



ARGENTINA HAKE - BOTTOM TRAWL FIP ACTION PLAN

31st January 2025

Prepared by Angel Díaz Lugo and Ernesto Godelman, CeDePesca

Introduction

The document provides an action plan for the Argentine hake (*Merluccius hubbsi*; southern stock) fishery, based on a previous Marine Stewardship Council (MSC) assessment conducted by CeDePesca in January 2020 and approved the Initial Action Plan in April 2021 by the FIP partners: Pedro Moscuza e Hijos S.A, Estrella Patagonica S.A., Grupo Iberconsa de Argentina S.A., Giorno S.A., Pescasol S.A., Costa Marina S.A. and Pesquera Comercial S.A. The Action Plan foresees actions and tasks covering the three MSC IPs where the score was <SG80. For each action is searched wanted to achieve a consistent score level to reach a certifiable status with the MSC, the organizations, participants and the completion date are detailed.

Action Plan Overview

Action plan Version and Date 2021	Version 3.2 – January 31 st , 2025
Start date (actual)	End date (anticipated month/year)
April 2022	March 31, 2027
FIP Lead (organization/individual responsible for Action Plan)	Improvements recommended by (meeting/group that supported the development)
CeDePesca	CeDePesca
FIP Coordinator (organization/individual responsible for reporting on FisheryProgress)	Action plan developed by (consultant or person)
CeDePesca	CeDePesca

Acronyms

INIDEP	Instituto Nacional de Investigación y Desarrollo Pesquero/National Institute of Fisheries Research and Development
CFP	Consejo Federal Pesquero / Federal Fisheries Council
SSPyA	Sub-Secretaría de Pesca y Acuicultura / Undersecretariat of Fisheries and Aquaculture

FIP Unit of Assessment (UoA)

Target species	Argentine hake (<i>Merluccius hubbsi</i>)
Other common names	merluza hubbsi
Stock	Southern stock
Stock distribution	The southern stock of Argentine hake is located south of the 41°S parallel.
Fishery geographical area	Argentina EEZ (FAO Statistical Area 41)
Fishing method or gear type	Bottom-trawl fishery
Fishing fleet	Industrial fleet

FIP OBJECTIVES

The main objective of the Argentine hake (*Merluccius hubbsi*) bottom trawl FIP is to achieve a certifiable status of the fishery against the Marine Stewardship Council (MSC) standard by March 2025. To this end, the FIP has the following specific objectives:

- Achieve the establishment of explicit, well-defined harvest control rules.
- Achieve the definition of a limit reference point for the southern stock of Argentine hake and the periodic peer review of the stock assessment.
- Promote the continuity and regularity of research campaigns directed at the Argentine hake stock.
- Collect additional data on the interactions of the Argentine hake fishery with other components of the ecosystem through the implementation of a Private On-Board Observer Program.
- Support the development of research activities related to the improvement of the selectivity of fishing gears to reduce bycatch.
- Promote the adoption of a Recovery Plan for pink cuskeel.
- Ensure the improvement of the fishery-specific management system, including the periodic evaluation of its performance.
- Promote the bilateral cooperation between Argentina and Spain within the framework of the existing Memorandum of Understanding for the Sustainable Management of the Argentine hake fishery in the area adjacent to the Argentine EEZ.

ACTION PLAN

Seven FIP Actions are currently active. These Actions are detailed on the following pages:

Action Number and Name	Action 1. Promote improvements in the fishery management system.
Action Goal	Achieve the definition of a Fisheries Management Plan that includes the establishment of a catch control rule, periodic evaluation of the system, specifies consultation protocols and describes alternatives for management in the area adjacent to the EEZ.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	There are implicit objectives, and they are taken into account at the time the fishery is conducted. INIDEP carries out stock status assessments on an annual basis and there is monitoring of the fishery that could help determine if the rebuilding strategy is working to recover the stock in any given time frame. Indeed, the stock assessment shows a gradual improvement in stock status since 2010. For this fishery a Maximum Allowable Quota is assigned annually, which is based on the Biologically Acceptable Catch recommendations issued by INIDEP to reach a target reference point in the medium term (600,000 tons of spawning biomass with 16% of large spawners in 7 years), it can be inferred that "there are HCRs understood in general terms that have been established or are available, however, there is no pre-established catch control rule that responds to pre-established reference points or triggers. In addition to this, in June 2018 a Memorandum of Understanding (MoU) was signed between Argentina and Spain for bilateral cooperation, but to date its operation has not been consolidated. This Action seeks to achieve explicit management objectives for the fishery, establish a catch control rule that responds to reference points, periodically evaluate the system, define protocols for consultation processes and agree on alternatives for the management of the fishery in the area adjacent to the Argentine EEZ.
Expected Completion Date	March 2027
Priority (as gauged in April 2022)	High
Estimated Cost (1 April 2022 – March 31, 2027)	USD 1.641,54
Responsible Parties	CeDePesca/Partners
Other stakeholders	INIDEP, CFP and SSPyA
MSC PI(s) Addressed by the Action	1.2.1, 1.2.2, 3.1.1, 3.2.1, 3.2.2, 3.2.3, 3.2.4

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
Action 1. Promote improvements in the fishery management system.	Task 1.1. [MODIFIED] Promote, through the Follow-up Commission, the establishment of a harvest control rule that responds to reference points and/or make explicit the effectiveness of the current harvest control rule derived from the ITQ.	CeDePesca/ Partners	INIDEP, CFP,	April 2022	ONGOING	New Expected completion date: March 2027	
	Task 1.2. [MODIFIED] Encourage the improvement of consultation processes and periodic evaluation of the fishery management system.	CeDePesca/ Partners	CFP	New Starting date April 2026	TO START	New Expected completion date: March 2027	
	Task 1.3. [MODIFIED] Promote, through the Follow-up Commission, the definition in the CFP of a Management Plan (or equivalent) for the Argentine hake fishery, with parameters, catch strategy and explicit objectives referring to the sustainability of the fishery.	CeDePesca/ Partners	CFP	April 2022	TO START	March 2025 New Expected completion date: March 2027	
	Task 1.4. [MODIFIED] Promote the effective implementation of the cooperation framework between Argentina and Spain or	CeDePesca/ Partners	SSPyA	New Starting date April 2026	TO START	New Expected completion date: March 2027	

	other alternatives for the management of the fishery in the area adjacent to the Argentine EEZ.						
	Task 1.5. To request the SSPyA to prepare an annual document that explains the degree of compliance, the summaries carried out on board and on land, and the sanctions imposed in the event of violations of the regulations in force.	CeDePesca/ Partners	SSPyA	August 2022	TO START	December 2023	COMPLETED Note DNCFP_FIP record of sanctions Argentina Hake_ January 12, 2023.
	Task 1.6. [MODIFIED] To request the SSPyA to prepare an annual document that explains the degree of compliance, the summaries carried out on board and on land, and the sanctions imposed in the event of violations of the regulations in force.	CeDePesca/ Partners	SSPyA	April 2024	ONGOING	New Expected completion date: March 2026	

Action Number and Name	Action 2. Promote improvements in the primary species management system.
Action Goal	Encourage a long-term Pink cuskeel (<i>Genypterus blacodes</i>) recovery plan with harvest control rules within the framework of a specific action and research plan.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	In its Official Technical Report No. 26/2018 of INIDEP, on the spawning biomass of Pink cuskeel, it was estimated at 30,000 t for 2017 and represented only 8.2% of its value in virgin state, below the biological reference point limit of 13% of the virgin spawning biomass (48,055 t), being also well below 20% of the virgin spawning biomass, considered as the biological safety limit for species with life history and biological characteristics similar to Pink cuskeel. INIDEP warns that the reproductive biomass in 2017 was found in "a risky location in the curve of the stock-recruitment relationship" and that this "would indicate that the reproductive capacity of the resource is compromised, with high risk of overfishing of recruitment, positioning the resource in an extremely critical state", in addition, a significant under-reporting of this species has been reported from the work of on-board observers, to this must be added the catches in waters outside Argentine maritime jurisdiction. This Action seeks follow up on the management measures implemented by the Federal Fisheries Council aimed at the recovery of pink cuskeel and, if necessary, promote management options.
Expected Completion Date	March 2027
Priority (as gauged in April 2022)	Medium
Estimated Cost (April 1, 2022 - March 31, 2027)	USD 1.641,54
Responsible Parties	CeDePesca/Partners
Other stakeholders	INIDEP, SSPyA and CFP
MSC PI(s) Addressed by the Action	2.1.1, 2.1.2, 2.1.3

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
Action 2. Promote improvements in the primary species management system.	[REMOVED] Task 2.1. Encourage increased monitoring of Pink cuskeel landings and conducting surveys to assess biomass in "Pink cuskeel pits" to assess a fraction of the population that is possibly underestimated.	CeDePesca/ Partners	INIDEP, SSPyA	August 2022	TO START	New Expected completion date: March 2027	Task 2.1. and Task 2.2. In the July 2023 update, the CeDePesca team suspended these tasks after reviewing publicly available information between 2018 and 2022 on the status of pink cuskeel and measures for its recovery. It was documented that INIDEP has for years suggested measures to limit directed fishing for this species, and that the most recent assessments indicate that these measures are still in place and improving. INIDEP recommends continuing with the current management scheme to recover the spawning biomass to levels above biological reference points in the medium to long term. (Please see Report pink cuskeel_CeDePesca_June 2023, in the Supporting Documents section below).
	[REMOVED] Task 2.2. Encourage the CFP and INIDEP to adopt a Pink cuskeel Recovery Plan that specifies objectives and deadlines and establishes rules for control of catches within the framework of a specific action and research plan.	CeDePesca/ Partners	INIDEP	December 2022	TO START	New Expected completion date: March 2027	
	Task 2.3. [MODIFIED] Follow up on the management measures implemented by the Federal Fisheries Council aimed at the recovery of pink cuskeel and, if necessary, promote management options.	CeDePesca/ Partners	INIDEP	July 2023	ONGOING	New Expected completion date: March 2027	

Action Number and Name	Action 3. Promote improvements in the fishery research system.
Action Goal	Promote the continuity over time of scientific research to support decision-making in the management system.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	According to the stock assessment carried out in 2018, INIDEP considers that it is very likely that the stock is currently above the point where recruitment could be impaired, in order for this fact to be considered, there must be a high level of certainty, it would be necessary for INIDEP to issue an opinion on what that limit reference point would be. This Action aims at the periodic peer review of the stock assessment, the definition by INIDEP of a limit reference point for the stock and to promote the continuity and regularity of the research campaigns established for the Argentine hake fishery.
Expected Completion Date	March 2027
Priority (as gauged in April 2022)	High
Estimated Cost (April 1, 2022 - March 31, 2027)	USD 3.283,08
Responsible Parties	CeDePesca/Partners
Other stakeholders	INIDEP, SSPyA and CFP
MSC PI(s) Addressed by the Action	1.1.1, 1.1.2, 1.2.1, 1.2.3, 1.2.4

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
Action 3. Promote improvements in the fishery research system.	Task 3.1. [MODIFIED] Promote the definition by INIDEP of a reference point limit for the stock.	CeDePesca/ Partners	INIDEP	April 2022	ONGOING	New Expected completion date: March 2027	
	Task 3.2. [MODIFIED] Promote the continuity and regularity of the research campaigns established for the Argentine hake fishery.	CeDePesca/ Partners	INIDEP,	April 2022	ONGOING	New Expected completion date: March 2027	
	Task 3.3. [MODIFIED] Promote periodic peer review of the stock evaluation.	CeDePesca/ Partners	INIDEP	April 2026	TO START	New Expected completion date: March 2027	

Action Number and Name	Action 4. Promote improvements in fishing practices
Action Goal	Promote scientific tests on the operation and selectivity of fishing gears that seek to reduce bycatch and thus promote the participatory adoption of possible changes.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	It is necessary to define some technique to further reduce the participation of the fleet under evaluation in unwanted catches and to improve the monitoring of landings in order to estimate the volumes and lists of species caught. This action aims to promote the development and implementation of selective fishing gear/techniques for use in the vessels of the Unit, carry out tests with the purpose of standardizing maneuvers with selective fishing gear or techniques, promote in a participatory manner the protocols of good fishing practices, limit errors in the declaration of catches and collaborate with the Fishing Gear Program of INIDEP in activities related to alternative measures to reduce the bycatch of the fishery.
Expected Completion Date	March 2027
Priority (as gauged in April 2021)	High
Estimated Cost (April 1, 2022 - March 31, 2027)	USD 3.283,08
Responsible Parties	CeDePesca/Partners
Other stakeholders	INIDEP
MSC PI(s) Addressed by the Action	1.2.1, 1.2.3, 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.3.1, 2.3.2, 3.2.3

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
Action 4. Promote improvements in fishing practices	Task 4.1. [MODIFIED] Support the development and implementation of selective fishing gear/techniques for use on UoA vessels.	CeDePesca/ Partners	INIDEP	April 2022	ONGOING	New Expected completion date: March 2027	
	Task 4.2. [MODIFIED] Promote the realization of tests with the purpose of standardizing maneuvers with fishing gear or selective techniques to reduce the capture of juveniles of the target species.	CeDePesca/ Partners	INIDEP	April 2022	ONGOING	New Expected completion date: March 2027	
	Task 4.3. [MODIFIED] Establish participatory protocols and test good fishing practices (set duration, well management methodology, etc.).	CeDePesca/ Partners		April 2022	ONGOING	New Expected completion date: March 2027	
	Task 4.4. [MODIFIED] Establish a participatory protocol from the company to the captains and crew members for strict compliance with national and international regulations on the conservation of ETP species.	CeDePesca/ Partners		April 2022	ONGOING	New Expected completion date: March 2027	

	Task 4.5. [MODIFIED] Encourage actions to limit errors in the declaration of catches.	CeDePesca/ Partners		December 2022	TO START	New Expected completion date: March 2027	
	Task 4.6. [MODIFIED] Collaborate with INIDEP's Fishing Gear Program in activities related to alternative measures to reduce bycatch in the fishery.	CeDePesca/ Partners	INIDEP	New Starting date April 2026	TO START	New Expected completion date: March 2027	

Action Number and Name	Action 5. Promote the generation of scientific documents to corroborate and validate critical aspects of the pre-evaluation.
Action Goal	Ensure that scientific evidence on the argentine hake fishery is available and accessible to all stakeholders.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	Among the weaknesses found in the pre-assessment is that there is no scientific evidence to corroborate the conversion factors applied to estimate the catches of the freezer fleet from the volume of fish processed, which would not be entirely adequate and could be resulting in an underestimation of the catch made by the fleet under evaluation and impacting the monitoring of compliance with the catch quotas assigned. In addition, there was no adequate information on the list of species and proportions of the total catch of non-target species to estimate the impact, and evidence on the impact of the habitats where the fishery operates is also not available. On the other hand, it is very important to generate information on the selectivity of the fishing gear used and future proposals. This Action intends to promote the development of scientific papers dealing with: juvenile catch in the fishery and its relationship between the closed area and gear selectivity, sources of uncertainty related to stock assessment, and the way in which each is addressed or taken into account in the assessment, estimating the proportion of the squid catch of the UoA with respect to the total of the respective fishery, historical estimates of the abundance of primary and secondary species, and the impacts of fishing gear on the habitat where the fishery operates.
Expected Completion Date	March 2027
Priority (as gauged in April 2022)	Low
Estimated Cost (April 1, 2022 - March 31, 2027)	USD 5.143,20
Responsible Parties	CeDePesca/ Partners
Other stakeholders	INIDEP
MSC PI(s) Addressed by the Action	1.2.1, 1.2.4, 2.1.1, 2.2.1, 2.4.1, 2.4.3, 2.5.1, 2.5.3

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
<p>Action 5. Promote the generation of scientific documents (reports and publications) to corroborate and validate critical aspects of the pre-evaluation.</p>	<p>Task 5.1. [MODIFIED] Promote the preparation of a technical report by INIDEP that addresses the issue of juvenile catch in the fishery (continuous mix of sizes and ages) and demonstrates the role and importance of the closed area in the selectivity of the fishery.</p>	CeDePesca/ Partners	INIDEP	<p>New Starting date April 2026</p>	TO START	<p>New Expected completion date: March 2027</p>	
	<p>Task 5.2. [MODIFIED] Promote the production of reports/publications describing the use of selective fishing gear/mechanisms by vessels in the UoA and their impact on reducing the catch of unwanted sizes and bycatch.</p>	CeDePesca/ Partners	INIDEP	<p>New Starting date April 2026</p>	TO START	<p>New Expected completion date: March 2027</p>	
	<p>Task 5.3. [MODIFIED] Promote the drafting of a document by INIDEP identifying and describing the sources of uncertainty related to the stock assessment, and the manner in which each is addressed or taken into account in the assessment.</p>	CeDePesca/ Partners	INIDEP	<p>New Starting date April 2026</p>	TO START	<p>New Expected completion date: March 2027</p>	

	<p>Task 5.4. [MODIFIED] Promote the preparation of a report that shows the proportion of Argentine shortfin squid (<i>Illex argentinus</i>) catches in the UoA with respect to the total of the respective fishery.</p>	CeDePesca/ Partners	INIDEP	December 2022	ONGOING	<p>New Expected completion date: March 2027</p>	
	<p>Task 5.5. [MODIFIED] Promote the preparation of reports on the composition of catches of primary and secondary species and, to the extent possible, make estimates of the abundance of secondary species with historical and current data from research campaigns.</p>	CeDePesca/ Partners	INIDEP	December 2022	ONGOING	<p>New Expected completion date: March 2027</p>	
	<p>Task 5.6. [MODIFIED] Promote the preparation of reports and scientific publications on the state of habitats, analyzing old and new information collected through the Observer Program and campaigns.</p>	CeDePesca/ Partners	INIDEP	<p>New Starting date April 2026</p>	TO START	<p>New Expected completion date: March 2027</p>	
	<p>Task 5.7. [MODIFIED] Promote the development of reports/publications to assess the state of the ecosystem and determine whether the UoA poses a risk to habitats (e.g., in relation to bottom trawling).</p>	CeDePesca/ Partners	INIDEP	<p>New Starting date April 2026</p>	TO START	<p>New Expected completion date: March 2027</p>	

Action Number and Name	Action 6. Risk assessment for other components of the ecosystem
Action Goal	Conduct risk analysis for those components of the ecosystem that cannot be quantitatively assessed.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	At the time of writing the pre-assessment there was no specific data available for the fleet under assessment on primary and secondary species, however, a preliminary analysis was developed to identify non-target species of commercial interest using landings data from the freezer trawler fleet for 2018. Regarding habitats, it is recognized that general information exists regarding bottom sedimentological composition, but due to the wide operating range there is insufficient information to expedite on the specific impact of the whiting freezer fleet. This action aims to identify the information available to assess the ecosystem components/elements that can be analyzed in the risk-based framework (RBF) and analysis: CSA (habitats), PSA (secondary species and species of conservation concern), SICA (ecosystems) and if necessary promote impact mitigation measures in light of the results.
Expected Completion Date	March 2027
Priority (as gauged in April 2022)	Low
Estimated Cost (April 1, 2022 - March 31, 2027)	USD 442,32
Responsible Parties	CeDePesca
Other stakeholders	
MSC PI(s) Addressed by the Action	2.2.1, 2.2.2, 2.3.1, 2.3.2, 2.4.1, 2.4.2, 2.5.1, 2.5.2

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
Action 6. Risk assessment for other components of the ecosystem	Task 6.1. [MODIFIED] Identify and evaluate ecosystem components/elements that can be assessed using the risk-based framework (RBF). This may include the application of the following analyses: CSA, PSA, SICA.	CeDePesca		April 2024	ONGOING	New Expected completion date: March 2027	
	Task 6.2. [MODIFIED] Promote impact mitigation measures in light of the ERAEF results, if necessary.	CeDePesca		April 2024	ONGOING	New Expected completion date: March 2027	
	Task 6.3. [MODIFIED] Seek the collaboration of other entities interested in marine fauna.	CeDePesca		April 2024	ONGOING	New Expected completion date: March 2027	

Action Number and Name	Action 7. Implement a Private On-Board Observer Program for the Argentine hake fishery.
Action Goal	Collect data of sufficient quality and quantity on the criteria and variables used to estimate the conversion factor applied to estimate catches and the interaction of the fishery with non-target species and other ecosystem components.
Action Description (Brief summary of the steps involved in the action and importance of the action in achieving the FIP objectives)	At the time of writing the pre-assessment there was no specific data available for the fleet under assessment on primary and secondary species, nor was it possible to comment on the specific impact of the freezer trawl fleet on habitats. In addition, the process of estimating the conversion factor used needs to be understood on board. This Action seeks to ensure that data are collected onboard in accordance with the requirements of the MSC standard, and at a level of detail sufficient to assess the conversion factor and impact of the fishery on secondary species, ETP species, habitats and the ecosystem as a whole, seeking to propose and adopt measures aimed at minimizing impacts, if necessary.
Expected Completion Date	March 2027
Priority (as gauged in April 2022)	High
Estimated Cost (April 1, 2022 - March 31, 2027)	USD 7.647,94
Responsible Parties	CeDePesca
Other stakeholders	
MSC PI(s) Addressed by the Action	2.1.1, 2.1.2, 2.1.3, 2.2.1, 2.2.2, 2.2.3, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.3, 2.5.1, 2.5.3

Action	Tasks/ Milestones	Responsible (lead)	Other relevant stakeholders	Starting date	Actual completion date	Expected Completion Date	Evidence of completion / results
Action 7. Implement a Private On-Board Observer Program for the Argentine hake fishery.	Task 7.1. [MODIFIED] Organize and implement a Private On-Board Observer Program and ensure that it works in coordination with the INIDEP Observer Program.	CeDePesca		August 2022	ONGOING	New Expected completion date: March 2027	
	Task 7.2. [MODIFIED] Communicate the progress and results of the Private On-Board Observer Program for the 2021/2022 season among partners, fishermen, fisheries authorities and other stakeholders.	CeDePesca		December 2022	ONGOING	New Expected completion date: March 2027	
	Task 7.3. [MODIFIED] Share data from the private On-Board Observer Program with INIDEP and, in return, request information from the INIDEP Observer Program.	CeDePesca		December 2022	ONGOING	New Expected completion date: March 2027	
	Task 7.4. [MODIFIED] Publish technical reports with the systematization of the data collected by the private On-Board Observer Program and make this information available to researchers.	CeDePesca		December 2022	ONGOING	New Expected completion date: March 2027	