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POSITION
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Smart Fishing Initiative

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WWF STATEMENT ON FISH AGGREGATION DEVICES (FADs) IN TUNA FISHERIES

Why are FADs used in tuna fisheries?

A fish aggregation device, or FAD, is simply a floating object that attracts fish. Fishing beside/under FADs takes advantage of the fact that tuna and other pelagic fish naturally congregate around floating objects in the open ocean and can be substantially more efficient than setting on unassociated schools.

There are two main types of FADs: natural and man-made. Man-made FADs can be found either drifting or anchored. Natural FADs are naturally occurring floating objects such as logs and large live marine organisms (whales, whale sharks, manta rays, etc). Fishing around large marine organisms can occasionally kill the marine organism (which are vulnerable due to their life history characteristics).

Purse seine nets are used to encircle a school of fish, with the boat driving around the fish in a circle in a process known as setting. Sets can be placed around free-swimming schools or set on FADs. Restrictions on purse seine sets on dolphins in the Eastern Pacific, as well as the move towards more efficient fishing methods, have resulted in an increase in the use of FADs globally and have become a major tool of the industrialised purse seine fleet. Purse seine FAD-caught skipjack tuna supply the majority of the global canned tuna. Fishing with FADs saves on resources and fuel.

For example, over 90% of purse seine sets on FADs are successful, compared to only 50% of sets around free-schooling tuna, and the total catch of tuna in weight per set is higher in FAD sets relative to unassociated sets¹.

¹ Gilman, E.L.(2011) Bycatch governance and best practice mitigation technology in global tuna fisheries. *Marine Policy* 35: 590–609.

In addition, drifting FADs usually have location devices, which means that they are relatively easy to locate, while free schools are often encountered by chance. Thus, FAD fishing saves time, resources and fuel, and has become a major tool of the industrialised purse seine tuna fleet globally.

FADs are also used by hand line, troll, pole and line and even gillnet fisheries. Livelihoods, food security and the economies of many regions and countries dependent on FAD fishing. In the Coral Triangle, the use of FADs in hand line, troll and pole and line fishing are increasing, and in some cases, have also been used to catch baitfish.

What are the issues with the use of FADs?

Fishing by its very nature impacts the marine environment, yet fish are a vital source of protein and income for communities throughout the world. Fishing on FADs has some major impacts compared to fishing around free schools¹:

- It increases the catch of ‘non target’ species and sizes of tunas (especially undersized, juvenile Bigeye² and Yellowfin)
- There is relatively high bycatch of sharks, other unmarketable species and sizes of fish and other vulnerable species groups
- Without clear ownership they can become persistent marine debris impacting marine habitats such as reefs
- The ecological impact of a network of thousands of artificial drifting and anchored FADs aggregate tunas and other pelagic species from surrounding waters has not been assessed

WWF Views

- The impacts of fishing with a lack of adequate management are further exacerbated by improvements in fishing efficiency, including the use of FADs in purse seining.
- The current use and management of FADs do not meet WWF’s expectations for sustainable fisheries.
- All gear types that use FADs must be adequately managed and their impact on bycatch minimized
- Improvements in fishing gear technology/fishing practices for reducing bycatch in purse seine sets on FADs are in the stage of research and development. With increased investment they promise to be an effective way to mitigate the impacts. These developments include:
 - changes in fishing gear technology
 - development and implementation of management plans to control the number and density of FADs, and
 - time/area closures for purse seine FAD sets that could, in theory, mitigate ecological problems currently associated with purse seine FAD fishing.

² Bigeye is overexploited in some regions and raises an issue of allocation with pelagic long line tuna fisheries that target adult Bigeye for *sashimi* markets

WWF Statement

WWF does not view purse seine sets on large live organisms to be sustainable.

WWF will not promote FADs nor encourage their increased use until their negative consequences (especially in terms of bycatch) are addressed through adequate ecosystem management.

WWF only promotes tuna that is certified by the Marine Stewardship Council (MSC) programme. Unfortunately, no tuna fishery using FADs currently meets MSC certification standards. Therefore, WWF will keep working with the tuna industry and other partners to improve management and conservation practices in tuna fisheries, including the reduction of bycatch associated with FAD fishing.

WWF will:

- Work with fishing industry partners such as the ISSF to increase the understanding of the impacts of FADs on bycatch and ways to reduce these impacts;
- Work with the fishing industry to develop and implement mitigation measures, such as:
 - improving gear technology and fishing practices,
 - changing the use of gear or modifying gear, and
 - delivering training on techniques that minimize FAD impacts;
- Push for regional fisheries management organisations (RFMOs) and national governments to sustainably manage tuna fisheries by imposing appropriate controls on the use of FADs.

These controls include:

- Setting catches at sustainable, science-based levels, retention of all bycatch except living and healthy individuals able to survive if thrown back,
 - Temporary closure of fishing in areas that have a high concentration of small tunas,
 - Increased observer coverage (at least 100% electronic observation), and;
 - Implementation of sufficient management measures to deter Illegal, Unreported and Unregulated (IUU) fishing. This includes S-AIS³ for all purse seine vessels
- Encourage consumers to buy IUU-free, Marine Stewardship Council (MSC) certified tuna.
 - Demand tuna products that can be traced back to the vessel.
 - Work with retailers and brands to encourage moving towards sustainable sourcing (fully traceable, IUU-free and MSC-certified).

³ Satellite - Automatic Identification System

Our Smart Fishing Vision and Goals:

Vision: The world's oceans are healthy, well-managed and full of life, providing valuable resources for the welfare of humanity.

2020 Goals: The responsible management and trade of four key fishery populations results in recovering and resilient marine eco-systems, improved livelihoods for coastal communities and strengthened food security for the Planet.



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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For more information

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