Mexico Baja California Sur blue and brown shrimp – bottom trawl/cast net

Fishery Improvement Project (FIP)

Action 1. Conduct a Management Strategy Evaluation

Six-Month Progress Report

April 2026

Task 1. Develop a clear scientific work plan in collaboration with government authorities, research centers, and fisheries consultants.

During this reporting period, an important step was achieved through the formalization of a Memorandum of Understanding between the FIPs, CICIMAR-IPN, and IMIPAS. This agreement provides a collaborative framework to strengthen the scientific basis for shrimp stock assessment and management in the Mexican Pacific, including the blue shrimp and brown shrimp fisheries in Baja California Sur.

Within this framework, a new scientific work plan was established for the evaluation of shrimp resources in the Mexican Pacific. The work plan is intended to coordinate the technical contributions of government authorities, research institutions, and fisheries consultants, ensuring that the assessment process is scientifically robust, transparent, and aligned with the management needs of the fishery.

Although the scientific work plan is still being finalized, the progress achieved during this period provides a clear basis for its formal inclusion in the 2026 FIP Annual Report. Once completed, the plan will serve as a roadmap for stock assessment, data analysis, management strategy evaluation, and future updates to the fishery management framework

Task 2. Organize research workshops with the inter-institutional group to identify both short- and long-term management objectives.

Several in-person and virtual meetings were held over the past six months with key members of the inter-institutional technical group. These meetings helped consolidate collaboration among the FIPs, IMIPAS, CICIMAR-IPN, and technical consultants, while also providing a space to discuss scientific priorities and management needs for the shrimp fishery in Baja California Sur and the broader Mexican Pacific.

The most relevant meeting during this period involved the new IMIPAS Pacific Director, the IMIPAS Pacific Deputy Director, and Dr. Francisco Arreguín-Sánchez from CICIMAR-IPN. This meeting was particularly important because it helped define a collaborative three-year work plan focused on strengthening the scientific and management basis for the shrimp fishery.

As part of this process, the group identified short-term objectives related to the current stock status of shrimp resources, including the need to consolidate and compare available assessment approaches. Long-term objectives were also discussed, including the development of improved modeling tools, harvest control rules, biological reference points, and the eventual update of the shrimp fishery management plan. These objectives are directly relevant to the FIP’s

improvement pathway and to the generation of evidence needed to support more adaptive and science-based management.

Fig. 1. Virtual meeting with representatives from IMIPAS, CICIMAR-IPN, and the FIP technical team to discuss the collaborative scientific work plan and management objectives for the shrimp fishery.

Task 3. Conduct a management strategy evaluation for the brown and blue shrimp fishery in the Mexican Pacific.

The project has made progress in establishing the technical basis required to begin the Management Strategy Evaluation for both brown shrimp and blue shrimp. The MSE will be supported by the comparison of two complementary assessment approaches: a catch-and-effort-based model and a size-structured model.

The catch-and-effort model provides an approach based on fishery-dependent information and allows the evaluation of stock trends in relation to fishing pressure over time. In parallel, the size-structured model, which has already been completed and is currently being prepared as a scientific manuscript for publication, provides a more detailed biological perspective by incorporating the size composition of the catch and population structure.

Using these two assessment approaches will strengthen the analytical foundation of the MSE, as they represent different methodological perspectives and provide complementary information for management decision-making. This comparison will help evaluate which management strategies are more appropriate for the fishery, considering biological sustainability, economic performance, and social implications.

The MSE will be used to test alternative harvest strategies, including potential harvest control rules and reference points, under different assumptions and

management objectives. This will allow the project to identify options that are more robust to uncertainty and better aligned with the long-term sustainability of the brown and blue shrimp fisheries.

Based on the progress achieved to date, the project remains on track to complete the MSE by May 2027. This result will represent a key milestone for the FIP, as it will provide a stronger scientific basis for future management recommendations and for the update of the fishery management plan.