

Suggested improvements to 19/02 that will ensure the effective management of dFADs

By - KENYA and like-minded proponents

Summary

Noting concerns of non-compliance provided to the IOTC Compliance Committee in May 2022 through submissions [IOTC-2022-CoC19-INF03 Rev2](#) and [IOTC-2022-CoC19-INF04](#), Kenya proposes various improvements to Resolution 19/02 in follow up to submission [IOTC-2022-S26-REF06](#) as below:

- Implement a dFAD Register, following at minimum the requirements listed in [IOTC-2022-S26-REF06](#)
- Implement precautionary limits on the number of dFADs that may be deployed and registered to any vessel in the dFAD Register, following at minimum the requirements listed in [IOTC-2022-S26-REF06](#)
- Apply an oceanwide dFAD closure of at least three months, with a 15 day period in advance during which dFAD deployments are prohibited and any fished dFADs must be retained by that vessel to reduce the likelihood of dFAD loss during the closure period
- Implement a dFAD Monitoring System that is developed and administered by an independent third party, following at minimum the requirements listed in [IOTC-2022-S26-REF06](#)
- Improve dFAD marking, reporting and compliance obligations following at minimum requirements listed in [IOTC-2022-S26-REF06](#)
- Immediately prohibit the deployment of dFADs that are not fully constructed of biodegradable materials or are an entanglement risk due to having any netting or other meshed materials in their design.
- Require the immediate removal from the ocean of any dFADs that are currently constructed of non-biodegradable materials or contain entangling netting.

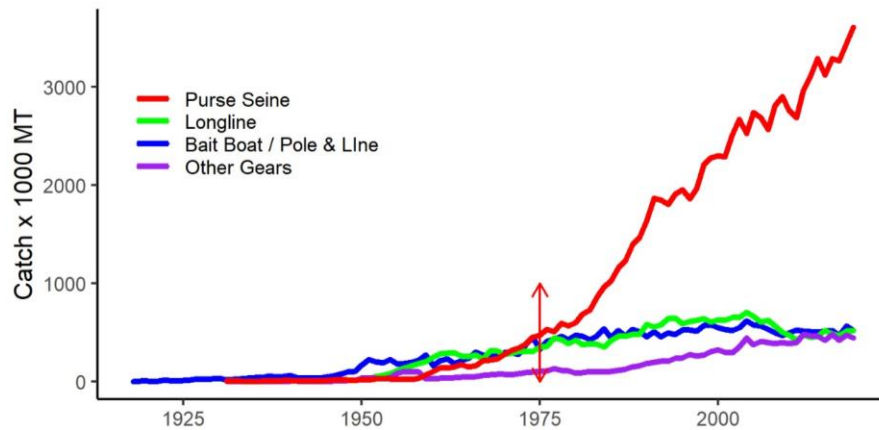
Issue context

The exponential growth of purse seine harvests that [now account for over 47% of Indian ocean wide juvenile yellowfin tuna harvests](#), over 10% more than the proportion harvested by gillnets, has been facilitated by the use of dFADs. Harvesting such large numbers of juvenile yellowfin tuna contradicts key principles of sustainable fisheries management. Therefore, the impacts of dFADs are inextricably linked to the overfished state of the region's yellowfin tuna stock since 2015. The use of dFADs has now become a key concern for the sustainability of yellowfin and bigeye tuna stocks across all tropical oceans. The commercial construction and deployment of dFADs since the mid-70s facilitated and maintained a remarkable increase in purse seine global harvests (Figure 1), The scale of this issue is very clear below, and scientific management has, thus far, been compromised by a lack of data provision and general transparency in purse seine fleets' use of dFADs.

Issues with FAD use and management, as well as priorities for improvements, have been identified and discussed for a number of years. Back in 2017, at the beginning of the first Joint Tuna-RFMO FAD Working Group, the Chair highlighted the impacts of FADs on fish stock dynamics and the wider oceanic ecosystem through by-catch, pollution and habitat damage. The report of this meeting warned that the continued growth of dFAD use in tuna fisheries could increase overall fishing pressure on tuna stocks (and in particular juveniles) unless mediated by adequate management measures. Priorities for improving FAD management were also identified at the Second Joint Tuna-RFMO FAD Working Group meeting in 2019. These priority actions included that tuna-RMFOs develop and define FAD management objectives, explore a system for marking both buoys and FADs, make high-

resolution buoy position data available for research purposes and, as a matter of priority, implement systematic monitoring and reporting procedures on the number of active FADs/buoys in the waters of the different RFMOs in order to manage their impacts on fish stocks and the wider ocean ecosystem.

Figure 1 - Global catch of tropical tuna from 1918 to 2019, with red arrow indicating the industrial construction and deployment of dFADs starting in mid 70's (Source = FAO Global Tuna Atlas Nominal Catches)



The 2nd IOTC *ad hoc* FAD Working Group (WGFAD) October 2021, further noted the need to quantify the contribution of dFADs to marine pollution and ecosystem damage in the Indian Ocean, also noting that fleets should be in compliance with international pollution laws, including MARPOL Annex V and the London Convention. Solutions have been available for this for some time, including constructing FADs from biodegradable materials and without netting or other meshed materials used in their design. The WGFAD noted that while some progress was being made in terms of fleets adopting biodegradable FAD designs, with some variability between companies, there is still much work required to roll these out across the wider Indian Ocean region.

Engangling and non-biodegradable FADs

Information Paper [IOTC-2022-CoC19-INF04](#) submitted to the IOTC Compliance Committee in May 2022 discussed the lack of compliance with biodegradability requirements, while Information Paper [IOTC-2022-CoC19-INF03 Rev2](#) highlighted systematic non-compliance with Resolution 19/02. Developing coastal state governments in the western Indian Ocean region remain concerned that, based on further dFAD recoveries since May 2022, such systematic non-compliance with Resolution 19/02 appears to be ongoing.

It is clear that amendments are required, aligned with prior recommendations, to further strengthen Resolution 19/02 and mitigate the ecological impacts associated with dFADs. Our proposal 22/XX (IOTC-2022-S26-REF06[E]) aimed to effectively reduce the negative impacts of dFADs in the Indian Ocean, including reducing the harvests of juvenile tropical tunas around dFADs as a means of supporting and finally enabling rebuilding of the Indian Ocean yellowfin tuna stock as envisaged under Resolution 21/01. That proposal also followed up on the 20th Scientific Committee's request that FAD ownership form part of the mandatory information to be collected by. Noting that IOTC, along with other tuna RFMOs, recommended and adopted resolutions to promote reduction of the amount of synthetic marine debris by using natural or biodegradable materials for dFADs, the proposal also addresses this issue by strengthening the existing rules.

Proposed adjustments to 19/02 and their rationale

This paper aims to further build on submission [IOTC-2022-26-REF06\[E\]](#), explaining the rationale for suggested changes to Resolution 19/02 to ensure full clarity and support for genuinely improving the management and sustainability of FAD fisheries throughout the Indian Ocean. Implementing the proposed improvements to 19/02 would support application of a sustainable, precautionary and ecosystem-based approach to fisheries management in alignment with the IOTC mandate.

Kenya's submission during the 26th Annual Session of IOTC saw key adjustments made to the resolutions to manage [drifting](#) and [anchored](#) FADs. These two FAD designs are not comparable in design, supported fleet sectors & stakeholders, technology and linked data provision potential, frequency of deployment & loss, or in the ghost fishing, pollution and habitat damage they cause. Therefore, it is logical to intentionally split the two to streamline the management of, and negotiations around, both FAD designs and management measures.

We suggest adjusting the FAD definition to become *“a FOB, which is deployed and/or tracked, for the purpose of aggregating target tuna species for consequent capture”*. This text tightens the definition in alignment with the one for a Floating Object (FOB) while adding improved clarity through removal of the definition for a “Log” which could otherwise be used to introduce ambiguity to negotiations according to whether a FAD is made of natural materials or accidentally lost through anthropogenic activities. Clear and unambiguous definitions are critical pre-requisites for effective fisheries management, so we hope that agreement can be achieved on a revised definition that covers all dFAD designs and does not contain any ambiguity.

dFAD Register

Secondly, we propose the implementation of a public dFAD Register, reminiscent of the [IOTC record of authorized, active and IUU vessels](#). Enabling the monitoring, control and surveillance (MCS) needed to enforce rules and regulations in the use of these devices is essential to achieve the transparency and data flow required to enable the sustainable management of dFAD fisheries. To do so, the dFAD register should, at minimum, meet requirements suggested in [IOTC-2022-S26-REF06](#) and all information on the dFAD register must be made publicly available to all stakeholders on the IOTC website. The systemic non-compliance with 19/02 illustrated through submission [IOTC-2022-CoC19-INF03_Rev2](#) demonstrates consequences of the current lack of dFAD operation transparency that are persisting in the meantime. This data has been previously unavailable to the public under claims of “commercial confidentiality” from the industry, however, as recognised under international law, the interests of companies should never override the interests of other stakeholders, particularly coastal communities and small island developing states most critically reliant upon marine ecosystem health for their survival. Effective monitoring and governance of dFAD use requires transparent data provision, especially since the data required is received from dFADs operational buoys by the vessels benefitting from their use via satellite in near real time.

In further support of this objective, we suggest that a single vessel is assigned as responsible for a dFAD for its entire lifecycle with the same information maintained on the dFAD Register and no sharing of dFADs be permitted. Precautionary limits must be placed upon the number of dFADs that can be deployed per vessel, not only the number of “active” dFADs or operational buoys. Additionally, FAD set limits are harder to enforce and do not address some key concerns such as pollution, and therefore should not be considered as a management option. The dFAD Register will support monitoring of all these measures.

FAD Closure

Another suggested, and critical, improvement to 19/02 is the implementation of a dFAD closure period. The IOTC is the only tRFMO that does not have a dFAD closure period in place which has certainly been detrimental to stock statuses of yellowfin and other tropical tunas in the Indian Ocean. However, closure periods are already helping maintain or improve tuna stock conditions in all other tropical oceans. A dFAD closure in the Indian Ocean must, at minimum, follow criteria proposed in [IOTC-2022-S26-REF06](#), should occur oceanwide until there is sufficient data and scientific evidence to support a reduced geographic scope, and must occur for a long enough period to enable a positive, stock-wide benefit. Having the closure occur during the peak period of juvenile yellowfin tuna catch by purse seine fleets using dFADs will also provide the greatest benefit to helping rebuild that overfished stock. It's important to note that free school fishing will continue to be permitted during the dFAD closure period, so canneries can continue being supplied with their primary skipjack tuna harvests while having a reduced impact upon yellowfin and bigeye tuna stocks during the selected months.

Pollution and ghost fishing

To mitigate pollution, ghost fishing and other habitat impacts of dFADs when in use and after loss or abandonment, only fully non-entangling and biodegradable designs should be permitted. All dFADs must be marked, at minimum, following guidance put forward in [IOTC-2022-S26-REF06](#) which makes critical provisions in addition to those of the FAO Voluntary Guidelines on the Marking of Fishing Gear. Proposed improvements to 19/02 must seek to facilitate greater transparency, sustainability and accountability for dFADs, while also informing and enabling the future application of a dFAD loss/abandonment reporting mechanism linked to a polluter pays principle. It's worth noting that the polluter pays principle is a principle of EU environmental law enshrined in Article 191 of the Treaty on the Functioning of the European Union, and is regarded as an overarching principle of environmental responsibility. The EU has publicly stated that "in addition to harming the environment, marine litter damages activities such as tourism, fisheries and shipping" and that it "threatens food chains, especially seafood". As part of their Plastics Strategy, the European Commission has further committed itself to look into further action to address marine plastic litter and FADs are specifically mentioned in this document as one of the potential sources of plastic pollution through the abandonment, loss or discarding of fishing gear.

To enable effective management, for all intents and purposes dFADs must also be considered explicitly as a "fishing gear" and managed accordingly with precautionary and ecosystem based measures that protect the shared public resources that their use impacts. Kenya is committed to a sustainable future for these resources in the Indian Ocean, along with all the coastal communities most critically reliant upon them each day, and looks forward to achieving the effective management of dFADs as soon as possible.