Current and future initiatives for the sustainability of FAD fishing

It is undeniable that the tuna purse seine fishery with FAD has become an important production method for the fleets that develop the activity in the different oceans of the world, because it offers the possibility to generate productivity and increased efficiency mainly catching skipjack and, to a lesser extent, bigeye and yellowfin tuna.

Its ongoing and consolidated development in this industrial fishery has generated various analyzes of its impact on tuna populations and the ecosystem, which have been debated in the scientific and political context of resource management and conservation which are Fishing Regional tuna Fisheries Organizations of all oceans, as well as in various international forums related to fishing, processing and marketing of these species that have become a relevant product of human consumption in different regions of the planet.

The fishing of tuna on FADs has been the subject of strong criticism, particularly by social organizations, which have sought to develop decisions and regulations at the highest political level, based on the best scientific evidence to reduce any negative impacts detected in the work of fisheries management experts.

To define actions to coordinate the efforts of governments, industrial shippers and RFMOs, management plans have been developed and implemented to generate initiatives for sustainable and responsible management of tuna with FADs, essentially in two essential areas: this is to avoid overfishing in some tuna populations and to reduce negative impacts on ecosystems due to mismanagement of bycatch and coastal marine pollution.

In parallel to these needs, growing initiatives have been developed on a permanent basis in the main consumer markets where the final products of tuna are marketed, in order to ensure that external evaluation technical processes guarantee the presence of a complete management system which demonstrates that it is clear that fishing is managed in a responsible and sustainable way, which must lead to recognition through certificates or eco-labels.

These fisheries certification processes have strongly displaced the management of the production and processing industry of these species with the support of social organizations, for which they have developed Fisheries Improvement Projects (PMP or FIP for its acronym) which aim to build or strengthen an integrated management system in coordination with the various fishing stakeholders, in order to comply with the management principles proposed by the different certification entities, which are essentially:

- a) Maintain tuna populations at a satisfactory level below maximum sustainable yield,
- b) Reduce impacts on marine ecosystems, and
- c) Maintain good fisheries management systems at local and regional levels.

For example, in the application of conservation measures for tuna populations that have been adopted by the different RFMOs, they have obtained the ongoing support of tuna owners when they contribute to or provide essential information to build robust information systems. For the necessary scientific analyzes, it was the same in the research projects to study in more detail the dynamics of different populations of tropical tunas.

With respect to technological change processes and the enhancement of crew knowledge in the FADs fishery to reduce impacts on juvenile tuna populations and marine ecosystems in relation to populations affected by bycatch species, as well as due to marine pollution, the industry is making an important contribution through initiatives developed in coordination with governments and RFMOs, but also through its own efforts to achieve significant changes in the environment through Fisheries Improvement Projects (PMP or FIP for its acronym in English), among which we can list:

- a) Use of sonar for detecting juvenile tunas
- b) Use of juvenile tuna exclusion grids
- c) Training programs for masters and crews for the proper management of incidental catches, mainly sea turtle, shark and stingrays.
- d) Development of FADs with untangled material.
- e) Development of FADs with degradable materials.
- f) Collection of FADs to prevent stranding, particularly in areas with sensitive ecosystems.

The different groups of tuna boat owners working on their MPPs have prepared and incorporated in their general policies measures such as:

- a) Codes of good practice for bycatch management
- b) Management plans in FADs fishery.

PMPs and certification or eco-labeling processes for fisheries products have been able to dynamically integrate sustainable management processes into the main links of this chain: shipowners, crewmembers, primary caretakers tuna products processing and marketing companies and especially consumers, these actors, as well as scientists, social organizations, national and regional administrators, will certainly make more effective initiatives necessary for sustainable fishing.