IFFO RS V2.0

IMPROVER PROGRAMME

IMPROVEMENT RECOMMENDATIONS

Applicant Fishery	Small Pelagic Fishery, Ecuador
Date	August 2018

Introduction

This document uses the gaps identified during an initial fishery assessment conducted on an IFFO RS Improver Programme applicant fishery to produce a list of fishery improvements. The purpose of this list is to enable the applicant fishery to develop an improvement timeline, with measurable deadlines, along which it can progress towards full IFFO RS approval.

It is important to note that this document is **not** an improvement timeline. It represents expert advice to inform the fishery what changes must be made before IFFO RS approval can be achieved. Defining and planning the specific actions to be taken in order to achieve the improvements listed below remains the responsibility of the applicant fishery.

Summary of Gaps Identified

General

Although the fishery is considered to currently meet the requirements of sections M1 and M2, in order to maintain this status the fishery should ensure that transparency and stakeholder engagement continue, particularly as new stock assessments and their associated management recommendations are created, and should continue to publish publically available information on control and enforcement efforts. The improvement timeline should also ensure to take into account any anticipated changes already in motion as a result of recent updates to the fisheries legislation.

A1 – Data Collection (Macarela)

There is evidence of a range of species information being collected at various times, although there is little data publically available beyond landings estimates in recent years. Overall the fishery is very close to achieving a Pass rating against A1.1, due to the extensive landings record, but the lack of clarity on stock structure currently means a Gap is appropriate.

A2 – Stock Assessment (Macarela)

The most recent full stock assessment for the fishery was conducted in 2000, and does not appear to be publically available. Although the availability does impact the scores in this section, it is primarily the lack of a recent stock assessment which results in Gap ratings throughout. In order to pass this section, there must be a regular stock assessment conducted which produces an estimate of the current status of the stock relative to a reference point or proxy, and it must also include a recommendation for total fishery removals. Based on the other documentation available from the INP website, it seems likely that once such a stock assessment exists, it will be peer reviewed and available online, thus meeting A2.4 and A2.5.

A3 – Harvest Strategy (Macarela)

The scientific advice generally appears to be reflected in the actions of managers. Recommendations from scientific reports, such as a stock assessment report, should continue to be implemented by managers. Of particular relevance to this section, in order to achieve a Pass rating the total fishing mortality of Pacific chub mackerel should be limited to a level indicated by scientists to be appropriate. This could be achieved via a quota system, but also further temporal, spatial or licencing restrictions if these can be shown to achieve the desired result.

A4 – Stock Status (Macarela)

This clause can only be met once reference points or proxies have been established for the stock. There is considerable overlap between this clause and A3.3, to the extent that once A3.3 is met this clause will likely also be met. The intent of this clause is to permit stocks which are currently below their limit reference points to remain IFFO RS approved on the condition that fishery removals are prohibited.

Other Type 1 Species

There are a total of nine Type 1 species which must be assessed using either Category A or Category B. For the majority of these species, the main raw data available appears to be landings data. However, there is some evidence that some additional data collection and analysis was conducted during the first half of 2014, as the INP makes summary technical reports available for some months in this period. These reports include an indication of total landings, the locations where removals were made, and comments relating to size sampling of landed fish. More recently, a 2018 hydroacoustic cruise provided additional information for many of the species, including biomass estimates and indications of geographical distribution. A more historical source, a paper published by the INP analysing small pelagic landings between 1981 and 2007, indicates that size frequency data are available for Pacific chub mackerel, thread herrings, Pacific anchoveta (chuhueco), frigate tuna, and red-eye round herring for the period 1999-2007. It is not clear whether similar data have been collected in the interim, but taken together these two sources suggest that there may be more information available for the 'main' species in the small pelagic fishery than have been published on government websites

F1 – ETP Impacts

The Gap ratings in this section are largely the result of limited information on the extent to which the fishery interact with ETP species. Understanding these interactions is key to establishing whether or not they are successfully mitigated. The fishery improvement plan should focus initially on improving the understanding of the extent to which interactions occur, and from their implementing measures to mitigate these interactions. Unpublished observer data may be a useful starting point.

F3 – Ecosystem Impacts

Substantially more information on the potential impacts of the fishery on the ecosystem are required before the fishery can be approved against this section, and the fishery improvement plan should make understanding these impacts and factoring them into management decisions a priority.

Improvement Recommendations

Note, the client group must seek to address all the points below within a recommended improvement timeline of 5 years. Some of the fishery improvements may be closely related to one another and therefore there should be an integrated plan to tackle the issues identified. It is mandatory that the improvement planned are not only policy based but actually result in verifiable changes and/or improvements in the water.

General

1. Ensure stakeholder engagement mechanisms are functional.

2. Ensure reports relating to management activities, stock assessments, data collection, control and enforcement, and other key areas of the fishery management process are made publically available.

Stock Management (Sections A and B)

Under an IFFO RS fishery assessment, all Type 1 species must be assessed using either Category A or Category B. Category A requires more information, but is less conservative. Fishery managers may choose against which Category the improvement plan is working towards approval for each Type 1 species.

The specific improvements required for each stock depend on the choice of Category, as follows:

For Category A Species

3. [A1.1] Collect landings data to indicate total landings from the stock. This also requires an understanding of the biological stock, such that removals by other fisheries can be included if necessary.

4. [A1.2] Collect other stock data sufficient to determine the current stock status – most commonly, an estimate of biomass.

5. [A2.1] Conduct a stock assessment at least every 3 years, which considers all fishery removals and the biological characteristics of the species; [A2.2] provides an estimate of the current status of the stock in relation to a reference point or proxy; [A2.3] and which provides an indication of the volume of fishery removals which is appropriate for the current stock status.

6. [A2.4] Ensure the stock assessments undergo peer review and [A2.5] are made publically available.

7. [A3.1] Implement a mechanism by which total fishery removals can be limited to the level recommended by stock assessments. This does **not** necessarily need to take the form of a quota; any effective mechanism can be implemented. The effectiveness will be demonstrated by meeting requirement A3.2.

8. [A3.2] Ensure that the total fishery removals for the species do not regularly exceed the level recommended in the stock assessment.

9. [A3.3 & A4.1] Implement a mechanism which results in fishery closure when the stock is estimated to be below the limit reference point or proxy.

For Category B Species

10. Establish target and limit reference points (or proxies) for biomass and fishing mortality.

11. Monitor the status of the stock in relation to the reference points.

12. Adhere to the 'Pass' requirements of Table B(a), i.e.:

- Ensure fishing mortality is at or below the target reference point, AND biomass is above the target reference point, OR

- Ensure fishing mortality is below the target reference point, AND biomass is above the limit reference point, OR

- Prohibit removals of the species.

F1 – ETP Impacts

13. [F1.1] Require vessels to record and report all interactions with ETP species.

14. [F1 general] Analyse the impacts of the fishery on ETP species and implement mitigating measures as appropriate.

F3 – Ecosystem Impacts

15. [F3 general] Determine the potential impacts of the fishery on the broader ecosystem, and ensure these impacts are factored into the management decision-making process and stock assessment reports.

16. [F3 general] Determine whether any of the Type 1 species plays a key role in the ecosystem and ensure that this is taken into account in the management decision-making process.