout the world and to evaluate the management systems of the Regional Fishery Management Organizations (RFMOs) associated with these stocks. Since the goal was to assess the commonality of the tuna stock, no evaluation was made for the fishery specific ecosystem criteria. The principles that were assessed were:

Principle 1 (P1): A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery, and

Principle 3 (P3): The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

Each of these Principles is evaluated in relationship to Performance Indicators (PIs) within each Principle. Additionally, the MSC has established rigorous Guidelines for scoring fisheries (MSC Fishery Standard Principles and Criteria for Sustainable Fishing, Version 1.1 – 1st May 2010; <http://www.msc.org/>).

Table 1 summarizes the findings of this evaluation.

Of the 19 stocks of tropical and temperate tunas, 5 achieved a passing score for Principle 1. Note that failure was not usually due to the poor status of the stock, but rather the failure of there not being target and limit reference points and well-defined harvest control rules in place. None of the 19 stocks met these MSC requirements.

Additionally, the RFMOs also had similar weaknesses but these varied between RFMO (Table 1).

While a future client tuna fishery will be evaluated on the merits related to all three MSC Principles, the scoring clearly outlines a template for actions to improve the management of the 19 tuna stocks through the RFMOs.

¹ The bluefin tunas (Atlantic, Pacific and southern) are specifically excluded from this study.

Table 1. Assessment of Global Tuna Stocks Using MSC P1 and P3 (RFMO) Criteria

P1-Atlantic Ocean ICCAT			Yellowfin	Bigeye	Western Skipjack	Eastern Skipjack	North Albacore	South Albacore	Med Albacore
Component	PI No.	Performance Indicator (PI)	Score	Score	Score	Score	Score	Score	Score
Outcome	1.1.1	Stock status	70	80	80	80	70	70	60
	1.1.2	Reference points	75	75	75	75	75	75	65
	1.1.3	Stock rebuilding	75				80	75	
Management	1.2.1	Harvest strategy	80	80	70	70	80	80	50
	1.2.2	Harvest control rules & tools	60	60	60	60	60	60	50
	1.2.3	Information & monitoring	80	80	65	75	80	80	50
	1.2.4	Assessment of stock status	85	85	80	80	80	80	80
Weighted Principle-level scores									
Stock rebuilding required?			Yes	No	No	No	Yes	Yes	No
P1 Score:			74.8	76.9	73.1	74.4	75.0	74.2	<60, P1 Fails

P1-Pacific Ocean			Western Yellowfin	Western Bigeye	Western Skipjack	Eastern Yellowfin	Eastern Bigeye	Eastern Skipjack	North Albacore	South Albacore
Component	PI No.	Performance Indicator (PI)	Score	Score	Score	Score	Score	Score	Score	Score
Outcome	1.1.1	Stock status	90	80	100	80	80	100	80	100
	1.1.2	Reference points	75	75	75	75	75	75	75	75
	1.1.3	Stock rebuilding								
Management	1.2.1	Harvest strategy	75	60	70	80	80	85	80	80
	1.2.2	Harvest control rules & tools	60	60	60	60	60	60	60	60
	1.2.3	Information & monitoring	80	80	80	80	80	80	80	80
	1.2.4	Assessment of stock status	90	90	85	95	95	85	85	85
Weighted Principle-level scores										
Stock rebuilding required?			No	No	No	No	No	No	No	No
P1 Score:			79.4	75.0	80.6	78.1	78.1	82.5	76.9	81.9

P1-Indian Ocean			Yellowfin	Bigeye	Skipjack	Albacore
Component	PI No.	Performance Indicator (PI)	Score	Score	Score	Score
Outcome	1.1.1	Stock status	90	90	100	70
	1.1.2	Reference points	75	75	75	75
	1.1.3	Stock rebuilding				
Management	1.2.1	Harvest strategy	80	80	80	60
	1.2.2	Harvest control rules & tools	60	60	60	60
	1.2.3	Information & monitoring	80	80	80	65
	1.2.4	Assessment of stock status	90	80	85	60
Weighted Principle-level scores						
Stock rebuilding required?			No	No	No	No
P1 Score:			80.0	78.8	81.9	66.9

P3 by RFMO			ICCAT	WCPFC	IATTC	IOTC
Component	PI No.	Performance Indicator (PI)	Score	Score	Score	Score
Governance and Policy	3.1.1	Legal & customary framework	75	85	85	80
	3.1.2	Consultation, roles & objectives	75	85	85	70
	3.1.3	Long term objectives	60	100	100	60
	3.1.4	Incentives for sustainable fisheries	80	80	80	80
Fishery specific management system	3.2.1	Fishery specific objectives	60	80	80	60
	3.2.2	Decision making processes	90	80	80	90
	3.2.3	Compliance & enforcement	75	80	80	70
	3.2.4	Research plan	90	90	90	90
	3.2.5	Management performance	90	70	70	90
Weighted Principle-level scores						
P3 Score:			76.8	83.8	83.8	76.3

PI < 60 or Principle < 80: Principle Fails

60 ≤ PI < 80: Condition Needed

PI or Principle ≥ 80: Passing Score

Unscored

Rebuilding Required

Rebuilding Not Required

Foreword

One of the primary objectives of ISSF is to improve tuna fisheries so that they are sustainable, as measured by standards developed from the Food and Agriculture Organization's (FAO) Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (available from www.fao.org).

The Marine Stewardship Council (MSC) is a global certification program with standards developed from the FAO guidelines and compliant with ISEAL specifications. To date, close to 200 fisheries, including several tuna fisheries, have been certified against the MSC standards. ISSF has been actively involved as a stakeholder in the tuna fishery certifications since 2011.

Through our involvement with MSC tuna fishery certifications, we have observed that there are often significant inconsistencies between assessments conducted by the Conformance Assessment Bodies (CAB) that are accredited by ASI to apply the MSC standards. The assessment scores assigned to individual sustainability indicators by CABs in what seem to be very similar situations are sometimes quite different. This could be, at least in part, due to a level of subjectivity allowed by any system. In other cases it could be an incorrect interpretation of the standards and scoring guidance issued by the MSC.

We decided to ask two experienced assessors to score 19 stocks against the MSC standards using the very same indicators of sustainability and the guideposts provided by the MSC to make scoring consistent. These 19 stocks represent all of the major commercially-exploited tuna stocks in the world, except those for the three species of bluefin tunas. The scores are not fishery-specific, i.e. they focus only on stock status (MSC Principle 1) and the international management aspects relevant to Regional Fishery Management Organizations (RFMOs) (part of MSC Principle 3). Thus, they do not consider management in national or bilateral jurisdictions, nor gear/fleet-specific ecosystem impacts (MSC Principle 2), which are important components in any complete MSC assessment. Nevertheless, we hope that this exercise will:

- Provide a basis for comparing between stocks scores that are assigned by the same experts;
- Become a useful source document in future tuna certifications;
- Give a "snapshot" of the current status of the stocks and the strengths and weaknesses of RFMOs.

It is important to note two caveats. First, the document is work in progress. It needs to be modified to reflect the latest MSC Certification Requirements (v. 1.3, which become effective in March, 2013) and to reflect the latest management measures adopted by two RFMOs in late 2012. Second, the scores for some of the Principle 1 scoring issues are given on the basis of recent final assessments of tuna fisheries. In particular, for most cases the RFMOs have not adopted any specific harvest control rules or limit and target reference points, and it is questionable whether even a score of 60 (a passing grade with conditions for future improvement) is justifiable. Nevertheless, several recent tuna assessments have resulted passing scores in these situations. ISSF hopes that this issue will be addressed in the very near future.

We invite you to read *An Evaluation of the Sustainability of Global Tuna Stocks Relative to Marine Stewardship Council Criteria* by Joe Powers and Paul Medley and to provide any comments and suggestions you may have.

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