

MarinTrust Improver Programme: Annual milestone report template

In this document the applicant should outline progress made towards the actions listed in the Fishery Action Plan (FAP) as part of the Fishery Improvement Project (FIP). This should be aligned with the MarinTrust Assessment criteria where possible. The progress actions should be updated in the following tables, and the relevant evidence linked to. It is important that evidence documents are publicly available. This will then be verified by the peer reviewers based on evidence submitted by the applicant.

This report should include an update on all actions outlined in the Fishery Action Plan, even if no demonstrable progress has been made since the last report.

FIP name	Small Pelagics Sustainability - Ecuador
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Template guidelines

To help ensure the review process can be carried out effectively and efficiently:

- Include specific citations to the evidence that substantiates it. This should include the exact page numbers and paragraph references where the evidence can be found.
- Where possible, include a hyperlink to any evidence referenced.
- Ensure that the supporting evidence documents are easily accessible and well-organised. They should be available in a format that allows for easy navigation, such as a table of contents, bookmarks, or an index.
- Use clear and concise language when referring to evidence to make it easy for readers to grasp why a particular piece of evidence supports a specific progress claim.

Note: MarinTrust will host all evidence documents on the MarinTrust FIP profiles. If there are any confidential and or draft documents that the applicant does not want made public, this should be made clear in the report.

IP Milestone report

Use the below tables to provide an update on actions in the Fishery Action Plan with links to relevant evidence documents. Additional lines may be added where necessary.

Example table

MT clause (if relevant)	Action in plan	Action update / progress made	Evidence	Status of action	Additional comments
M1.1	Provide the original action as outlined in the action plan.	Provide an update on this action since the last report.	Provide a url link to any evidence and summarise relevant points for actions or updates. If evidence is not publicly available, include a copy in the evidence pack.	What is the current status of this action (i.e. complete, pending, ongoing)	Provide any additional information here.
M1.2					
Add rows to each table as necessary					

M – Management Framework and Surveillance, Control and Enforcement

MT clause (if relevant)	Action in plan	Action update / progress made	Evidence	Status of action	Additional comments

A – Category A: Data Collection, Stock Assessment, Harvest Strategy and Stock Status

MT clause	Action in plan	Action update / progress made	Evidence	Status of action	Additional comments
A1	1. Strengthen the sources that input to the catch estimation	<p>1.1 Strengthen the Responsible Fishing participatory monitoring program</p> <p>In the period from January 2024 to March 2025, 2347 records of sets and releases have been accumulated, recorded by 24 vessels in the participatory monitoring program (PPR): 1929 records of sets (catch composition) and 418 records of releases of marine megafauna.</p> <p>A total of 24,414.05 metric tons of catch corresponding to 1941 sets have been accumulated, including geographic information, dates, sizes and stages of maturity.</p> <p>During the period, the interaction and release of 1150 individuals has been recorded, 98 % of which were released alive or escaped. Interactions and releases of ETP species were documented, such as: <i>1 Rhincodon typus</i>, <i>1 Dermochelys coriacea</i>, <i>13 Lepidochelys olivacea</i>, <i>25 Chelonia mydas</i>.</p> <p>The participatory monitoring program of the FIP is an important source of information to the industry and also for the management system.</p> <p>1.2 Promote the implementation of electronic logbook in the fleet</p>	<p>1.1</p> <p>PPR Report 2024 https://drive.google.com/file/d/12iVlc2YnRggPOcpBiJ99dL4Oy-UB4XKC/view?usp=drive_link</p> <p>PPR Report Jan-March 2025 https://drive.google.com/file/d/1OMFFOLDJ0dFNJmTo9m4wy7Die1tPEcyO/view?usp=drive_link</p>		

		<p>In October 2024, CNP and Shellcatch signed a cooperation agreement to develop electronic logbook in the fleet. It's important to mention that the process of recollect data by the fishers is in force trough the Responsible Fishing Program of the CNP, and this activity is to develop an app for additional support to the current program. Find attached a document with the actual previsualization of the app design.</p> <p>1.3 Execute acoustic cruises to determine biomass, distribution, and population structure In February 2025, a new research cruises to determine biomass, distribution and reproductive periods was done by IPIAP with support of FIP.</p> <p>1.4 Estimate landings based on data from the Responsible Fishing Program, Observers and IPIAP monitoring Landings for 2024 were preliminary estimated.</p>	<p>1.2 https://camaradepesqueria.ec/boletin-cnp-y-shellcatch-firman-convenio-para-potenciar-el-monitoreo-participativo-del-programa-pesca-responsable/</p> <p>Attached a document with screenshot of the first version of the app available to download at https://play.google.com/store/apps/details?id=com.shellcatch.fisherapp</p> <p>1.3 IPIAP report: https://institutopesca.gob.ec/wp-content/uploads/2018/01/informe_ejecutivo_crucero_ipiap_2025-02-01_ppp_27-02-2025.pdf</p> <p>1.4 Preliminary estimation of small pelagics landings. Draft version attached</p>		
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A2-A4	2. Review stock assessment models	<p>2.1 Implement new evaluation scenarios (review of life parameters and input data) Canales C. M., V. Jurado (2024) already reported in previous progress report.</p> <p>2.2. Peer review of new assessment Peer review concluded that the diagnosis of the goodness of fit for the results of the assessment model has considered the recommendations of previous reviews, and given the continuous improvement of the model, this review concludes that the assessment of the pelagic fish resources of Ecuador is being carried out under a high standard. As a final point, a series of new improvements to the model are proposed in the short, medium and long term periods, which IPIAP technicians will take into consideration.</p>	<p>Stock assessment Canales C. M., V. Jurado (2024)</p> <p>https://institutopesca.gob.ec/wp-content/uploads/2024/07/Informe_Evaluacion_2024.pdf</p> <p>Peer review report. Cubillos & Cuevas (2024)</p> <p>https://drive.google.com/file/d/1ZAjZWqqlMmIgjDtlrr_xzqUUK6n3pc/view?usp=drive_link</p>	Completed	
A3	3. Strengthen the transparency of raw materials flow in the supply chain	<p>3.1 Implement a responsible purchasing policy for whole fisheries that includes a mechanism for verifying compliance with responsible sourcing.</p> <p>The SPS-FIP Assembly on February 5, 2025, discussed the proposed raw material procurement policy (PELAGIC PURCHASE POLICY PROPOSAL 02022025.pdf).</p>	3.1 Internal document of analysis of activity 3 by the FIP Assembly (attached)	Completed	

		<p>After analysing the input provided by the FIP meeting, it was concluded that the commitment and processes to responsible raw material sourcing by the fishmeal companies participating in the FIP are implemented and independent verified in the companies audited by MarinTrust IP or MarinTrust byproducts, demonstrating compliance with the standard's guidelines. The MarinTrust factory standard guarantees that:</p> <ul style="list-style-type: none"> • marine ingredients are produced to high standards of safety and quality, with sufficient care for the environment, workforce, and local community. • the raw materials used to produce marine ingredients are not sourced from IUU fishing activity, do not stem from an endangered species, for whole fish, are from responsibly managed fisheries aligned to the FAO Code of Conduct for Responsible Fisheries. <p>These elements are part of the procurement policy proposal, so it is assessed that being certified by an independent body is better than a voluntary declaration.</p> <p>By April 2025, 11 companies are accepted facilities under MT improver programme. 11 companies are certified facilities under MarinTrust factory standard (by-products) and 6 companies are MT certified under chain of custody.</p>			
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	<p>Notwithstanding the above, it is important to consider the concerns of local industries about the value of MT certification in the market (local or international), considering the associated costs and competition with non-certified production that is in demand in the market (local or international). The participating fishmeal industry perceives a lack of commercial benefits from having MT certification compared to those that are not certified. This can generate market disincentives to sustain the costs associated with certification.</p> <p>Another aspect to evaluate is that once Ecuador achieves approval for whole-fish species under the MT standard, any producer of marine ingredients in Ecuador will be able to access MT certification without incurring the fishery improvement costs assumed by the FIP participants. This already occurs, for example, with some marketing companies that currently have chain of custody certification and trade IP products without having supported the FIP process. Both cases described can be perceived as a scenario of unfair competition within the certification process.</p> <p>In this regard, new efforts should likely focus on the aquaculture feed market, with the goal of highlighting the efforts of domestic fishmeal producers to comply with certification processes</p>			
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		and implementing voluntary responsible fishing initiatives. For example, the registry of vessels and processing facilities in the CNP's Responsible Fishing Program could show which companies supported the process of improving the small pelagic fishery, as well as which processors are implementing actions for the fishery's sustainability. Processors within the FIP work in participatory monitoring programs of fishing activity both in the fleet and in processing facilities, an additional effort and cost that should be valued by the market.			
	4. Design a recovery plan for frigate tuna annexed to the fishery management plan	<p>4.1 Strengthen closed seasons design aligned with maximum reproductive and recruitment periods.</p> <p>Between January and March 2025, a new closure for small pelagic fishery was defined, using information from the monitoring of the on-board observer program, as well as complementing information with the participatory monitoring of the fleet participating in the PPR. Also a hydroacoustic survey was done to determine the evolution of the reproductive period. As part of the monitoring of small pelagic eggs and larvae carried out in February, through the hydroacoustic survey, revealed a notable increase in the density of small pelagic eggs and larvae compared to January. The data obtained show an average of 50,139 organisms/10 m², significantly exceeding the 12,000 organisms/10 m² recorded</p>	<p>4.1.</p> <p>ACUERDO Nro. MPCEIP-SRP-2024-0280-A https://drive.google.com/drive/u/3/folders/1Rj_8nu1Q5sG7K0SLdvpDGtTR7a229AZS</p> <p>ACUERDO Nro. MPCEIP-SRP-2025-0022-A https://drive.google.com/drive/u/3/folders/1Rj_8nu1Q5sG7K0SLdvpDGtTR7a229AZS</p> <p>REPORT ON SPAWNING CONDITIONS (ABUNDANCE OF EGGS AND LARVAE) OF SMALL PELAGIC SPECIES https://drive.google.com/file/d/1UCtnEgfsqM7ctXwlGOgmRpWqwKHiJ6Ff/view?usp=drive_link</p>	Ongoing	

	<p>the previous month. This substantial increase in spawning activity is mainly attributed to the increased abundance of Botella eggs (<i>Auxis spp.</i>), which represented 90% of the total collected, as well as the high abundance <i>Opisthonema spp.</i> The largest spawning concentrations were located in Anconcito and Bajo Cope, while larval dominance was observed in Puerto Hualtaco, Santa Clara, and Puntilla de Santa Elena. These findings suggest that the prevailing environmental conditions favored the peak of reproduction and larval development of these small pelagic species.</p> <p>4.3 Implement adaptive management strategies We have designed a strategy for this milestone. It will be implemented as part of the Responsible Fishing Program project activities submitted by the CNP to the Save the Blue Five initiative. A proposed methodology is attached (internal FIP document).</p> <p>Also, the FIP has worked to establish systems for monitoring environmental conditions, reproductive activity, and recruitment periods, as well as how environmental variables influence these processes, as part of the activities described in this work plan.</p>	<p>Dashboard. Monitoring program of small pelagic eggs and larvae https://app.powerbi.com/view?r=eyJrIjoieYzlxZDI3ZTkzM2UxMi00NGEyLTkwMGUtMzY3OGU1YzBmNWE5IiwidCI6IjNIOTFjOWEyLTNlMjltNGM5Ny1hZTMxLWQ5YTAYMjA1YjI4NCJ9</p> <p>4.3 https://camaradepesqueria.ec/camara-nacional-de-pesqueria-reconocida-como-una-de-las-cinco-mejores-iniciativas-de-competencia-internacional-iniciativas-en-accion-por-los-cinco-azules/ A proposed strategy is attached (internal FIP document).</p> <p>REPORT ON SPAWNING CONDITIONS (ABUNDANCE OF EGGS AND LARVAE) OF SMALL PELAGIC SPECIES https://drive.google.com/file/d/1UCtnEgfsqM7ctXwlGOgmRpWqwKhiJ6Ff/view?usp=drive_link</p>		
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		<p>Dashboard. Monitoring program of small pelagic eggs and larvae https://app.powerbi.com/view?r=eyJrIjoieYzlxZDI3ZTkzM2UxMi00NGEyLTkwMGUtMzY3OGU1YzBmNWE5IiwidCI6IjNIOTFjOWEyLTNIMjltNGM5Ny1hZTMxLWQ5YTAyMjA1YjI4NCJ9</p> <p>Monitoring environmental conditions and preferential spawning conditions. https://docs.google.com/spreadsheets/d/1oCsQn8fvgig1N284OCFOHlb0mGe6BDs0rVqQSkqdDM/edit?gid=0#gid=0</p> <p>Recruitment and gonadosomatic index https://drive.google.com/file/d/18bFGUVuMlOhu139XgrfXBKLzy3pigAA/view?usp=drive_link</p> <p>4.4 Monitoring eggs and larvae to determine periods and zones of reproductive activity. This report updates the results of monitoring the abundance of eggs and larvae of small pelagic species (SPS), such as chuhueco, botella, morenillo or macarela, round sardine, and pinchagua, at nine stations along the Ecuadorian coast. Seventy samples collected between September 2024 and February 2025 were analyzed, adding them to the 440 previously analyzed samples. The samples were obtained by vertical trawls with Bongo nets, as part of the monthly monitoring program onboard vessels</p>	<p>4.4: https://drive.google.com/file/d/1nMRWpbYe4pyjyJ1hvp9rc4YPqcKHFci/view?usp=drive_link</p>	
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	<p>associated with the SPS-FIP. The results revealed an average of 25,192 eggs/10 m² and 16,289 larvae/10 m², with 74% corresponding to SPS. The highest spawning activity was observed in January and February 2025, and larval abundance indicated good recruitment, especially for Botella bream and pinchagua bream, suggesting a future increase in their population biomass. The areas with the highest egg and larval abundance were again located off Engabao, Anconcito, Puntilla de Santa Elena, Bajo Cope, and Salango. Continuous monitoring over the years has shown that PPP spawning presents two peaks of intensity, with the highest occurring in the first months of the year. These results allow for more accurate predictions of peak adult reproductive activity. Furthermore, the observed larval abundance allows for anticipating a possible increase in juveniles in the following months, crucial information to be considered as an adjunct measure for the implementation of biological closures.</p> <p>4.5 Correlate presence and abundance of eggs and larvae with oceanographic conditions</p> <p>This report examines the relationship between oceanographic parameters and reproductive activity, based on the abundance of early stages of small pelagic species (SPS), focusing on the</p>	<p>4.5 https://drive.google.com/file/d/1YCxPJonAk3yPamyUmVqlHDsNjSA1bdnW/view?usp=drive_link</p>		
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	<p>species Frigate tuna (<i>Auxis</i> spp.) and <i>Scomber japonicus</i>. Sea surface temperature (SST), surface salinity (SSS), dissolved oxygen (DO), and chlorophyll-a (Cl-a) were determined to be key environmental factors influencing SPS reproduction and development. SST and DO were strongly correlated with adult spawning, while SSS and Cl-a were associated with larval survival. Using quotient (Q) analysis, optimal ranges of these parameters for spawning and development of the studied species were defined. SSTs between 25.5°C and 27.5°C, SSM between 32.5 and 33.5 psu, DO between 215 and 230 mmol/m³, and Cl-a between 0.7 and 2.1 mg/m³ were established as the preferential values for maximum egg and larval abundance. Detailed monitoring of environmental conditions and their relationship to spawning was strengthened as a source of adjunct data for planning biological closures. The information collected on periods of peak reproductive activity, and their correlation with optimal environmental conditions, provided valuable input for decision-making. These data facilitated the precise monitoring of critical and peak spawning times, which significantly contributed to the development of closures tailored to the species' natural cycles.</p> <p>4.6 Correlate presence and abundance of eggs and larvae with the gonodasomatic index</p>			
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		<p>This report presents a detailed analysis of the monitoring of the relationship between the Gonadosomatic Index (GSI) and egg and larval abundance in the pelagic species Botella and Macarela. The direct correlation between peak reproductive activity (GSI ≥ 4) and peak egg and larval abundance was strengthened, validating the GSI as a predictive tool for closure planning. The reproductive seasonality of each species was determined: both species has spawning peaks between January and March, while Macarela displays an extended spawning period, from September-October to February, providing crucial information for the implementation of timely closures. The study also identified significant variability in the IGS-spawning relationship, particularly in Macarela, and an atypical shift in the IGS peak in 2024. This year featured an anomalous reproductive pattern, underscoring the need for ongoing monitoring to adapt closures to fluctuations in species dynamics.</p> <p>4.7 Training the crew to identify reproductive activity.</p> <p>In February 2025, training sessions were held on identifying gonad status and reproductive activity. A total of 59 people were trained as part of the Responsible Fishing program.</p>	<p>4.6 https://drive.google.com/file/d/1e4vldQQEPQGztz0YQNsBHZA5j4hC9QO7/view?usp=drive_link</p> <p>4.7 Training report 2024</p>		
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		<p>Also in 2024, 165 crew from SPS-FIP and 115 crew from no associated fleet were trained in responsible fishing as part of the project objectives.</p> <p>Additionally, the program is working on implementing a participatory monitoring system to identify reproductive activity of small pelagic fish at processing sites, as a complementary source of information.</p>	<p>https://drive.google.com/file/d/1x9j9AO1iNVUxxodOZ7HjjwhdKBihLXHA/view?usp=drive_link</p> <p>Training report 2025 https://drive.google.com/file/d/17nypBgHJi_fGmU2CywL6xy6ryc5vwXw0/view?usp=drive_link</p> <p>New dashboard https://drive.google.com/file/d/18bFGUVuMlOhu139XgrfXBKLzy3pigAAAn/view?usp=drive_link</p>		
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B – Category B Stock Status

MT clause (if relevant)	Action in plan	Action update / progress made	Outstanding actions and rationale	Evidence	Status of action	Additional comments

C – Category C Stock Status

MT clause (if relevant)	Action in plan	Action update / progress made	Outstanding actions and rationale	Evidence	Status of action	Additional comments

D – Impacts On Species Categorised as Vulnerable by D1-D3

MT clause (if relevant)	Action in plan	Action update / progress made	Outstanding actions and rationale	Evidence	Status of action	Additional comments

F – Impacts on ETP Species, Impacts on Habitats and Ecosystem Impacts

MT clause (if relevant)	Action in plan	Action update / progress made	Outstanding actions and rationale	Evidence	Status of action	Additional comments

SOCIAL CRITERION

MT clause (if relevant)	Action in plan	Action update / progress made	Outstanding actions and rationale	Evidence	Status of action	Additional comments

Additional Information

The following section is for any information provided by the fishery in support of this Milestone Report which does not relate directly to any of the Milestones above, but which is relevant to the ongoing monitoring of fishery management status.

The FIP is conducting an external pre-assessment to evaluate the fishery's certification scenario. The final document is expected to be completed by the end of April 2025. This will provide additional input regarding the October 2025 deadline.