ASOCIACIÓN NACIONAL
DE ARMADORES DE BUQUES
ATUNEROS CONGELADORES

ORGANISATION DES PRODUCTEURS DE THON CONGELÉ ET SURGELÉ
ORTHONGEL

SIOTI

2021

SIOTI Member fleets

Code for Responsible Tropical Tuna Purse Seine Fisheries

February 2021

How to read this Code of Responsible Tropical Tuna Purse Seine Fisheries ?

This code of responsible tropical tuna fisheries applies to member fleets of the Fisheries Improvement Program SIOTI (Sustainable Indian Ocean Tuna Initiative). It contains a set of Best Practices to improve the sustainability of tropical tuna purse seine fishing in the Indian Ocean, either mandatory for all purse seine fleets (*The Management Measures*) or voluntarily adopted (*Our Voluntary Commitments, Our Ongoing Projects*).

THE MANAGEMENT MEASURES

In the Indian Ocean, tropical tuna stocks and associated bycatch species are managed by the Indian Ocean Tuna Commission (IOTC). Members of this Regional Fisheries Management Organization (RFMO) set out the common rules for the sustainable exploitation, monitoring and management of these stocks and the conservation of sensitive species through the adoption of *Resolutions*.

The European Union and its member States (France, Italy, Spain in the case of our fishery) may adopt more restrictive Control and Management Measures (CMMs) than those already implemented in IOTC Resolutions. This is also the case for Mauritius and Seychelles flagged SIOTI member purse seiners.

OUR VOLUNTARY COMMITMENTS

The Spanish Association of purse seine vessel owners ANABAC (www.anabac.org) and the French Producer Organization ORTHONGEL (www.orthongel.fr) assist their member fishing companies in their commitments for more sustainable tropical tuna purse seine fisheries. Voluntary commitments presented in this Code of Responsible Tropical Tuna Purse Seine Fisheries are the sustainability measures adopted by all SIOTI members that go beyond IOTC, EU or national CMMs.

Only common commitments are presented in this Code to serve as minimum standards for all SIOTI member fleets. Other initiatives adopted by SIOTI members are not discussed here, though they foster discussions within the Fisheries Improvement Program.

OUR ONGOING PROJECTS

The feasibility and the efficiency of potential new sustainability measures need to be evaluated. This 2020 version of the Code of Responsible Tropical Tuna Purse Seine Fisheries present our ongoing projects to mitigate the impacts of our fishery and grant high standards of monitoring. This Code will be revised annually to include the most relevant decisions made each year, voluntarily, or in the frame of the IOTC, EU or national management plans.

This Code is supported by our ongoing Fisheries Improvement Program SIOTI (https://fisheryprogress.org/fip-profile/indian-ocean-tuna-purse-seine-sioti) that aims at improving the fishery to a point at which it will meet the standards of sustainable fisheries of the Marine Stewardship Council (MSC).

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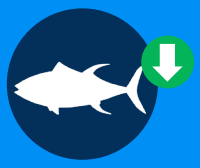
Best Practices on Tuna Purse-seining and Bycatch mitigation

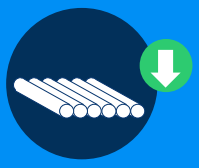
What are bycatch species? SIOTI member fleets target tropical tunas in the Indian Ocean both in free-swimming schools and on FOBs. Non-target species can be found in association with tropical tunas. Traditionally, fisheries scientists distinguish incidental interactions with sensitive species (sharks, whale sharks, rays, sea turtles, cetaceans) from bycatch (unvoluntary catches of non-sensitive species of fish). This section describes SIOTI member fleet commitments to mitigate bycatch in the Indian Ocean.

THE MANAGEMENT MEASURES

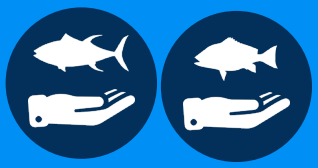


Adoption catch limits

Catch and activities on FADs reporting



Limitation of FADs and support vessels



Ban on discards (some species)

National FAD management plans

OUR VOLUNTARY COMMITMENTS

100% observer coverage of purse seiners

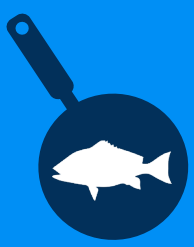
Collaboration with national scientists

OUR ONGOING PROJECTS

High standard scientific data collection by observers

Avoid fishing on small FAD schools

Assessment of bycatch survival



Bycatch utilization

Adapted releasing devices, vessel configuration and fishing crew training

SIOTI ANABAC ORTHONGEL

Best Practices on Tuna purse seining and Bycatch mitigation

The management measures

IOTC Resolution 19/01 and IOTC Resolution 16/02 establish yellowfin catch limits for all fishing vessels targeting tuna and tuna like species and harvest control rules for skipjack tuna in the Indian Ocean.

All data reporting requirements (catches, activities on FADs, vessel positions) are daily completed and transmitted to national administrations; and periodically submitted to IOTC as adopted in IOTC Resolution 15/02.

Bycatch of non-target species can be higher when fishing around FADs than on free schools. Activities on FADs is limited in the Indian Ocean and the number of support vessels, that assist purse seiners in their use of FADs, is limited in IOTC Resolution 19/02.

In the Indian Ocean, except for fish considered unfit for human consumption, IOTC Resolution 19/05 prohibits the discard of bigeye, yellowfin, skipjack and to the extent practicable of other tunas, rainbow runner, dolphinfish, triggerfish, billfish, wahoo, and barracuda.

All CPCs fishing on FADs have to submit, annually, a FAD Management Plan to IOTC. Among others, this document can describe further requirements on FAD structure than those required by IOTC Resolution 19/02.

Our voluntary commitments

100% observer coverage (by onboard or electronic observers) should be guaranteed by SIOTI member fleets. Among others, observers collect information on the size of fish, number of interactions with bycatch individuals and the fate of these individuals.

SIOTI member fleets actively collaborate with national scientists by participating to research programs and providing useful information, such as observer data from voluntary observer programs and FAD acoustic records data, without interfering with the work of scientists.

Our ongoing projects

High standards are currently being developed to ensure the best observer data quality possible. This includes the individual training of onboard observers, the full validation of electronic monitoring systems or the combination of these two types of scientific observation.

A large proportion of bycatch species should not be discarded in compliance with IOTC Resolution 19/05. However, local markets will be evaluated with the aim of further reducing discards through bycatch utilization.

For the same amount of loaded tuna, it has been observed that the amount of bycatch is constant no matter the size of the tuna aggregation. SIOTI fleet members should avoid fishing on aggregations with an estimated biomass of less than 10 tons in order to reduce the amount of bycatch.

Information on the fate of bycatch is collected through observer programs. Data are currently explored to monitor the amount of bycatch released alive in the future.

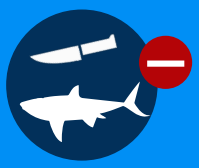
Safe releasing tools and devices are currently being tested to facilitate the fast and safe release of some bycatch individuals, which could enhance their survival. Some of the releasing tools (discard belts and sorting grids) and techniques used for sensitive species are being tested and implemented depending on vessel configuration.

Best Practices to prevent the mortality of sensitive species

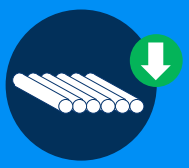
What are sensitive species? Sensitive species are species of sharks, whale sharks, small rays, mobulid rays or cetaceans incidentally caught by tropical tuna purse seiners. Though such unvoluntary interactions are scarce compared to other fishing gears, SIOTI member fleets are committed to avoid the mortality of sensitive species found in association with targeted tropical tunas in the Indian Ocean.

THE MANAGEMENT MEASURES


No intentional fishing set on whale sharks and cetaceans



No shark finning

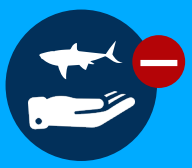


Limitation of FADs and support vessels

Non entangling FADs since 2012

OUR VOLUNTARY COMMITMENTS


100% observer coverage of purse seiners



No shark retention

Safe releasing techniques

Collaboration with national scientists

OUR ONGOING PROJECTS


High standard scientific data collection by observers


Prevention of incidental interactions and assessment of survival


Adapted releasing devices, vessel configuration and fishing crew training

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Best Practices to prevent the mortality of sensitive species

The management measures

No intentional fishing set should occur on tuna schools associated with whale sharks or cetaceans. When unvoluntary interactions occur, captains must report this information in their logbook and fishing crews should make all the necessary efforts to release the animal unharmed as fast as possible. IOTC Resolutions 13/04 and 13/05

When incidental catches of sharks occur, shark finning is strictly prohibited, even if the animal is dead. IOTC Resolution 17/05

As fishing on floating objects increases the risk of interactions with sensitive species, the use of Fish Aggregating Devices (FADs, man-made objects deployed to attract tunas) is limited in the Indian Ocean. The number of support vessels, that assist purse seiners in their use of FADs is also controlled. IOTC Resolution 19/02

The use of non-entangling FAD designs is mandatory to reduce the risk of entanglement of sensitive species. In the Indian Ocean, captains must report on the use of non meshed elements for the construction of FADs in their logbooks. IOTC Resolution 19/02

Our voluntary commitments

All fishing trips should be covered by a well trained scientific observer, whether present onboard or reviewing records of fishing operations remotely (Electronic Monitoring Systems). Among others, observers collect information on the number of interactions with individuals of sensitive species, the application of safe releasing techniques and the state of the animals when released.

Even for the individuals arrived dead onboard, the voluntary retention of sharks or parts of the shark body is not allowed to encourage the fast and safe release of live sharks by fishing crews.

A manual of safe handling techniques, that ensure the fast release of individuals of sensitive species while granting the security of fishing crews, is in use since 2012. Captains, second captains and bosuns should be trained to these techniques.

SIOTI member fleets actively collaborate with national scientists by participating to research programs and providing useful information, such as observer data from voluntary observer programs and FAD acoustic records data, without interfering with the work of scientists.

Our ongoing projects

High standards are currently being developed to ensure the best observer data quality possible. This includes the individual training of onboard observers, the full validation of electronic monitoring systems or the combination of these two types of scientific observation.

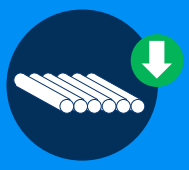
In collaboration with scientists, SIOTI member fleets participate in the development of techniques to prevent the incidental catch of sensitive species and assess their survival after an incidental interaction. This includes for example avoiding fishing in hotspots of presence of these animals or investigating the post-release survival of sensitive species handled with safe releasing techniques.

Safe releasing tools, such as sorting grids and improved vessel configurations are currently being developed to facilitate the fast and safe release of large and dangerous animals. Vessel specific training sessions, adapted to each particular vessel configuration will be tested.

Best Practices to minimize impacts on habitats and ecosystems

Why and how minimizing the impacts of the fishery on habitats and the ecosystem? In recent years, marine litter has become a growing concern in all oceans. This section describes actions that are or could be taken by SIOTI members regarding the loss of their FADs, waste management for purse seiners and the retrieval of polluting debris at sea.

THE MANAGEMENT MEASURES

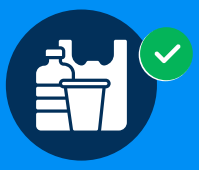


Limitation of FADs and support vessels

National FAD management plans

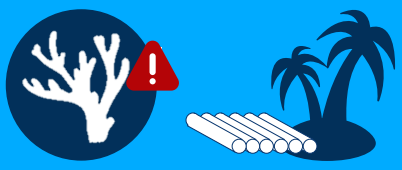
Reporting of all activities on FADs

Biodegradable FADs by 2022



Waste management

OUR VOLUNTARY COMMITMENTS



Prevention of FAD stranding and stranded FAD recovery in Seychelles

Collaboration with national scientists

100% observer coverage of purse seiners

OUR ONGOING PROJECTS

Biosourced materials for FAD construction

Retrieval of FADs

Promotion of the recovery of polluting marine debris

Assess and reduce the impacts of FADs on ecosystems

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Best Practices to minimize impacts on habitats and ecosystems

The management measures

As FAD must be deployed by a tracking buoy attached, the limitation of FAD and their tracking buoys is the most efficient tool to reduce the number of FADs lost at sea. Each purse seine vessel may have a maximum of 300 FAD tracking buoys in use at any one time and may acquire annually no more than 500 buoys.
IOTC Resolution 19/02

All CPCs fishing on FADs should submit, annually, a FAD Management Plan to IOTC. Among others, this document should include plans for the monitoring and the retrieval of lost FADs. IOTC Resolution 19/02

All activities on FADs have to be reported on the logbook: structure of FAD deployed, tracking buoy number attached to the FAD, visit/fishing set/loss. All FADs must be deployed by a tracking buoy attached, with a clear identification of such tracking buoys. IOTC Resolution 19/02

Purse seiners are encouraged to identify biodegradable materials for the construction of their FADs, for a transition to biodegradable FADs in 2022. The design of tracking buoys, that allow monitoring the number of FADs and their position, will remain unchanged. IOTC Resolution 19/02

All ships must keep on board and dispose non organic waste in port upon arrival. They should comply with conditions for the disposal of garbage at sea. MARPOL ANNEX V

Our voluntary commitments

To prevent damage to coral reefs and other sensitive habitats, SIOTI members are working on a project to intercept FADs before they strand. This project, called FADWATCH, will be set on 5 atolls across Seychelles.

SIOTI member fleets actively collaborate with national scientists by participating to research programs and providing useful information, such as observer data from voluntary observer programs and FAD acoustic records data, without interfering with the work of scientists.

Training observers and fishing crews allows them to better fill scientific observation forms and logbooks. The quality of these data guarantees a good knowledge of the activities on FADs during the fishing trip.

Our ongoing projects

Research and tests of biodegradable materials is currently being conducted for the construction of FADs. Biosourced materials are prioritized to reduce the environmental impacts of FADs at the time of their construction.

SIOTI member fleets support the work of scientists to improve the understanding of FADs on marine and coastal ecosystems (ecological trap effect of FADs, potential for spatial management of FAD deployments...).

The replacement of entangling elements of FADs encountered at sea and the retrieval of damaged FADs at sea are currently being tested by SIOTI member fleets.

SIOTI members fleets are encouraged to recover polluting marine debris found at sea by their vessels (e.g plastic debris, old pieces of fishnets…).

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