COMMISSION
THIRTEENTH REGULAR SESSION
Denarau Island, Fiji
5 – 9 December, 2016

REPORT TO WCPFC ON PROGRESS OF THE PROJECT SUSTAINABLE MANAGEMENT OF TUNA FISHERIES AND BIODIVERSITY CONSERVATION IN THE ABNJ

WCPFC13-2016-37
2 December 2016

Paper by UN Food and Agriculture Organisation (FAO)

Food and Agriculture Organization of the United Nations

gef

COMMON OCEANS

Report to WCPFC on Progress of the Project Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the ABNJ

Rome, November 2016

Background

The Project "Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction" also referred to as the *Common Oceans ABNJ Tuna Project*, is one of the four projects funded by the Global Environment Facility (GEF) under the umbrella of the Common Oceans Program, which brings together governments, regional management bodies, civil society, the private sector, academia and industry to work towards ensuring the sustainable use and conservation of ABNJ biodiversity and ecosystem services.

The five-year project started in 2014 and is supported by a 27 million USD GEF grant in addition to partners co-financing. It is the largest of the Common Oceans projects, with FAO as the implementing agency and working with a wide range of partners, including the five tuna RFMOs, encompassing 90 different countries as members of the various organizations, sub-regional organizations, environmental community and private sector.

The main guiding principles of the Project, discussed and agreed with partners at the Inception Workshop, help in March 2014, include:

1. Extending the global benefits of the Project to as many members and tuna RFMOs as possible. As this is a global project, we need to ensure that the direct benefits or the lessons learned in one region extend to as many tuna RFMOs as possible
2. Promote the cooperation and exchange of experiences between t-RFMOs. There are few opportunities to share the results of experiences in one RFMO with the other RFMOs
3. Facilitate the implementation of existing initiatives. The Project has no intention to impose anything on the partners, it is simply to assist in, and accelerate existing initiatives that were decided and agreed by the members of RFMOs.
4. Recognition of the need to support developing coastal States in the tuna RFMOs to become more effective members.

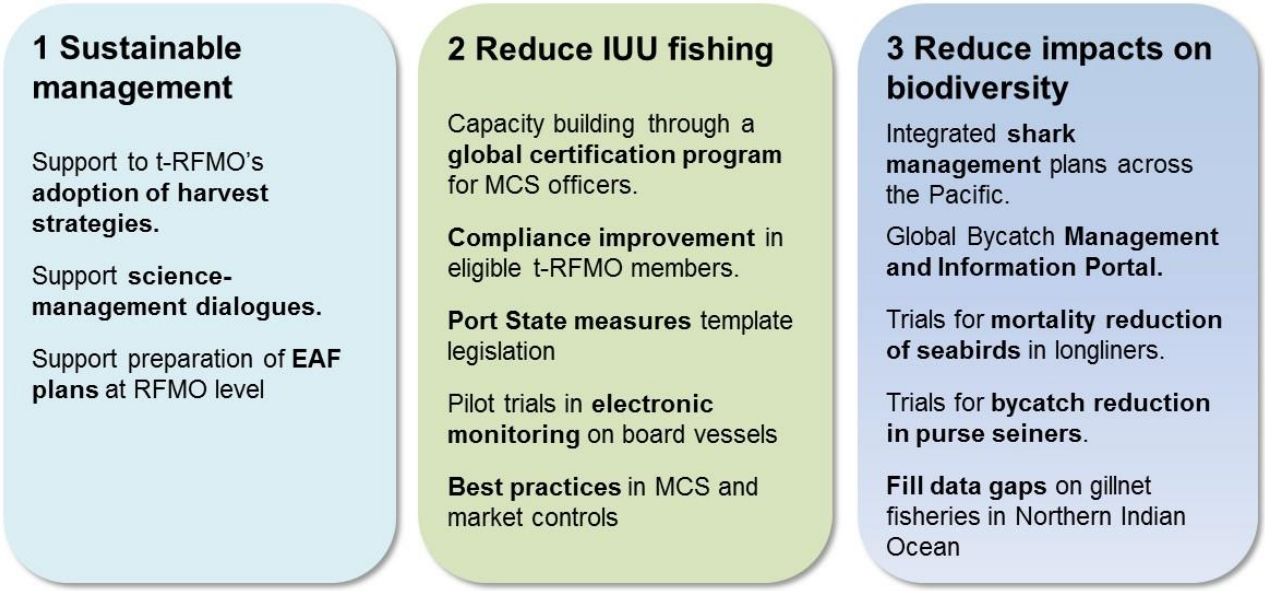

Figure 1. *Structure of the Common Oceans ABNJ Tuna Project*

The Project is structured around a hierarchy of three components, each composed of outcomes that will contribute towards the objective of the component, and each outcome being the result of a number of outputs. The basic structure of the project is shown in Figure 1 above.

The emphasis on sharing experiences between t-RFMO processes links the Project to the spirit of the Kobe process, in serving as a forum for cooperation in the scientific and technical communities of the t-RFMOs, therefore learning from the collective experience and improving the effectiveness of the various processes.

Project Progress

Component 1: Promotion of Sustainable Management (including Rights-Based Management) of Tuna Fisheries, in Accordance with an Ecosystem Approach

This component includes a number of activities that would facilitate the incorporation into the management framework of the tuna RFMOs of principles that have been identified as important elements in sustainable management, such as the precautionary approach, and an ecosystem approach to fisheries.

Implementation of the precautionary approach, and adoption of harvest strategies

This is probably the most transformational of all activities under the Project, bringing a new level of cooperation and dialogue between science and management. These activities aim to change the way of using science in the decision making process, but need the managers to lead the process.

However, often managers are not familiar with Management Strategy Evaluation and Management Procedure/Harvest Control Rule, which is why capacity building as well as better dialogue between managers and scientists are needed. This is following a two-pronged approach with

- Capacity building workshops led by WWF for officials from t-RFMO member countries are helping to increase the familiarity and confidence with the process of Management Strategy Evaluation (three workshops held in Sri Lanka for officials of IOTC countries in 2014, and in Panamá for IATTC countries in 2015 and in Ghana for ICCAT countries in 2016).
- Support to the science-management dialogues and to the scientific processes in the tuna RFMOs that had not yet adopted a harvest strategy (led by FAO). Support was provided for meetings or meeting participants in WCPFC, IOTC and IATTC.

The Project is also supporting the collaboration between t-RFMOs and their memberships, and aims to revive the Kobe Process, in particular in relation to Management Strategy Evaluation. In this context, the project supported the first meeting of t*he Joint Management Strategy Evaluation Technical Working Group*, which was created during the Third Joint Meeting of Tuna RFMOs in 2011. The meeting, organized by ICCAT with support of the Tuna Project, took place in Madrid from 01-03 November 2016.

Support to implementation of the Ecosystem Approach to Fisheries

The Project is promoting and supporting the preparation of long-term plans for operationalizing the Ecosystem Approach to Fisheries (EAF) in each of the t-RFMO, encouraging consideration of the impacts of fishing activities on the environment. The Project is supporting a *joint meeting of the tuna RFMOs on the implementation of the ecosystem approach to fisheries managemen*t, an initiative of ICCAT, to establish a sustained dialogue across tuna RFMOs on the issues of EBFM and its implementation. The meeting which will take place in Rome from 12-14 December 2016.

Component 2 – Reducing IUU fishing and improving compliance

Addressing IUU fishing is supported through a number of strategies. To a large extent, these are based on empowering officials from t-RFMO member countries through capacity building of enforcement

and compliance officers by establishing, for the first time in the world, a certification-based training program.

MCS best Practices

Under the Project, a compilation of Global Best Practices for Monitoring Control and Surveillance in tuna fisheries will be developed in collaboration with t-RFMO staff, ISSF, and other partners and will be reviewed by the compliance/MCS sections from the t-RFMOs, as well as international MCS experts. Progress have been slow under this output, however, the work should start before the end of the year and a contract was recently signed between FAO and ISSF.

Tuna iMCS Network

The Project is working with the International MCS Network to create a 'sub-network' focused on exchanged of information on MCS issues associated with tuna fisheries. This 'sub-network' will be constituted of people associated with compliance in the t-RFMOs, as well as other MCS experts or national MCS officers, and will constitute a vehicle for exchange of lessons learned, information relevant to monitoring of tuna fisheries or intelligence information. A contract was signed recently with the IMCSN for this implementation of this output, and RFMOs should be contacted by the Common Oceans ABNJ Tuna Project before the end of the year to participate to this subnetwork.

MCS Certification course

Capacity building activities are planned through a certification-based course to be conducted in the areas of the various t-RFMOs. A certification course of 6-8 weeks would become the seed for more academic programmes and would offer young officials a career path in areas not covered so far by formal training. A consultant is currently developing a curriculum and a training strategy that would have a core global component of basic MCS skills, supplemented by regional issues (such as CMMs specific for the region).FFA has conducted a course of this nature in association with the University of the South Pacific and experiences gained during that course will be fully taken into account.

The project supported FFA and The University of the South Pacific to carry out the second MCS training from 05-30 October 2015. In total, 16 fisheries MCS and/or surveillance officers from eight FFA Member countries were trained.

The project also supported FFA to facilitate the organisation and delivery of a programme on Certificate IV in Fisheries Enforcement and Compliance (FEC) study for 16 participants over a period of 12 months, with distance and flexible learning as well as face-to-face competency assessments.PSM legislative template

The FAO Port States Measures Agreement is one of the major international instruments to combat Illegal Unreported and Unregulated (IUU) fishing. The original plan to develop individual legislation for ten countries in the Indian Ocean was replaced by the development of a legislative template framework. The template has been completed taking a global and comprehensive approach, including: working from the FAO Agreement and the IOTC Resolution; ensuring applicability to different legal systems, including through use of annotations; covering core/supporting legislation; providing a framework for supporting procedures; and identifying the roles of RFMOs. The template was launched during the 32nd Session of COFI (11-15 July 2016) during a celebration dedicated to the entry into force of the Port State Measures Agreement. The template is available online here. Translations into French and Spanish are ongoing.

CLAV work

This activity was successfully completed in its core functionality, and the latest version of the Consolidated List of Authorized Vessel is now available on the tuna-org.org website[1]. While the CLAV has been developed by the five t-RFMOs starting in 2009, in order to merge their lists of authorized vessels, it is now daily updated through an automatized process that directly links the t-RFMOs authorized vessels databases to the CLAV database.

In addition, the Project is also providing expertise to analyse the data contained in the CLAV and identify some data inconsistencies, including possible duplicate records. These issues are reported to the t-RFMOs for further investigation and correction by the reporting member States. In the future, the CLAV could host additional information, *e.g.* linkages to report of IUU activities, port inspection reports, *etc.* and mobile applications for fisheries inspectors could be developed.

Pilot trials of electronic observer systems on longline verssels in Fiji and purse seiner vessel in Ghana

The pilot programs in Fiji and Ghana provide an opportunity for both countries to test the use of EM as an MCS tool to better assess compliance of fishing fleets as well as to collect observer data. Both pilots are implemented with the participation of the private sector and should evolve in business models that would allow a sustainable use of the EM in the long term.

Since last year, five Fijian longliners and 11 Ghanaian purse seiners have been equipped with EM systems. Training has been provided to land-based observers from the Fiji Department of Fisheries and the Fisheries Commission of Ghana in the use of the review hardware and software to analyse the video footage collected by the EMS, and the second training Session was held in October in both countries. EM data from fishing trips is now routinely being reviewed by land-based observers, with around 30 and 45 trips reviewed in Fiji and Ghana respectively. Within the next few months, an additional 15 EM systems will be deployed in Fiji bringing the total of equipped vessel to 30, and early next year the target of 50 EM systems deployed in Fiji should be reached. In 2017, business case studies will be started in both sites to provide cost-benefit analysis of EM in Fiji and Ghana, and propose scenarios for the sustainability of their use as an MCS tool beyond the Common Oceans ABNJ Tuna Project.

A small pilot project on two purse seiners was also started in Seychelles, to test the accuracy of catch and bycatch estimates through EM, where the data will be compared to onboard observer as well as oversampling data.

Integrated MCS system in FFA

Assessing the risk of IUU fishing associated with certain operations and vessels provides an opportunity to use limited enforcement assets in a more efficient and cost-effective way in combatting IUU. To do this, FFA has created an MCS system that integrates information coming from multiple data sources and that is used to create intelligence reports by a dedicated unit. The Project is supporting a Data Analyst working on this system, and will assist in disseminating the lessons learned to other regions.

Best practices in Catch Documentation Schemes (CDS)

Catch Documentation Schemes are considered a valuable tool in the MCS toolbox, and for a number of years several instances have been implemented as part of RFMO regulations or other traceability schemes developed by main markets to ascertain the provenance of fish products entered into a market. To be successful in preventing IUU tuna products from entering into the supply chains, CDS should fulfill a number of requirements.

[1] http://tuna-org.org/GlobalTVR.htm

The Project has completed an analysis of the main global tuna supply chains to identify possible weaknesses that would allow entry of IUU products into the markets. Based on this, *Design options for the development of tuna catch documentation schemes* were developed and published. This work integrates with similar work that FAO has been mandated to develop for all fisheries in the world.

Support to improve compliance

Although the original plan was limited to support participation of national officials into technical and scientific meetings, the implementation has been extended to focus on innovative ways of supporting members of t-RFMOs to improve their compliance performance.

For example, the close work of the Secretariat of IOTC with its membership in what is termed Compliance Support Mission offers an example of a way to improve, not only the compliance of the member in question, but to empower members with information that enhances their level of participation as well. The lessons learned from these type of initiatives are being shared across t-RFMOs and it could be further extended through mechanisms such as the IMCS network.

Component 3 – Reducing ecosystem impacts of tuna fishing

The third component addresses the ecosystem impacts of tuna fisheries. The Common Oceans ABNJ Tuna Project is supporting the collaboration between the WCPFC and IATTC to develop integrated and consistent management for sharks in both sides of the Pacific. The Project is also supporting the development and dissemination of mitigation techniques for by-catch of small tuna and sharks in purse-seiners and incidental seabird mortality in long-line fleets, including the development of a global portal to access information on the success of various techniques. The Project is also working towards filling data gaps in the gillnet fisheries from the northern part of the Indian Ocean, as the characteristics of these fisheries and their levels of bycatch are largely unknown.

Shark Data Improvement, Assessment and Management

This work is divided in two different, closely related elements: shark data improvement and shark assessment and management.

The objective of the first element (Shark Data Improvement) is to develop a practical and consistent approach to monitoring the status of sharks caught by ABNJ tuna fisheries. It focuses on identifying the data deficiencies which inhibit management and proposes strategies to obtain more data through field studies and better information return from fisheries. Baseline data inventories have been completed by both IATTC and WCPFC (the latter's is global). Recommendations for shark data improvement initiatives were adopted by the WCPFC (December 2015, in the form of changes to the Regional Observer Program Minimum Data Standards and Fields) and by the IATTC (June 2016). In August-September 2016 WCPFC and IOTC decided to trial a third t-RFMO bycatch data format (BDEP) as a basis for annual summarization and sharing. The whale shark tagging programme initiated with NOAA in June 2015 continues; as of April 2016 other post-release mortality work is underway in IATTC which will inform similar work planned in the WCPFC for 2016-2017. Work on cataloguing shark data holdings across the t-RFMOs using public domain data has been completed.

The objective of the second element (Shark Assessment and Management) is to identify risks and priorities for shark conservation through assessment, using new data generated under the first element and improved tools developed under this element as appropriate. It will evaluate the existing management framework and develop measures to strengthen shark management by t-RFMOs. The first of four stock status assessments was initiated ahead of schedule in response to a request from CCSBT to coordinate a global southern hemisphere porbeagle study. This assessment is being conducted in

partnership with Argentina, Chile, Japan, New Zealand and Uruguay and is expected to be completed in 2017.

A second assessment of the Pacific bigeye thresher shark based on data from 14 national observer programmes across the Pacific was completed in September 2016 and will be reviewed by WCPFC's Scientific Committee in August 2017. This spatially-explicit risk assessment study evaluated whether current impacts from fisheries exceed a maximum impact sustainable threshold (MIST) defined based on population productivity. Future work on the shark stock asessments is laid out in EB-IP-16[2]

Development of a global Bycatch Management and Information System (BMIS) and workshops for joint analysis of mitigation effectiveness

This work involves collating, catalysing and disseminating new information that will direct effective management to mitigate impacts on bycatch species including sharks, seabirds, sea turtles and cetaceans. This will help reduce technical uncertainties across a range of stakeholders, allowing t-RFMO discussions to focus on management issues such as cost and feasibility. Re-development of the BMIS is underway. Two workshops for Joint Analysis of Sea Turtle Mitigation Effectiveness took place in Honolulu, Hawaii, US in from Feb 16-19 February 2016 and from 3-8 November 2016. The first workshop (Report and in EB-WP-11[3]) with participants from 14 countries from all three oceans compiled a dataset which may be the world's largest compilation to date for longline fisheries and sea turtle interactions involving over 2,300 turtles caught by 31 fleets between 1989-2015. The second workshop revisited and agreed all of the building block models with the new data and completed an integrated analysis of mitigation scenarios. The final pair of workshops on mitigation is proposed to focus on post-release mortality of sharks. The first of these will take place in Wellington, New Zealand in January 2017.

Longline sea trials in the Atlantic and Indian Oceans demonstrate the effectiveness of seabird mitigation measures by two different fleets

BirdLife International is carrying out various outreach activities to refine and facilitate the understanding of techniques to reduce the incidental mortality of birds during longline operations, as well as collecting information that could lead to monitor the extent of the application of the mitigation techniques in the field.

Activities have included:

- National awareness workshops, for government officials, fisheries observers and industry reps (held for fleets from Namibia, Indonesia and China)
- Where there is a need to support fleets to become compliant with RFMO resolutions, the Project supports observer training workshops – these are intensive 5 day training for observers including conducting scientific research to enable mitigation trials to be conducted by national observers onboard, during production fishing. These have thus far been run for Korea only (13 observers to date), with training envisaged for Namibia, South Africa, China and Indonesia next year.
- At sea trials demonstrations of sliding "lumo leads" on Korean longline vessels (8 trips in total since 2014)
- Port-based outreach to high seas fleets from Cape Town, initial workshop in May 2016. This will raise awareness and build capacity amongst crews on matters related to seabird bycatch and the use of mitigation measures. To date 6 vessels have been engaged with.

[2] https://www.wcpfc.int/node/27582
[3] https://www.wcpfc.int/node/27494

- Regional bycatch assessment workshops. These form part of capacity building of national scientists to build and enhance skills in analysis of bycatch data and the strengthen bycatch reporting and management. Southern Africa and South American workshop planned for 23 Feb – 1 March 2017 in South Africa. Asian and Australasian workshop planned for 2-7 April in Hoi An, Vietnam
- Global Assessment and reassessment workshops are also planned for 2018 and 2019.

Purse seine sea trials in one ocean basin demonstrate the effectiveness of small tuna/shark mitigation measures and results disseminated to other ocean regions

This output, implemented by ISSF, includes research cruises in the Western Central Pacific, Atlantic and Indian Ocean, followed by skipper workshops, and a final workshop to communicate results to all t-RFMOs. Equipment (satellite linked echo-sounder buoys, sonic receivers, sonic and popup archival tags, etc.) were procured by FAO to ISSF in 2015 and 2016 in order to study vertical behavior, residency of tuna and non-target species at drifting FADs; target strengths of tunas after they were deployed during cruises in the Atlantic, Pacific and Indian oceans. Since July 2015, seven Skippers Training Workshops have been conducted in Indonesia, Peru, Ecuador, Korea, France, Spain, China, and Ghana involving 464 participants. Additional information on this Bycatch Mitigation activity can be found at: http://iss-foundation.org/what-we-do/areas-of-focus/bycatch/

Filling bycatch and catch data gaps in the northern Indian Ocean tuna-directed gillnet fisheries

This output is led by WWF in close collaboration with IOTC, who will assist as necessary in the formulation of the data collection plan. It is mainly aiming at obtaining estimates of catch by species (include bycatch species) in the gillnet fisheries of the northern Indian Ocean through placement of observers. Bycatch data and catch data gaps have been identified, and initial data was shared with the IOTC Working Party. As of June 2016, 32 Observers have been trained, selected and deployed in Pakistan achieving on-board observer coverage of 6.2%, which is expected to reach 15% by the end of 2016.