

Project-specific management of a pole and line skipjack tuna (*Katsuwonus pelamis*) and albacore tuna (*Thunnus alalunga*) fishery in FAO area 27.10 (Azores) and 34.1.2 (Madeira)

The project-specific management conditions have been worked out from suggestions of the expert surveys on 15th July 2019 in Horta, Faial in Azores.

1. Expert meeting

1.1 Besides the general regulations for sustainable fishery listed in Part B, project-specific management conditions are imposed on each fishery project. Taken together with the regulations under B. 2.-4., these special conditions constitute a catalogue of measures to be adopted in the management plan and quality assurance system of the project. The conditions are the result of an expert survey of each fishery project to be performed. Naturland decides whether to accept the list of experts proposed either by the fishery project or a third party and can, where justified, reject the list or ask for changes to be made. The experts on the list should cover the following fields:

- scientific institutions which deal with the respective type of fishery (primarily for current information on the status of the stock and on the aquatic ecosystem)*
- fishing authorities (legal requirements, national and international development aims)*
- NGOs (social and ecological aspects)*
- organisations from the fishing and/or processing industries (technical, social and economic aspects).*

1.2 To ensure that the regulations compiled in the project-specific management conditions are kept up to date, each expert survey is performed every two years at the minimum. In principle, the fishery project bears responsibility for the expert survey being performed according to schedule. This also holds true for the case that the project has to supply the experts with pertinent data for them to be able to assess the situation of a fishery. The project-specific management conditions for each individual fishery project must be approved by Naturland.

source: Naturland Standards for Sustainable Capture Fishery; Part B

The following topics include the project specific management conditions:

1.2. The next expert survey should take place in December 2021 the latest.

The following topics will be discussed:

- Observation of bait stock
- Continuous research of dolphin bycatch

2. Ecology

2.1 The project performs its fishing activities in such a way that integrity of the ecosystem is maintained long-term, concerning both the stocks of the economically relevant species as well as the other components of the ecosystem.

2.2 Subject of the evaluation is the geographical catchment area of the respective fishery project or the project's share in the total exploitation of a certain species.

2.3 In the case of species which only occur temporarily in the catchment area of the project, or which do not spend their whole life cycle there, an evaluation is made of whether the management form of the project were compatible with maintaining the total stock volume if this management form were adopted by all the enterprises involved in fishing this species in this way (exemplary character).

2.4 Naturland reserves the right not to perform certification or to suspend the procedure if management of the fishery is not guided by the concept of the maximum sustainable yield (MSY), i. e. the fishing mortality rate must be below F_{msy} ($F < F_{msy}$) and the biomass of the spawning stock (SSB) must be greater than or equal to $MSY \cdot B_{trigger}$ ($SSB \geq MSY \cdot B_{trigger}$). Should no reference values be available for certain species, then as an alternative certification may be performed on the basis of the life span and manner of reproduction.

2.5 If no exclusively used geographic area can be attributed to the project (e.g. in deep-sea fishery), the evaluation is made based not only on the fishing practices of the project but also on the total situation of the stocks in question.

2.6 Practices which are generally deemed as detrimental or critical from an ecological point of view are prohibited. These include the following regulations in addition to the project-specific management conditions defined:

- catching marine mammals and ocean turtles*
- catching sharks for their fins ("finning")*
- the use of poisons and explosives in fishing*
- damage to coral reefs (including cold-water corals)*
- beam trawl fishing as well as demersal trawling on highly structured sea beds*
- demersal trawling without suitable escape hatches to keep bycatches to a minimum.*

2.7 The project-specific management conditions govern the following in particular:

- minimum size and maximum quantities*
- equipment and techniques employed*
- close seasons and sanctuaries*
- avoidance or minimization of bycatches*
- other measures which help to protect the aquatic ecosystem and/or individual species (e.g. protection of breeding colonies)*
- protocols for monitoring of relevant pollutants, determination of specific alert/reporting values and threshold values.*

The following topics include project specific management conditions:

2.4. The International Commission for the Conservation of Atlantic Tunas (ICCAT) is the body responsible for assessing the status of tuna populations in the Atlantic Ocean. The latest stock assessments of the two skipjack stocks (eastern and western) suggest that the stocks are neither overfished nor subject to overfishing. The link to the latest ICCAT stock assessment summary for skipjack tuna can be found here:

https://www.iccat.int/Documents/SCRS/ExecSum/SKJ_ENG.pdf

https://www.iccat.int/Documents/Meetings/Docs/2021/REPORTS/2021_SCRS_ENG.pdf

The most recent ICCAT stock assessment of the north Atlantic albacore tuna stock suggests that the stock is not in an overfished state and that overfishing is not likely to occur. Catches of this stock are below MSY. The latest ICCAT summary report of the Atlantic albacore stock status can be found here:

https://www.iccat.int/Documents/SCRS/ExecSum/ALB_ENG.pdf

https://www.iccat.int/Documents/Meetings/Docs/2021/REPORTS/2021_SCRS_ENG.pdf

ICCAT has adopted a harvest control rule (HCR) for the management of the northern albacore tuna fishery.

The spawning biomass (SBB) for skipjack tuna and albacore at all catching areas is at or above the biomass that would produce maximum sustainable yield (SSB_{MSY}).

2.7 a) The restrictions on the Total Allowable Catch (TAC) are defined by the International Commission for the Conservation of Atlantic Tunas. There is no minimum size and no TAC for skipjack tuna.

The TAC for northern Albacore tuna is defined at 33,600 t for the period 2018-2020 (see attachment)¹. TAC for the southern Albacore tuna is defined at 24,000 t since 2011. Minimum sizes were not defined for this specie¹.

b) The eastern/ western Atlantic skipjack stock is not critically jeopardized.

The northern/southern Atlantic albacore stock is not critically jeopardized.

c) The fishery of Associação de Produtores de Atum e Similares dos Açores (APASA) is carried out exclusively with pole and line.

The bait fishery is in compliance with European regulations².

The only fishing gears used for the bait fishery are small purse seines. There is no bycatch of marine mammals. Every possible bycatch e.g. of ETP species will be released alive.

d) Fish Aggregating Device (FAD's) are not used to attract tuna schools within this fishery.

e) The ratio of the baitfish in the skipjack fishery is optimized with a ratio of 26:1 kg.

f) The fishermen respect the marine protected areas.

g) Each landing of the fish is controlled and documented by the fishing authorities.

¹ The quota for the north Atlantic Albacore in 2019 for Portugal was 1994,20 t and 633,94 t for the southern Atlantic Albacore.

² <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0022:0061:EN:PDF>

h) Bycatch of ETP species and marine mammals is very uncommon and will be released alive and carefully, if caught.

i) The tuna is immediately slaughtered by hand when arriving on board.

j) The fishermen try to avoid juvenile fish to minimize the percentage of undersized fish in the catch.

k) Scientists and observers have the permission to accompany the fishing vessels for research purposes.

l) Programa de Observação para as Pescas dos Açores (POPA) observers accompany at least 90 fishing trips per year on pole and line tuna fishing boats.

<http://www.popaobserver.org/>

m) In cooperation with POPA the fishermen follow a waste management plan which include avoidance of waste and the loss of fishing gears, but also collect ocean litter during the fishing trips.

n) The maximum size of the vessels is 30 meters.

o) Protocol for the monitoring of relevant environmental pollutants in the final product are shown in table I

Table I Analytical protocol

Parameter	Interval	Alarm value	Limit value	Limit of detection
<i>Example</i>	<i>annually</i>	<i>xx mg/kg</i>	<i>xx mg/kg</i>	<i>xx mg/kg</i>
Heavy metals:				
Cadmium (Cd)	annually	0,025 mg/kg	0,05 mg/kg	0,005 mg/kg
Lead (Pb)	annually	0,15 mg/kg	0,3 mg/kg	0,01 mg/kg
Mercury (Hg)	annually	0,25 mg/kg	0,5 mg/kg	0,01 mg/kg
Dioxins:				
Sum of dioxins (WHO-PCDD/F-TEQ)	annually	1,75 pg/g	3,5 pg/g	0,5 pg/g
Sum of dioxins & dioxin like PCBs (WHO PCDD/F-PCB/TEQ)	annually	3,25 pg/g	6,5 pg/g	0,5 pg/g
Sum of PCB28, PCB52, PCB101, PCB138, PCB 153 and PCB 180	annually	37,25 ng/g	75 ng/g	-
Microbiology:				
Total bacterial count	annually	5x10 ⁶ CFU/g	10 x 10 ⁶ CFU/g	< 10 ² CFU/g
Listeria monocytogenes	annually	-	detected in 25 g	-
Salmonella	annually	-	detected in 25 g	-
Other:				
Radiation	annually	50 Bq/kg	100 Bq/kg	3 Bq/kg
Histamine	annually	100 mg/kg	200 mg/kg	5 mg/kg
TBT	annually	0,01 mg/kg	0,01 mg/kg	0,01 mg/kg
Please add any further testing parameters below, such as regionally				

3. Social and economic sustainability of the fishery

3.1 Naturland's standards governing social responsibility apply (ref. A.III. of these standards).

3.2 In addition, allowances have to be made for the situation of many fishermen in the developing countries. Fishery projects (resp. the processors or exporters of the fishery produce) bears responsibility not only for the fishermen to meet with fair working conditions (ref. A. III), but also for adequate living conditions out of working hours. Depending on socio-economic circumstances, those responsible must introduce the requisite measures in a suitable manner. These include especially:

- *adequate board and lodging*
- *access to banking and insurance services*
- *health care*
- *schooling for the children*
- *transport possibilities*

This is especially applicable if the fishermen and -women are not capable of fulfilling these basic needs from the sale of their products. This is the case, for example, when there is a glut or where seasonal yields fluctuate dramatically, and in cases of over-dependence on fishing as the sole source of income.

3.3 The project-specific management conditions govern, in particular:

- *special social aspects, particularly in relation to the situation in developing countries*
- *measures designed to avoid conflicts with other users of the resources*

source: Naturland Standards for Sustainable Capture Fishery; Part B

The following topics include project specific management conditions:

3.3.

- a)** All fishermen and workers are employed by the vessel owners or the canning factory and receive at least the national minimum wage.
- b)** The fishermen follow a code of conduct and are regularly instructed in safety issues.
- c)** The processing company Santa Catharina at Sao Jorge provides jobs for the people living on the island and secures their livelihood.
- d)** Most of the work is done by hand.
- e)** Santa Catharina supports financially the public transport for school children on the island.
- f)** The whole fish and all leavings are being processed.
- g)** The processing of the fish is exclusively taking place at Sao Jorge.
- h)** The tuna is immediately slaughtered by hand when arriving on board and cooled at -2°C before being landed at the harbor.

4. Legal framework and management

4.1 Fishing is performed in compliance with national and international law. The fishery project has to be able to produce the corresponding documents and proof in full and freshly updated.

4.2 The fishery project (or the processor or exporter of the fishing produce) is responsible for its staff and workers being familiar with the contents of these standards. Appropriate training sessions and material have to be provided to guarantee that the catalogue of measures is complied with.

Part B.; Regulations for sustainable capture fishery

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4.3 The management of the fishery project must be able to prove that the requirements laid down in the standards and the project-specific management conditions are implemented systematically, effectively and promptly at every level. This proof includes:

- consistent records and analysis of the catch data*
- feedback between the current catch data and the fishing practice in place*
- knowledge of current national and international regulations and fulfilment of the duties arising therefrom*
- establishment of mechanisms guaranteeing regular communication between the project and the fishermen with regard to social matters*
- existence of and compliance with a development plan (e.g. for deficient issues)*

4.4 The project-specific management conditions govern in particular:

- obligatory documentation requirements and internal control system.*

source: Naturland Standards for Sustainable Capture Fishery; Part B

The following topics include project specific management conditions:

4.1 A central fishing vessel registry is maintained; only registered vessels that have been granted a fishing licence may engage in commercial fishing.

4.2. The CEO of APASA confirms with his signature that he will comply with the Specific Guidelines listed here and agrees to the notified or unannounced check by a control body.

4.3 Before embarking on a fishing trip, the vessel 's operators must ensure that the vessel has quota registered which suffices for the expected catch.

4.4.

a) The fish can be traced back to the vessel by time and catch area.

b) Each landing is controlled and weighed in the harbor. Recording of vessel catch quotas and catches is done by the Fisheries Authority.



Appendix:

ISSF report 2019:

The ISSF (International Seafood Sustainability Foundation) Technical report of 2019 for **Eastern Atlantic Skipjack Tuna** stock:

1. The ratio of $F_{current}/F_{MSY}$ is likely below 1.0, indicating that overfishing is not occurring.
2. The ratio of spawning biomass $SSB_{current}/SSB_{MSY}$ is likely above 1.0, indicating that the stock is not in an overfished state.
3. The value of MSY is probably higher than previously estimated (143,000-170,000 tonnes).

STOCK ABUNDANCE		$SSB > SSB_{MSY}$.
FISHING MORTALITY		$F < F_{MSY}$.

The ISSF (International Seafood Sustainability Foundation) Technical report of 2019 for **Western Atlantic Skipjack Tuna** stock:

1. The ratio of $F_{current}/F_{MSY}$ is around 0.7, indicating that overfishing is not occurring.
2. The ratio of spawning biomass $SSB_{current}/SSB_{MSY}$ is close to 1.3, indicating that the stock is not in an overfished state.
3. The value of MSY is around 30,000-32,000 tonnes).

STOCK ABUNDANCE		$SSB > SSB_{MSY}$.
FISHING MORTALITY		$F < F_{MSY}$.

The ISSF (International Seafood Sustainability Foundation) Technical report of 2019 for **North Atlantic Albacore Tuna** stock:

1. The ratio of $F_{current}/F_{MSY}$ is estimated at 0.54 (range 0.35-0.72), indicating that overfishing is not occurring.
2. The ratio of spawning biomass $SSB_{current}/SSB_{MSY}$ is estimated at 1.36 (range 1.05-1.78). This indicates that the stock is not in an overfished state.
3. MSY is estimated at 37,100 tonnes. Current (2017) catch is 28,300 t. Catches have been below MSY level since 2007.

STOCK ABUNDANCE		$SSB > SSB_{MSY}$
FISHING MORTALITY		$F < F_{MSY}$. There is a TAC to reduce fishing mortality that has been set following scientific advice to rebuild the stock.

In 2017, as a result of applying the HCR, a three-year constant annual TAC of 33,600 t was established for the period 2018-2020; and the minimum fishing mortality (FMIN) was set at $0.1 * F_{MSY}$.

The ISSF (International Seafood Sustainability Foundation) Technical report of 2019 for **South Atlantic Albacore Tuna** stock:

1. The median ratio of $F_{current}/F_{MSY}$ in 2014 is estimated at 0.54 (range 0.31-0.87), indicating that overfishing is not occurring.
2. The ratio of biomass $SSB_{current}/SSB_{MSY}$ in 2015 estimated at 1.10 (range 0.51-1.80). This indicates that the stock is not in an overfished state.
3. MSY is estimated at 25,900 tonnes. Current (2017) catch is 13,800 t.

STOCK ABUNDANCE		$SSB > SSB_{MSY}$.
FISHING MORTALITY		$F < F_{MSY}$. The overall TAC has been lowered to 24,000 t following scientific advice to allow the stock to rebuild. Catches since 2013 have been below this level.

Since 2011, following SCRS advice, the TAC was lowered to 24,000 t (ICCAT Recommendations 11-05 and 13-06). However, permissible catch under the Rec. 16-07 exceeds 24,000 t due to individual allocations. The recommendation requires major fishing countries to improve their monitoring and reporting of catch.

Source:

ISSF. 2019. Status of the world fisheries for tuna. Mar. 2019. ISSF Technical Report 2019-07. International Seafood Sustainability Foundation, Washington, D.C., USA.

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