Mexico Gulf of California yellowtail, snappers and groupers - handline/gillnets

Overview

FIP Description

Artisanal fishing in Santa Rosalía-Mulegé has drastically decreased in recent years. Much of the decline is due to the complete collapse of the jumbo squid fishery. As the squid fishery declined, artisanal fishermen shifted their effort to yellowtails, snappers and groupers species, which are now showing signs of overfishing.

The motivation for undertaking this FIP is to enable local stakeholders to improve the biological, social and economic system associated with small-scale fishing in the Santa Rosalía-Mulegé corridor, so that fishers and others who depend on fishing resources are incentivized to implement positive changes, and can share the benefits and enjoy a better quality of life. We believe this is possible if the systems are managed for long-term sustainability, ensuring that the benefits are propagated and enjoyed by future generations.

This multi-species finfish artisanal fishery was selected for a FIP because we believe that it is possible to significantly improve its performance, certainly relative to its existing conditions, so that local fish populations, fishers, buyers and consumers benefit. Whether we achieve this objective depends on our ability to identify the factors that limit or prevent the existing fishery from becoming more productive, stable and resilient to external shocks and to identify measures to overcome these limitations. It also depends on the willingness of local fishers and others to adopt and implement these measures, and the likelihood that, once implemented, these measures will produce the desired results. We believe these results are desirable and achievable.

The potential barriers to achieving sustainability are myriad. However, these barriers could be overcome because:

• There is a long tradition of small-boat (‘pangas’) fishing in the Santa Rosalía-Mulegé corridor;

• Local fishers have the potential to influence the abundance, survival and/or growth of the local fish populations;

• The catches of yellowtail, snappers and groupers is an important source of income for local fishers and the Santa Rosalía-Mulegé community;

• The fisher community from the Santa Rosalía-Mulegé corridor come from similar socioeconomic backgrounds;

their ability to fish (access to permits, equipment, etc.) and the physical, biological, social and economic factors that affect them are common to all;

• There is potential support among the community, institutions, project partners and project funders; and

• There are viable options to improve the fishery in probable future scenarios.

During the Fishery Pre-Assessment, discussions with local fishers, observations of fishing behavior and catch records, and sampling data collected at various fishing ports determined that yellowtail, snapper, and grouper (represented by eight species) dominate catches in the Santa Rosalía-Mulegé corridor, caught with hook and line ("piola," local Mexican name) and surrounding gillnets ("chinchorro") as fishing gear.

Four separate Assessment Units (UoA) were identified to facilitate our fisheries assessment and improvement work plan:

• Yellowtail handline. There is a group of fishers who target yellowtail with handlines. They do not use gillnets during the same fishing days from the same fishing boats. The local yellowtail fishery targets fish from a population throughout the Gulf of California, so the actual population is larger than the geographic area covered by this PA. The yellowtail fishery only occurs when the migratory yellowtail is found in the local area.

• Yellowtail gillnet. A separate, but smaller, number of fishers target the same yellowtail population described above using gillnets, depending on the availability and abundance of this resource. Some fishers can sometimes switch from handlines to gillnets when targeting yellowtail, but not on the same day.

• Snapper handline. Handline fishers go after snappers, available year-round, usually when yellowtail is less available. They do not handline for other species on the same trips and sometimes target snappers and yellowtails during the same fishing trip. Because snappers are relatively territorial, the stock is roughly defined as those that occur within the SRMC geography.

• Grouper handline. A distinct handline fishery occurs by season or availability for grouper species. Some of the same anglers switch from other species to groupers, but usually only target groupers on a given fishing trip. Because groupers are territorial, the stock is roughly defined as those that occur within the geography of the SRMC area.

Because these 4 UoAs represent eight species exploited by two different fishing gears, by the same fishing fleet operating in the same fishing area under the same economic units and commercial fishing permit, recommendations provided by the PA for each one of 4 UoAs were compiled and prioritized within this multispecies finfish fishery to develop the FIP workplan and address the challenges of the fishery to improve its performance against the MSC standards indicators.

Although it is necessary to continue to implement a comprehensive program of monitoring fishing data for separate species and gear in order to detect changes in species abundance and assess species vulnerability to define specific measures and limit threats to the most vulnerable, combining the PA recommendations for this multispecies fishery will allow 1) to harmonize this FIP with other FIPs that are being implemented in other areas of the Gulf of California for the same species, and 2) facilitate the adoption of unified/coherent fisheries management measures within the entire Gulf of California region.

It is also expected that promoting and implementing fisheries enhancement measures for this single combined UoA will indirectly benefit each of the 4 separate UoAs through a potential spillover effect, as measures will be

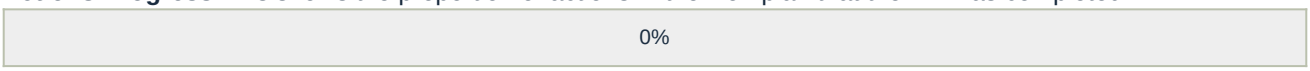
taken for the most vulnerable species.

How is this FIP Doing?

Current Status:

% of Indicators Tracked Basic FIPs may focus their workplans on a subset of the indicators. This shows the proportion of total indicators the FIP is working on.

Actions Progress This shows the proportion of actions in the workplan that the FIP has completed.



Actions Overview This shows the proportion of actions that are behind schedule, on track,completed, or not yet started.

Behind	On Track	Complete	Future
33%	67%	0%	0%

Red Indicator Progress This shows the proportion of actions specifically addressing red indicators that are behind schedule, on track, completed, or not yet started. This helps users understand the progress the FIP is making on the biggest challenges in the fishery.

Behind	On Track	Complete	Future
33%	67%	0%	0%

FIP Progress Rating

D - Some Past Progress

FIP Objective(s)

The objectives of this FIP are:

1. Develop a robust population assessment for the nine FIP target species, define reference points and propose a species and gear specific harvest strategy (October 2022 – January 2025).
2. Evaluate the fishery impact on the ecosystem by: 1) analyzing impacts and interactions of the fishing gears, 2) determining if current catch levels and interactions are putting the ecosystem at-risk, 3) implementing an underwater monitoring program of the fish communities to generate baseline information on the species composition and abundance variations among habitats exposed to different fishing

pressures, 4) and an hydrographic monitoring program to infer potential climate and oceanographic changes impacts on the fishing activity (October 2022-October 2025).

3. Based on the generated biological and ecological data obtained by Action 1 and 2, design and promote through a participatory mechanism of the FIP local actors, the adoption and implementation of a yellowtail, snappers and groupers Fishery Management Plan (FMP) in the Santa-Rosali?a – Mulege? corridor that would allow the sustainable use of the target fish populations, including the implementation of a minimum size of capture, establishment of a reproductive closed fishery season, and catch quotas, while increasing the participatory mechanism to assess the management performance (January 2023 - October 2026).

FIP Type
Basic

FIP Stage
Stage 3: FIP Implementation

Start and Projected End Dates
October, 2022 -
October, 2026

Species

Common Name
Yellowtail Amberjack
Scientific Name
Seriola lalandi

Common Name
Yellow Snapper
Scientific Name
Lutjanus argentiventris

Common Name
Pacific Snapper
Scientific Name
Lutjanus peru

Common Name

Pacific Dog Snapper
Scientific Name
Lutjanus novemfasciatus

Common Name
Spotted Rose Snapper
Scientific Name
Lutjanus guttatus

Common Name
Mexican Barred Snapper
Scientific Name
Hoplopagrus guentherii

Common Name
Leopard Grouper
Scientific Name
Mycteroperca rosacea

Common Name
Goldspotted Sand Bass
Scientific Name
Paralabrax auroguttatus

Common Name
Rooster Hind
Scientific Name
Hyporthodus acanthistius

Gear Type
Gillnet

Handline

Location

FAO Major Fishing Area

Area 77 (Pacific, Eastern Central)

Exclusive Economic Zones

Country
Mexico

Geographic Scope
West-central Gulf of California

Country Flag of Vessel
Mexico

Estimated Total FIP Landings
200 metric tons

FIP Leads

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Ecologists Without Borders

Organization Type
NGO

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