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**COMMON
OCEANS**
PROGRAM



Tuna project

Update on the Common Oceans Tuna Project, November 2023

Common Oceans Tuna Project 2022-2027 The Project “Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction” is a continuation of an earlier project (2014-2019) with the same name (“ABNJ Tuna Project”). The Project objective is to achieve responsible, efficient, and sustainable tuna production and biodiversity conservation in the ABNJ in face of a changing environment. This is a GEF-funded project, implemented by FAO and executed by the IOTC through a Project Management Unit. Activities are carried out by the partners of the project and most of the contracts are in place and the following activities have started.

Activities with a focus in the Indian Ocean region of relevance to the IOTC Scientific Committee and Working Party on Ecosystems and Bycatch.

1. Conservation International, in collaboration with the Pacific Community (SPC), and Mercator Oceans International will **model the effects of climate change on tuna distribution in the Atlantic and Indian Oceans.**

This work builds on previous modelling work carried out in the Pacific Ocean to study the effects of climate change on tuna fisheries which showed dramatic shifts eastward in the distribution of tuna stocks in the Pacific, hence predicting economic losses for Pacific Island countries. During the 2nd phase of the Tuna Project, Conservation International, the Pacific Community, and Mercator Oceans International will extend and replicate this work to the Atlantic and Indian Oceans, as well as in the Pacific, by using updated and improved physical-biogeochemical forcings data, modelling at finer resolution, and include various climate change scenarios (based on IPCC three emission levels). The model SEAPODYM will be used to simulate spatiotemporal dynamics of tuna populations under the influence of both fishing and environment, including the tuna prey (zooplankton and micronekton). The goal is to project the future of the tuna population using (corrected) forcing fields from IPCC scenarios and provide this information on climate change impacts to decision-makers for appropriate action.

A **Steering Committee** comprising Conservation International, Pacific Community (SPC), Mercator Oceans International, the Tuna Project, and t-RFMO representation will be formed to meet annually to review progress and endorse or recommend revisions to the workplan. Engagement with ICCAT and IOTC is important, and the respective Chairs of the Scientific Committees (as well as Ecosystems and Bycatch) will be invited to participate. The first meeting is expected to take place early 2024.



2. IOTC will carry out up to three additional **surveys to estimate abandoned, lost, and discarded fishing gear** in addition to the three already carried out under the first phase targeting identified priority fisheries.

The work on ALDFG is planned for a period of three years to contribute to the FAO Global ALDFG surveys with a focus on the Indian Ocean. This activity will address data gaps identified by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection Working Group (GESAMP Working Group 43), providing estimations of the quantity and impact of ALDFG. Surveys have been carried out in Pakistan and the Seychelles under the first phase of the Tuna Project. In the second phase of the project, implementation of surveys will be through LoAs with institutions in three IOTC Member countries (e.g. China, India, Indonesia), following the identification of priority countries/fisheries to be surveyed.

3. The International Whaling Commission (IWC) will assess cetacean bycatch and data gaps across the Indian Ocean, build **regional capacity and awareness on cetacean bycatch** and available solutions, and collaboratively develop recommendations (CMM) to address cetacean bycatch for consideration by the IOTC. A Cooperation Agreement was established with the IOTC.

4. Activities led by Commission for the Conservation of Southern Bluefin Tuna (CCSBT) targeting IOTC CPCs who are also CCSBT members (Australia, European Union, Indonesia, Japan, Republic of Korea, South Africa) to enhance education, outreach, and capacity building for the monitoring and implementation of **seabird bycatch mitigation measures**, as well as an update of the 2016 global seabird risk assessment.

Other activities of relevance to the IOTC:

5. Three **joint tuna RFMO Working Groups** will be convened on topics of global relevance to be decided by the tuna RFMOs, where ICCAT will take the lead in organizing these events with support from FAO.

Preliminary consultations have already taken place between the t-RFMOs secretariats during the COFI meeting (2022), and the proposed approach is to form a small steering group, including the t-RFMO Secretariats, Chairs of the t-RFMO Commissions and the Scientific Committees as well as the Tuna Project, to discuss which are the themes to be addressed in these workshops, which may have to be proposed through the Secretariats to their Members.

6. ISSF in collaboration with FAO/IOTC will support the processes in t-RFMOs on the **implementation of EAFM**. The emphasis is on how to operationalize EAFM in t-RFMOs and establish a way forward by producing recommendations. This will include updating and improving information materials, building on the outputs from workshops held in 2016 and 2019. Three workshops are planned to bring together stakeholders from the t-RFMOs, including delegates from CPCs, to discuss approaches and help develop EAFM action plans / roadmaps. The outputs from these workshops will be disseminated broadly and the goal is the adoption of EAFM roadmaps in t-RFMOs with the support from partners and CPCs that can champion the approach in t-RFMO Commission meetings.

7. ICCAT will carry out simulation studies using **EcoTest (testing ecosystem-based indicators and management policies)** that establish a range of credible ecosystem hypotheses including fleet and bycatch behavior in order to determine in which instances indicators and management policies might be considered reliable. The objective is to study how harvest rates will work under different assumptions of ecosystem and climate change conditions, taking into account the correlation of fishing mortality between target and secondary species. The open-source software package will be freely available.



8. The Ocean Foundation supports capacity building in **Harvest Strategies/Management Strategy Evaluation** in tuna RFMOs through technical support, developing e-learning courses and interactive tools, hosting quarterly webinars, and producing supporting outreach materials.

9. The International Seafood Sustainability Foundation (ISSF) continues efforts in bycatch mitigation such as: a) develop and promote **biodegradable/ non-entangling FADs**; b) hold **skippers' workshops** to adopt best practices; c) develop **acoustic technology**; and d) produce and disseminate a **policy paper for holistic bycatch management** that considers the impact of different fishing gears.

10. WWF Pakistan will carry out a **pilot trial conversion of 10 fishing vessels from gillnet to longline gear** in the Pakistani gillnet fleet.

The Indian Ocean gillnet fishery is the largest gillnet fishery in the world, with between 34-40 percent of tuna catches in the region taken by gillnet, and the catch share of this gear type continuing to increase. These gillnet fisheries produce chronically high levels of bycatch, with sharks, turtles and cetaceans being the most affected. Moreover, gillnets are also widely recognized as the most problematic of all gear types in regard to cetacean bycatch specifically.

The goal is to show the commercial benefits from gear conversion, and this will be documented through a business case. Considering the measure (CMM) adopted by IOTC on prohibiting gillnets of more than 2.5 km in length, this initiative, if successful, will contribute to solving an important issue, as most of the Pakistani (and other fleets in the North Indian Ocean) gillnetters exceed this limit.

11. The International Pole and Line Foundation (IPNLF) works on **improving the socio-economic performance of one-by-one tuna fisheries** and provide proof of concept including the supply chain of premium quality tuna. This will include a pilot study on the benefits from converting gillnet fishers to one-by-one tuna fishing techniques.