

INTERVIEW & ANALYSIS – DATA SUFFICIENCY & REPORTING QUALITY

Brazil South Atlantic Swordfish - Longline (Hilo) FIP

Action 1 – A.I. (1.2)

September 2024

Hilo Fish Company

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PURPOSE

Conduct an evaluation of data sufficiency and reporting quality within the Brazilian UoA to improve accuracy of MPA, MMA and CPG fisheries data as to improve stock status determination. This review will include interviews of fishers operating within the UoA.

INTRODUCTION

The fisheries data flow from Brazil to the International Commission for the Conservation of Atlantic Tunas (ICCAT) is a critical process for managing highly migratory species like tuna and swordfish in the Atlantic Ocean. Brazil's fishing vessels collect data on catches, bycatch, and fishing effort, which is then reported to the Brazilian government through local authorities such as MPA (Brazilian Ministry of Fisheries and Aquaculture). This data is compiled and analyzed before being sent to ICCAT, where it contributes to regional stock assessments and management decisions. While Brazil has made significant strides in improving the accuracy and timeliness of data reporting, challenges remain. Some issues include incomplete reporting by small-scale fisheries, inconsistent data collection protocols, and a lack of infrastructure for real-time monitoring. However, the implementation of electronic logbooks and increased collaboration between the government and fishers have been successful, leading to more reliable data submissions. Strengthening enforcement and standardizing data collection will be essential for Brazil to meet ICCAT's stringent data requirements and ensure sustainable fisheries management.

In Brazil, the responsibility for managing the sustainable use of fisheries and aquaculture resources is jointly held by the Ministry of Fisheries and Aquaculture (MPA) and the Ministry of Environment and Climate Change (MMA), as outlined in MPA Ordinance No. 58, dated May 22, 2023. Available longline CPUE (Catch Per Unit Effort) data from the MPA regarding Brazil's swordfish longline fishery was evaluated by ICCAT's Standing Committee on Research and Statistics (SCRS) in 2022 and deemed suitable for inclusion in South Atlantic swordfish stock assessment models. However, the SCRS raised concerns about inconsistencies in the stock's performance, likely due to overestimations of the stock's productivity, leading to uncertainty about the stock's recovery. Participants in the Fishery Improvement Project (FIP) have also identified areas for improvement in the MPA's swordfish longline data provided to ICCAT.

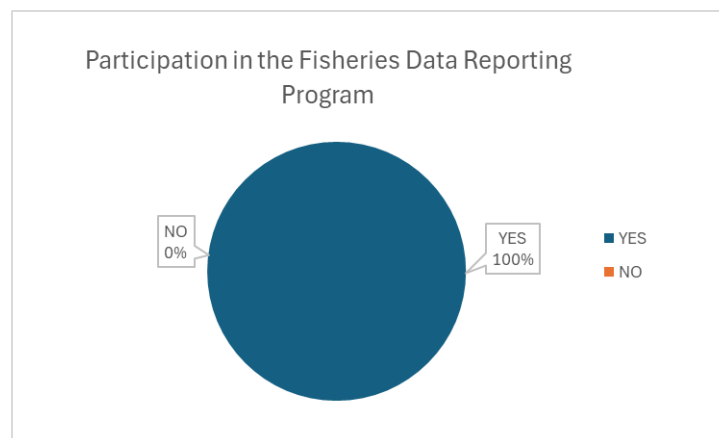
Source: ICCAT REPORT 2022-2023 (I) Section 9. South Atlantic Swordfish

INTERVIEWS

Electronic interviews/questionnaires were distributed to the captains of each vessel in the MoU to better understand the perspectives of the fishers on their national fisheries data reporting system.

QUESTION 1

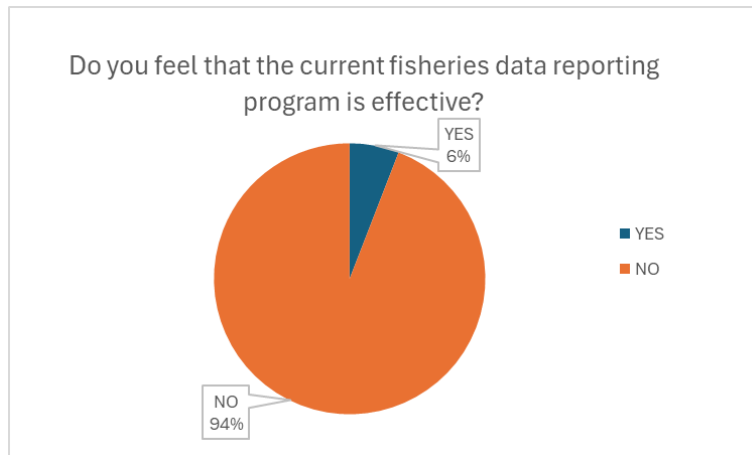
“As a member of the Brazilian fishing industry, do you participate in the fisheries data reporting programs mandated by the Brazilian Ministry of Fisheries and Aquaculture (MPA) and Brazilian Ministry of Environment and Climate Change (MMA)?”



As a baseline for the survey, we ensured that all fishers involved were actively participating in the national fisheries reporting requirements mandated by the Ministry of Fisheries and Aquaculture (MPA). This was critical to ensure the validity of the responses and the relevance of their feedback on the reporting process. When asked directly if they engage in fisheries data reporting, 100% of the participants responded affirmatively, confirming their active compliance with national reporting regulations. This widespread participation provides a solid foundation for evaluating their perspectives on the program, as it reflects input from those who are directly involved in and familiar with the reporting processes. The unanimous response also underscores that the challenges and critiques they raised stem not from a lack of engagement but from issues within the reporting system itself. This suggests that any perceived shortcomings are rooted in the program's design, execution, or communication rather than non-compliance on the part of the fishers.

QUESTION 2

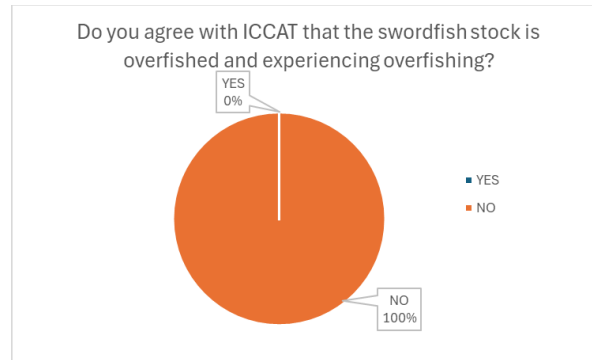
“Do you feel that the current fisheries data reporting program is effective?”



When asked about the effectiveness of the current fisheries data reporting program, 94% of fishers expressed that they find the program ineffective. While the specific reasons for this dissatisfaction varied among individuals, there was a clear consensus that a general distrust exists regarding the government's management and execution of the program. Some fishers pointed to inconsistent data collection methods and a lack of transparency in how the data is used, while others highlighted issues like insufficient training or support in completing reports. Many also voiced concerns about the perceived disconnect between policymakers and the realities faced by those working on the water, suggesting that the program feels more like an administrative burden than a tool for sustainable management. Additionally, several participants mentioned that their input often seems overlooked, fostering a sense of exclusion from the decision-making process. As a result, fishers expressed skepticism that their efforts in reporting data contribute to meaningful improvements in resource management or their livelihoods.

QUESTION 3

“ICCAT has determined that the South Atlantic swordfish stock is overfished and is experiencing overfishing. Do you agree with this statement?”



All fishers interviewed—100%—disagreed with ICCAT's determination that the South Atlantic swordfish stock is overfished and currently experiencing overfishing. This disagreement may stem from their direct experience on the water, where they observe swordfish populations in specific areas, which might not align with the broader stock assessments. The ICCAT manages the South Atlantic swordfish stock using reference points relative to Maximum Sustainable Yield (MSY), a benchmark for determining sustainable catch levels. While the stock has been recovering, albeit slowly, it remains in an overfished condition, which has led ICCAT to adjust the MSY to account for the stock's lower-than-expected productivity and slower recovery.

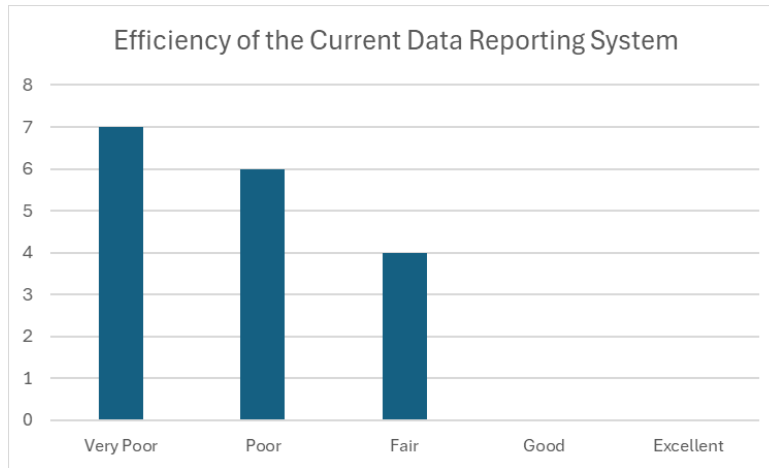
For several years, reported swordfish catches have stayed below MSY, which is strange given the slow recovery of the stock. For instance, projections from ICCAT's 2017 assessment indicated that if annual catches remained below 11,000 tons, there would be a 60% chance the stock would reach sustainable levels (the "green quadrant") by 2020. However, despite average catches from 2016 to 2020 being only 10,125 tons—well below the 11,000-ton threshold—the stock's biomass did not recover as expected. By 2021, the reported catch was 9,486 tons, a significant decrease of 57% from the peak 1995 reported catch of 21,931 tons. This discrepancy between projected and actual stock recovery may contribute to the fishers' skepticism about ICCAT's assessment, as they may perceive their reduced catches and conservation efforts as sufficient to ensure stock sustainability. Furthermore, fishers might feel that the slow recovery reflects natural variability rather than ongoing overfishing, leading to their disagreement with ICCAT's findings.

Their perspective highlights the disconnect between scientific stock assessments and on-the-ground observations, as well as potential communication gaps between management bodies and the fishing community.

Source: ICCAT REPORT 2022-2023 (I) Section 9. South Atlantic Swordfish

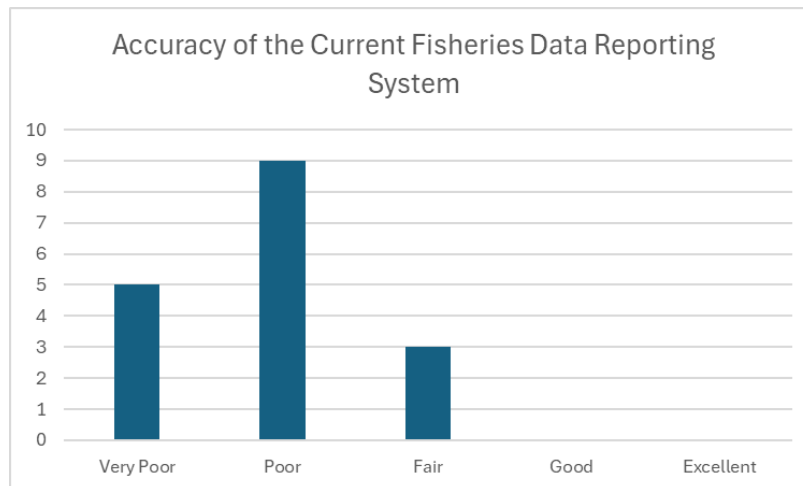
QUESTION 4

“Please rate the efficiency of the current fisheries data reporting program.”



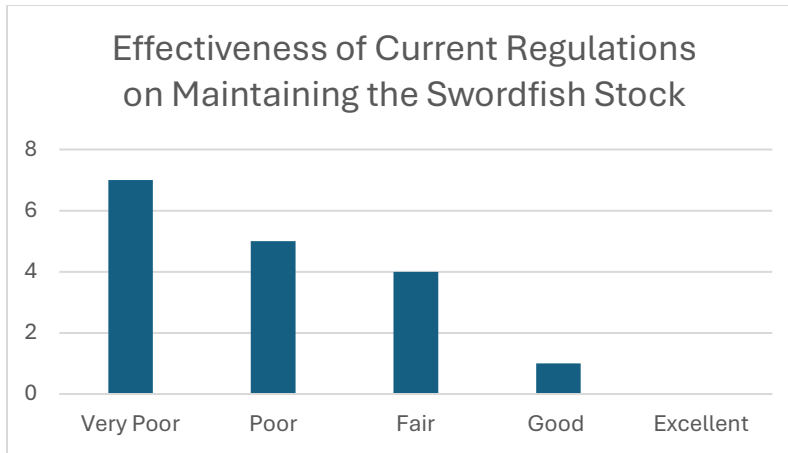
QUESTION 5

“Please rate the accuracy of the current fisheries data reporting program.”



QUESTION 6

“Please rate the effectiveness of the current fishing regulations on maintaining the swordfish stock in Brazil.”



CONCLUSION

There is a significant level of distrust between the fishers and the Ministry of Fisheries and Aquaculture (MPA), which has led to widespread concerns about the management and execution of the fisheries data reporting program. This distrust is compounded by clear gaps in the reporting data, as noted by ICCAT, which raises questions about the accuracy and completeness of the information used for stock assessments and fisheries management. However, there are viable opportunities for improving this data collection process. An area of interest for improvement came from the investigation in AI 1.1, using physical scales at the dock to reveal that the length to weight approximation, which is reported to MPA, is often incorrect. This discovery implies that the swordfish catch weights being recorded and submitted to the MPA and ICCAT through the Shipboard Maps are not entirely accurate and could be improved. The FIP participants will address this discovery in Action Items 1.3 and 1.4 of the South Atlantic Swordfish Longline (Brazil) Fishery Improvement Project as to improve the information available to support the harvest strategy and monitoring of the stock.