



**CONTRIBUTIONS BY THE INTERNATIONAL COMMISSION FOR THE CONSERVATION
OF ATLANTIC TUNAS (ICCAT) REGARDING THE REPORT OF THE SECRETARY GENERAL
OF THE UNITED NATIONS ON OCEANS AND THE LAW OF THE SEA**

**On behalf of the Chair and Vice-chair of the
Standing Committee of Research and Statistics (SCRS)**

This report is a short summary of the contributions by the International Commission for the Conservation of Atlantic Tunas (ICCAT) to the preparation of the report of the Secretary-General of the United Nations on Oceans and the Law of the Sea, pursuant to General Assembly resolution 73/124 of 29 November 2018, as requested in a letter from Mr. Miguel de Serpa Soares, Under Secretary-General in charge of the Office of Legal Affairs, dated 19 December 2018. Contributions from intergovernmental organizations are to report to the United Nations Open-ended Informal Consultative Process on Oceans, and Law of the Sea 2019 meeting which will focus on “Ocean Science and the United Nations Decade of Ocean Science for Sustainable Development (2021-2030)”. Where, “Scientific understanding of the ocean’s responses to pressures and management action is fundamental for sustainable development. Ocean observations and research are also essential to predict the consequences of change, design mitigation and guide adaptation”. The goal of this initiative is to support activities that will contribute to the reversal of declining ocean health and ensure ocean science can fully support countries in creating improved conditions for sustainable development of the Ocean through a worldwide common framework.

Introduction

The International Commission for the Conservation of Atlantic Tunas (ICCAT) is the Regional Fisheries Management Organization (RFMO) responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent Seas. ICCAT was established in 1969, and currently has 52 Contracting Parties and five Cooperating non-contracting Parties (CPCs), mostly comprised of coastal Countries and other Nations that fish for tuna and tuna-like species in the Atlantic Ocean and adjacent seas. Within ICCAT, the Standing Committee on Research and Statistics (SCRS) is responsible for providing scientific advice to the ICCAT Commission. The SCRS develops all policy and procedures for the collection, compilation, analysis and dissemination of fishery statistics of tuna and tuna-like species in the Atlantic Ocean and adjacent seas; ensures that the Commission has the most complete and current statistics available concerning fishing activities in the Convention area, as well as biological information on the stocks that are fished. The SCRS also coordinates a variety of national research activities, guides and develops plans for special international cooperative research and capacity building programs, carries out stock assessments, and advises the Commission on the need for specific conservation and management measures in support of the Commission’s objective of implementing science-based fishery management. The SCRS also advises the Commission on other scientific matters as requested.

The SCRS has evolved into a Committee with broad participation of expert scientists from all the CPCs that fish tuna and tuna-like species in the Atlantic Ocean and adjacent Seas, working cooperatively in an effective and transparent manner, with a solid scientific and technical support of the Secretariat, to provide objective, reliable and robust scientific advice to the Commission in support of the Convention objectives.

In this context many of the goals, objectives and strategies, laid-out in the 2015-2020 SCRS Science Strategic Plan (to be revised in 2020), merge directly with the United Nations Decade of Ocean Science for Sustainable Development activities with respect to the Atlantic Ocean for tuna and tuna-like species. Currently ICCAT is responsible for the assessment and management of tuna (Bluefin, Albacore, Yellowfin, Bigeye, Skipjack and 16 smaller tuna species), Swordfish, Billfish (Blue Marlin, White Marlin and Sailfish) and Sharks (Shortfin Mako, Blue shark, and Porbeagle) resources in the Atlantic Ocean and adjacent Seas. There is also a Sub-committee on Ecosystems and By-catch to deal specifically with issues such as the Ecosystem Based Fisheries Management, mitigation of impact of ICCAT fisheries on vulnerable taxa (i.e., sharks, sea-turtles, sea-birds and marine-mammals), oceanographic factors affecting tuna biology and fisheries, and the development of ecosystem indicators and an ecosystem report card.

The goals, objectives and strategies for the SCRS are summarized in the 2015-2020 Science Strategic Plan under 5 broad categories: Data Collection; Dialogue and Communication; Participation and Capacity Building; Research Priorities; and Stock Assessments and Advice. All of these activities have components that directly relate to the UN Ocean Science and the United Nations Decade of Ocean Science for Sustainable Development report. Each broad category has a number of goals and objectives that identify specific activities and targets.

Data Collection:

The collection of data necessary for the assessment and management of tuna and tuna-like species in the Atlantic is one of the primary functions of the SCRS. Under the current strategic plan there are initiatives to improve fishery data collection and reporting from all fisheries that harvest tuna or tuna-like species within the ICCAT Convention area: where absent, to institute sampling programs necessary to meet the stock assessment needs; and, the development of data collection/compilation programs necessary to improve the scientific advice. This is particularly important in the development of comprehensive by-catch and observer datasets and for the provision of Ecosystem Based Fishery Management Advice within the Convention area.

Major initiatives have been implemented by the SCRS to meet these goals through the encouragement of member Countries to improve data collections financially supported by ICCAT data and capacity building Programs; and through the implementation of multi-year broad scale programs (GBYP¹, AOTTP², EPBR³, SMTYP⁴ and SRDCP⁵, directed toward bluefin tuna, tropical tunas, billfishes, small tunas, and sharks, respectively) to obtain this information. The purpose is to advance ocean science and to address gaps in current knowledge for the management and sustainability of the resources; a major component of the Ocean Science and the United Nations Decade of Ocean Science for Sustainable Development program.

Dialogue and Communication:

Dialogue and Communication is a key operational element for any organization, but is critically important for RFMOs involved with the assessment and management of ocean wide multi-national and international resources. Currently ICCAT represents 52 Contracting Parties and five Cooperators to whom policy, programs, science, and advice must be communicated. The strategic plan identifies the need for improved dialogue and communication on almost all activities within the organization. Furthermore, the strategic plan recognizes the need for improved dialogue with the Commission and between the Commission and interested parties (stakeholders). It also acknowledges the requirement to improve dialogue within the SCRS, the scientific community, and society as a whole.

An important aspect of the SCRS's mandate is to communicate science advice on complex scientific issues, methods, and outputs/results for the management of natural resources. The Strategic plan suggests several mechanisms to increase dialogue and to improve communications between the SCRS and a broad spectrum of stakeholders. Many of these recommendations have already been implemented; including the establishment of a Standing Working Group to enhance Dialogue between Fisheries Scientists and Managers (SWGSM), for issues related to reference points, harvest control rules and Management strategy Evaluations. While the goal of improved dialogue and enhanced communication with stakeholders is not directly identified in the focus themes for the UN report, it is implicit within several of the activities and is an integral part of a successful program implementation.

Participation and Capacity Building:

The SCRS considers Participation and Capacity Building as a necessary requirement to ensure the preservation and promotion of the independence and excellence of the Standing Committee and its Working Groups; improved science capabilities and the enhancement of active involvement of developing economies in the SCRS activities. ICCAT have funded a number of initiatives over the past years to ensure participation and capacity building among CPCs. In 2018 the funding has included support for more than 120 scientists from developing countries to participate in SCRS meetings; training courses to build the data collection capacity in the semi-industrial, artisanal and recreational fisheries; and rebuilding of fisheries data

¹ Atlantic Wide Research Programme for Bluefin Tuna (GBYP)

² Atlantic Ocean Tropical tuna Tagging Programme (AOTTP)

³ Enhanced Programme for Billfishes research (EPBR)

⁴ Small Tuna Year Programme (SMTYP)

⁵ Shark Research and Data Collection Programme (SRDCP)

collection systems; scientific capacity building courses in introductory and advanced stock assessment methods; and short-term contracts to promote science-based programs. The ICCAT-Japan Capacity-Building Assistance Project (JCAP) has been dedicated to assisting developing CPCs to effectively implement ICCAT measures including those related to the monitoring, control and surveillance of tuna fishing activities as well as the improvement of data collection, analysis and reporting. The SCRS is also exploring new ways to communicate and present the results from complex approaches such as MSE (Management Strategy Evaluation) to broad range stakeholders. All of this is related to the integration of traditional knowledge in Ocean Research, the transfer of knowledge, the introduction of emerging technologies and strengthening Ocean science in developing countries.

Research Priorities:

The ICCAT convention jurisdiction in the Atlantic Ocean and adjacent areas is large, encompassing multiple species and a diverse group of CPC's. Establishing research priorities to ensure the necessary information is available to evaluate/assess stocks and to provide scientific advice, which is an important task of the SCRS. The SCRS recognizes the importance of scientific research in the sustainable management of resources and has recommended that research priorities should consider the requirement to quantify the major uncertainties in the assessment, the need to acquire the necessary biological information on the target species as well by-catch species, to improve the standardization of fishery-dependent information; to promote the development of fishery-independent indices; to balance the adequacy between the models and the quality of data; to evaluate management measures and strategies in achieving the Commission objectives; and, to include research needs for the inclusion of ecosystem considerations in the provision of scientific advice. All of these have been considered in the current ICCAT Strategic Science Plan with suggestions of how these goals might be achieved. The SCRS has supported many research initiatives and projects to develop new fishery independent indices of abundance (e.g., aerial surveys, larval, and acoustic surveys), the introduction of emerging technologies and modeling approaches (e.g., satellite/acoustic tags, and advanced analytical models). Recently the SCRS, through the GBYP and other voluntary funds, has invested heavily in Management Strategy Evaluations (MSE) for understanding and incorporating sources of uncertainty in the evaluation and assessment of the resources, using simulation studies to test and provide advice on management procedures that are robust and will perform better under those uncertainties and various possible alternative future scenarios. As with the objectives described above these goals are in line with many of the Ocean Science and the United Nations Decade of Ocean Science for Sustainable Development objectives and concerns.

Stock Assessment and Advice:

One of the key roles of the SCRS is to conduct stock assessments for the mandated species and to provide advice to the Commission on their status and potential future catches that are in line with the Commission objectives of maintaining fishing stocks at Maximum Sustainable Yield (MSY). The specific goals of the SCRS are to provide objective, reliable and robust scientific advice to the Commission; to evaluate precautionary management reference points and robust harvest control rules through MSE; advance Ecosystem Based Fishery Management advice; and, eventually broaden the scientific advice to include economic and social aspects of various management measures.

One of the most common forms of advice regularly provided by the SCRS is the status of each stock, and the probabilities that various alternative future Total Allowable Catches (TACs) will have on achieving the Commission's MSY objective over a certain number of years. In terms of MSE, the SCRS has identified a path forward for its implementation, which takes a sequential approach that focus on one species at a time, while continuing to progress on several others. Albacore was first and the focus is now mostly on Atlantic Bluefin tuna, with parallel processes starting for Swordfish and Tropical tunas. Simulation studies based on the MSE models and available data can be used to investigate the sensitivity of the Convention area to new and external activities/pressures. With regards to Ecosystem Based Fisheries Management, the SCRS has recently started to develop potential ecosystem indicators and a first Ecosystems Report Card is being drafted to be presented to the Commission over the next few years. Scientific advice is also regularly provided by the SCRS for vulnerable taxonomic groups impacted by tuna and tuna-like fisheries, including mitigation measures for sharks, marine turtles and seabirds.

Finally, the activities associated with each of the SCRS stock assessment and advice goals identified in the Strategic Science Plan can, and will, contribute to the sustainability of tuna and tuna-like species in the Atlantic Ocean and adjacent Seas.