International Consultations on the Establishment of the
South Pacific Regional Fisheries Management Organisation

Eighth International Meeting: Science Working Group

SP-08-SWG-DW-05

REMARKS TO "SPRFMO BOTTOM FISHERY IMPACT ASSESSMENT STANDARD" (BFIAS)
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Undersecretariat for Fisheries – Chile

During the VII Meeting of the DWSG, the creation of a work team was agreed, with the purpose of inter-sessionally compile the concerns and suggestions to the BFIAS, and prepare a revised draft for consideration at the VIII SWG Meeting.

In September 2009 Chile sent a document to the leader of the work team (Kelly Denit) pointing out a number of issues that were matter of concern. Although some observations were included in the revised draft (SP-08-SWG-DW-01), other important aspects – in Chile's view – remain open to careful consideration.

The Chilean delegation to the SWG submits the following items for further discussion:

1.- RANKING OF GEAR TYPES (Item 5.1.7 of the BFIAS)

The BFIAS establishes a hierarchical structure of the gear type according to their degree of impact, based on the research carried out by Chuenpagdee *et al.* (2003). In Chile's view, this classification is not appropriate, as it derives from a study based on surveys conducted in the US fisheries. Therefore, we consider that the terms under which this survey was conducted do not necessarily adjust to the characteristics prevailing in other areas. Thus, we propose that, to hierarchically organize the gear types, based on the impacts on the bottom, more specific-area aspects and fishing operational backgrounds should be considered.

In general, it should be taken into account that fishing, as any other human activity, has effects on the environment, which can reach different degrees depending on intensity, frequency, and location. In the case of trawling nets, the impact on the environment depends on several factors; the most important is the frequency at which a particular area is trawled. An area that is trawled few times a year can resist pressure without permanent alteration. In the same way, if only small areas are trawled, neighboring areas that are not disturbed can contribute to the recovery of disturbed communities, and thus, in general terms, the impact would be reduced and less significant.

The nature of the substrate and other features of the environment also play a role in the degree of impact. Deep-water environments can be less resistant to trawling disturbances than shallow-water environments (continental shelf and superior slope) since deep

environments are normally subject to natural low impact disturbances, so, they are more vulnerable to disturbances of greater magnitude, such as those originated by men.

According to the foregoing, it is estimated that a categorization of gear types, regarding the degree of impact generated, shall be a result of sound and comparable scientific research. Strictly speaking, a gear type cannot be classified in any impact level, because it shall depend on the features of the specific area (type and characteristics of the bottom), on the characteristics of the construction of the gear, on the way it operates, on the particular characteristics of the habitat where it operates, and mainly on the intensity of the fishing operations.

2.- IS ANY DEGREE OF VME INFRINGEMENT ACCEPTABLE?

Taking into account that together with the protection of VME the development of fishing activities is also a common interest, and that in areas where the existence of VME is detected it is possible to conduct fishing activities, subject to management and mitigation measures (which implies that the area will not necessarily be closed to fishing), it is necessary to clarify whether the management measures could include the opening of some fraction of the VME area for fishing, and if so, on what basis or foundation that will be established. This issue has not been considered in the BFIAS.

Niklitschek *et al.* (2008) point out, for example, that in sea mounts corresponding to the Juan Fernandez mountain chain, within the Chilean EEZ, the accumulated surface of the areas trawled during the research period was below 5%, and through an extrapolation from the number of sets conducted historically, it was determined that the affected area would not exceed 14% of the mounts area. Based on these backgrounds, and taking into account that the disturbed area is small, in sea mounts with similar features, and subject to similar fishing regimes, the possibility of not completely closing that VME could be evaluated.

3- GRADUALNESS AT ENFORCING THE STANDARD

Considering that the bottom-fishery impact assessment is carried out according to the guidelines established in the BFIAS, which has been attached some provisions for the case of new fisheries (i.e. experimental and exploratory fisheries), we consider appropriate to stress the concept of gradualness in the practical application of this set of norms or procedures. Thus, the impact assessment process shall not constitute an obstacle for the development of new fisheries. In this sense we must re-examine the implementation of the *"move on"* rule in new fishing areas, as, during the experimental fishing stage, priority should be given to the recording of information for the target species, related fauna and seabed.

4.- NEW DEFINITIONS

As there are no additional documents that clearly define the concepts of experimental and exploratory fisheries, it is important to incorporate these definitions into the BFIAS, considering that there are differences between them, which lead to different treatments in the standard application and in potential management measures, which the Commission might adopt, based on the advice of the Scientific Committee.

5.- DETECTION OF VME IN NEW FISHERIES

Considering that the characteristic of the new fisheries is the scarce information about the species and ecosystem to be intervened, recording and monitoring biological and oceanographic information should be privileged. Thus, strict on board application protocols should be designed, to allow to determine the necessary parameters for VME identification at least in the mid-term.

Although in the case of exploratory fisheries more information is available, in experimental fisheries, the identification of zones containing, or that may contain VME, is generally impossible at the beginning of fishing activities. Then, information collection protocols in the first fishing sets in an experimental fishery, at a determined place (geo-referenced according to the method indicated by the Convention or any other that adequate better to the fishing operational characteristics) should be established.

The information contained in these protocols shall serve to establish the taxonomic groups present, identify those that may constitute evidence of VME, and defining operational guides in the subsequent sets. Catch limits, recurrent group or taxonomic species between fishing sets should be considered while in experimental or exploratory fishing. Likewise considering the information collected, criteria shall be established to take *in situ* management measures, in accordance with an *ad hoc* protocol.

If the existence of VME is established during experimental fishing, a measure should be adopted to prevent possible impacts, such us *the "move on"* rule. However, this measure should only be applied when the zone where the evidence has been found has already been prospected, and when information is available as to allow the confirmation of such evidence.

REFERENCES

Chuenpagdee R., L.E. Morgan, S.M. Maxwell, E.A. Norse & D. Pauly. 2003. Shifting gears: assessing collateral impacts of fishing methods in US waters. Frontiers in Ecology and the Environment, 1(10): 517-524.

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