## **Panamanian Small Pelagics FIP Progress Update**

December 2021 – LAST TWELVE MONTHS ACTIVITIES APPEAR IN BLUE THROUGHOUT THE TABLE

| Results/<br>FIP Stage     | Indicator of Success  | Specific Details  | Date<br>Achieved | Entities in charge     | Source  |
|---------------------------|---|---|------------------|------------------------|---|
| FIP is launched (Stage 1) | Sustainability<br>assessment is<br>publicly available             | Sustainability report   | January<br>2009  | FishSource<br>(SFP)    | Pacific anchoveta Pacific thread herring Pacific bumper |
|                           |   | Fishery technical reports<br>available at CeDePesca's<br>website                                  | October<br>2010  | CeDePesca              | Fishery Profile (in Spanish)                            |
|                           |   |   |                  |                        | Fishery obstacles to<br>sustainability (in<br>Spanish)  |
|                           |   | Gap analysis was conducted<br>by CeDePesca, delivered to<br>PROMARINAand is publicly<br>available | July<br>2013     | CeDePesca<br>PROMARINA | Gap Analysis  |
|                           | Fisheries<br>improvement<br>recommendations<br>publicly available | The first FIP public report is published with improvement recommendations                         | January<br>2011  | CeDePesca              | FIP Public Report                                       |

Continue below

| Results/<br>FIP Stage                     | Indicator of Success                    | Specific Details  | Date<br>Achieved  | Entities in charge                    | Source                            |
|---|---|---|-------------------|---------------------------------------|-----------------------------------|
| FIP is formed<br>(Stage 2)                | Stakeholders are organized              | CeDePesca continuously strengthened relationships with the industry, especially with the Panamanian Seafood Exports Association (APPEXMAR), artisanal fishermen associations, and other stakeholders  | 2010<br>-<br>2012 | CeDePesca                             |                                   |
|   |   | CeDePesca held several meetings with PROMARINA as a response to a request from the company to discuss an effort limitation rule being drafted at the fisheries agency, and ways to address demands from companies like Cargill regarding scores in FishSource | Throughout 2010   | CeDePesca<br>PROMARINA                |                                   |
|   |   | Meetings with other fishery stakeholders such as Conservation International, Mar Viva, WWF, and researchers from the University of Panama   | 2010<br>-<br>2012 | CeDePesca                             |                                   |
|   |   | Framework Collaboration Agreement and Specific Agreement #1 signed between CeDePesca and PROMARINA  | February<br>2012  | PROMARINA<br>CeDePesca                | MOU                               |
|   |   | Framework Collaboration Agreement signed between the University of Panama and CeDePesca   | July<br>2013      | University of<br>Panama<br>CeDePesca  |                                   |
| FIP is formed<br>(Stage 2)<br>(CONTINUED) | Stakeholders are organized  (CONTINUED) | Specific Agreement #2 signed for the continued implementation of the FIP workplan   | August<br>2013    | PROMARINA<br>CeDePesca                |                                   |
|   |   | Panamanian General Audit Office approves MOU between CeDePesca and the University of Panama   | October<br>2013   | Panamanian<br>General Audit<br>Office | Framework Collaboration Agreement |
|   |   | Specific Agreement #3 signed in order to conduct the first stock assessment for the fishery and to improve the observers program  | February<br>2015  | PROMARINA<br>CeDePesca                |                                   |
|   |   | Specific Agreement #4 editing a clause in Specific Agreement #3   | May<br>2015       | PROMARINA<br>CeDePesca                |                                   |
|   |   | Specific Agreement #5 signed in order to conduct a second stock assessment for the fishery and to give continuance to the observers program in 2016 and 2017.   | March<br>2016     | PROMARINA<br>CeDePesca                |                                   |

|                                 |   | Promarina and CeDePesca<br>have welcomed<br>ProcesadoraBayano to the<br>FIP.   | April<br>2017    | PROMARINA<br>PROBASA<br>CeDePesca  | Addendum to the Framework Collaboration Agreement (in Spanish) |
|---------------------------------|---|--|------------------|--|--|
|                                 |   | Meeting with the General Administrator of the ARAP   | June 2018        | PROMARINA<br>PROBASA<br>CeDePesca  | Short report   |
|                                 |   | Specific Agreement #7 signed in order to conduct a quarter stock assessment for the fishery and to give continuance to the observers program in 2019.                          | February<br>2019 | PROMARINA<br>PROBASA<br>CeDePesca  |  |
|                                 |   | The act of completion of the Fishing Season 2019 is signed between the ARAP, the companies processing, marketing and exporting of fishmeal and fishing oil and CeDePesca       | December<br>2019 | ARAP PROMARINA PROBASA TABOGUILLA AnimalFeed CeDePesca                       |  |
|                                 |   | A meeting of the FIP Stakeholder Committee was held. At the meeting, the general evolution of the FIP was discussed as well as several aspects to improve the Management Plan. | October<br>2021  | ARAP<br>CeDePesca  | Minutes stakeholders meeting                                   |
| FIP is encouraging improvements | Workplans with annual improvement                     | Workplans approved by FIP partners   | March<br>2013    | CeDePesca<br>PROMARINA   | Initial workplan   |
| (Stage 3)                       | milestones are publicly available                     |  | January<br>2016  | CeDePesca<br>PROMARINA   | Workplan 2016  |
|                                 |   |  | April<br>2017    | CeDePesca<br>PROMARINA<br>PROBASA  | Workplan 2017-2018<br>(in Spanish)                             |
|                                 |   |  | February<br>2019 | CeDePesca<br>PROMARINA<br>PROBASA  | Workplan 2018-2019   |
|                                 | FIP is achieving agreed annual improvement milestones | A catch and effort database for the period 1996/2012 is available.   | November<br>2012 | PROMARINA<br>ARAP<br>CeDePesca   | Database<br>available at<br>stakeholders'<br>request.          |
|                                 |   | A preliminary stock assessment was presented to PROMARINA  | April<br>2013    | CeDePesca  | PPT available at request.                                      |
|                                 |   | First national workshop on fisheries research identified key research needs.   | April<br>2013    | ARAP, UP,<br>UMIP, STRI,<br>PROMARINA,<br>Panalang,<br>CeDePesca,<br>CONAPAS | Workshop report available on request                           |
|                                 |   | Onboard Observers Program up and running   | May<br>2013      | PROMARINA<br>CeDePesca   | <u>Undercurrent News</u>                                       |

| FIP is                   |                                | Onboard Observer Program database updated and reviewed.  ERAEF Workshop ERAEF at the University of Panama.    | October-<br>December<br>2013<br>January-<br>February | CeDePesca University of Panama | Data base available<br>to stakeholders on<br>request               |
|--------------------------|--------------------------------|---|--|--------------------------------|--|
| encouraging improvements | FID is a shipping              | Thrity-six stakeholders participated.   | 2014   | PROMARINA<br>CeDePesca         |  |
| (Stage 3)                | FIP is achieving agreed annual | CeDePesca trained a new observer.   | March<br>2014  | CeDePesca                      |  |
| CONTINUED                | improvement<br>milestones      | Meetings pre season<br>between observers, skippers<br>and CeDePesca   | April<br>2014  | CeDePesca<br>PROMARINA         |  |
|                          | CONTINUED                      | The onboard observers database is updated   | Jun<br>2014  | CeDePesca                      | Database available to stakeholders on request                      |
|                          |                                | The catch-effort database and the biological database are updated   | August<br>2014                                       | CeDePesca<br>PROMARINA         | Database available to stakeholders on request                      |
|                          |                                | A student of the Panama Maritime University began his professional practice as onboard observer               | September<br>2014                                    | PROMARINA<br>UMIP<br>CeDePesca |  |
|                          |                                | Catch and effort database and bycatch database are updated  | December<br>2014                                     | CeDePesca<br>PROMARINA         | Database available to stakeholders on request                      |
|                          |                                | The biological database was updated.  | January<br>2015                                      | CeDePesca                      | Database available to stakeholders on request                      |
|                          |                                | First formal stock assessment and recommendations for a management delivered.                                 | March<br>2015  | CeDePesca<br>PROMARINA<br>ARAP | Stock assessment<br>and<br>recommendations                         |
|                          |                                | The data collection<br>methodology for the<br>Onboard Observers Program<br>is improved                        | June<br>2015   | CeDePesca                      |  |
|                          |                                | A draft management plan has been put together   | September<br>2015                                    | PROMARINA<br>CeDePsca          | Available on request   |
|                          |                                | Catch and effort database is updated  | November<br>2015                                     | CeDePesca                      | Database available to stakeholders on request                      |
|                          |                                | Biological and bycatch databases are updated  | December<br>2015                                     | CeDePesca                      | Database available<br>to stakeholders on<br>request                |
|                          |                                | Second formal stock<br>assessment is completed in<br>March, and is available to<br>the public as of July 2016 | March<br>2016  | CeDePesca<br>PROMARINA         | Stock assessment<br>(in Spanish)  Stock assessment<br>(in English) |
|                          |                                | As a direct result from this FIP, the Government of Panama updates the fishery's regulations.                 | March<br>2016  | ARAP                           | Executive Decree N° 107-2016                                       |
|                          |                                | Catch and effort database is updated  | August<br>2016                                       | CeDePesca                      | Database available to stakeholders on request                      |

|                        |                                   | Biological and bycatch databases are updated   | September<br>2016 | CeDePesca                                 | Database available<br>to stakeholders on<br>request               |
|------------------------|-----------------------------------|--|-------------------|---|---|
| FIP is encouraging     |                                   | Catch and effort database and biological database are updated  | December<br>2016  | CeDePesca                                 | Database available<br>to stakeholders on<br>request               |
| improvements (Stage 3) | FIP is achieving agreed annual    | A report on bycatch according to the data from the Onboard Observers   | January<br>2017   | CeDePesca                                 | Bycatch Report<br>(in Spanish)                                    |
| CONTINOLD              | improvement milestones  CONTINUED | Program has been prepared.  An hydroacoustic survey in the Gulf of Panama was conducted by FIP partners                    | February<br>2017  | PROMARINA<br>CeDePesca                    |   |
|                        |                                   | A third biologist has been trained as onboard observer for the Program   | May<br>2017       | CeDePesca                                 | <u>Picture</u>  |
|                        |                                   | Catch and effort database,<br>biological database and<br>bycatch database updated  | June<br>2017      | CeDePesca                                 | Database available to stakeholders on request                     |
|                        |                                   | An onboard observer was trained for the PROBASA fleet  | July<br>2017      | CeDePesca                                 |   |
|                        |                                   | The Onboard Observers Program database was shared with ARAP  | August<br>2017    | PROMARINA<br>CeDePesca<br>ARAP            |   |
|                        |                                   | The catch and effort database and the size structure database were updated   | November<br>2017  | CeDePesca                                 | Database available to stakeholders on request                     |
|                        |                                   | ARAP requested to participate from the drafting process of the FIP Action Plan for 2018                                    | December<br>2017  | ARAP<br>CeDePesca                         |   |
|                        |                                   | The catch and effort database, the size structure database and the database on bycatch of sharks and turtles were updated. | January<br>2018   | ARAP<br>CeDePesca                         | Database available to stakeholders on request                     |
|                        |                                   | A hydroacoustic survey of small pelagic species was carried out in the Gulf of Panama conducted by FIP partners.           | March 2018        | PROMARINA<br>PROBASA<br>ARAP<br>CeDePesca | March 2018 report   |
|                        |                                   | A training workshop was held for on-board observers.   | April 2018        | CeDePesca                                 | Picture   |
|                        |                                   | The Fishing Season 2018<br>began according to<br>Resolution DGOMI N ° 024 of<br>April 10, 2018.                            | April 2018        | ARAP                                      | Resolution DGOMI N ° 024 of April 10, 2018.                       |
|                        |                                   | The Maximum Allowable<br>Catch (CMA) was estimated<br>for the 2018   | May 2018          | CeDePesca<br>PROMARINA<br>PROBASA         | The Maximum<br>Allowable Catch<br>(CMA), Season 2018<br>(Spanish) |

FIP is encouraging improvements (Stage 3)

CONTINUED

|  | 1                 | 1                    |                                 |
|--|-------------------|----------------------|---------------------------------|
| A draft of the text of the TdR was drawn up to hire an | September<br>2018 | CeDePesca            | The document is under review by |
| expert in the assessment of                            |                   |                      | ARAP, PROMARINA                 |
| small pelagic stocks.                                  |                   |                      | and PROBASA                     |
|  |                   |                      | (Confidential)                  |
| Catch and effort database,                             | December          | CeDePesca            | Database available to           |
| biological database and                                | 2018              |                      | stakeholders on                 |
| bycatch database update                                |                   |                      | request                         |
| Catch and effort database,                             | January           | CeDePesca            | Database available to           |
| the size structure database                            | 2019              |                      | stakeholders on                 |
| and the database on bycatch                            |                   |                      | request                         |
| of sharks and turtles were                             |                   |                      |                                 |
| updated.   |                   |                      |                                 |
| Workshop with the fishing                              | January           | Promarina,           | Picture                         |
| captains of Promarina and                              | 2019              | Probasa and          |                                 |
| Probasa on the measures of                             |                   | CeDePesca            |                                 |
| the management plan of the                             |                   |                      |                                 |
| fishery and on measures to                             |                   |                      |                                 |
| reduce the mortality of                                |                   |                      |                                 |
| turtles, sharks and rays.                              | Cohmus            | DDONAA DINIA         | Lludropouetie                   |
| A hydroacoustic survey of small pelagic species was    | February<br>2019  | PROMARINA<br>PROBASA | Hydroacustic survey             |
| carried out in the Gulf of                             | 2019              | ARAP                 | Report                          |
| Panama conducted by FIP                                |                   | CeDePesca            |                                 |
| partners.  |                   | CeDeresca            |                                 |
| CeDePesca coordinated a                                | April 2019        | PROMARINA            |                                 |
| Workshop on the Estimation                             | April 2019        | PROBASA              |                                 |
| and Recommendation of the                              |                   | ARAP                 |                                 |
| Maximum Allowable Capture                              |                   | CeDePesca            |                                 |
| for technicians of the Water                           |                   | 0020.000             |                                 |
| Resources Authority of                                 |                   |                      |                                 |
| Panama (ARAP) and                                      |                   |                      |                                 |
| collaborators of the FIP                               |                   |                      |                                 |
| Partners Promarina and                                 |                   |                      |                                 |
| Probasa.   |                   |                      |                                 |
| The Fishing Season 2019                                | April 2019        | ARAP                 | Resolution DGOMI                |
| began according to                                     |                   |                      | No. 025                         |
| Resolution DGOMI N ° 025 of                            |                   |                      |                                 |
| April 02, 2019.  |                   |                      |                                 |
| Three observers were                                   | May 2019          | CeDePesca            |                                 |
| trained on board                                       |                   |                      |                                 |
| theoretically and in the field.                        | D.4 1             | ADAR '               |                                 |
| As a catch control, the                                | May and           | ARAP and             |                                 |
| weekly average of the Catch                            | June 2019         | CeDePesca            |                                 |
| per Effort Unit (CPUE) was estimated.                  |                   |                      |                                 |
| CeDePesca moderates the                                | June 2019         | CeDePesca            |                                 |
| second workshop on the                                 | Julie 2019        | CEDEFESCA            |                                 |
| calculation of the CMA to the                          |                   |                      |                                 |
| ARAP researchers and                                   |                   |                      |                                 |
| collaborators of the FIP                               |                   |                      |                                 |
| Partners Promarina and                                 |                   |                      |                                 |
| Probasa, at the request of                             |                   |                      |                                 |
| the institution.                                       |                   |                      |                                 |
|  | i                 | <u>1</u>             | 1                               |

|                                     | The 2019 anchovy fishing season is officially closed through Resolution No. DGOMI-189 of Tuesday, September 24, 2019. Published in Official Gazette No. 28870 of Friday, September 27, 2019             | September<br>2019 | ARAP  | Resolution No<br>DGOMI-189<br>September 2019                 |
|-------------------------------------|---|-------------------|---|--|
|                                     | Catch and effort database, the size structure database and the database on bycatch of sharks and turtles were updated.  | November<br>2019  | CeDePesca   | Database available to stakeholders on request                |
|                                     | Estimation of bycatch per month per species per area was continued.   | November<br>2019  | CeDePesca   | Database available to stakeholders on request                |
|                                     | Databases on the different habitats of the fishing areas were reviewed.   | November<br>2019  | CeDePesca   | Database available to stakeholders on request                |
|                                     | The estimate of the bycatch per month per species per area was continued  | December<br>2019  | CeDePesca   | Database available to<br>stakeholders on<br>request          |
| FIP members are engaging regulators | Discussions held between PROMARINA and ARAP, and between CeDePesca and University of Panama in order to reinforce the FIP   | February<br>2012  | PROMARINA<br>CeDePesca<br>UP<br>ARAP                          | U. of Panama<br>activities Pages 238<br>239                  |
|                                     | A joint research project was submitted to SENACYT, aiming at securing funds for monitoring and stock assessment purposes. However, the project was not selected by SENACYT, citing funding availability | May<br>2012       | PROMARINA,<br>CeDePesca,<br>UP (Limnology<br>Center),<br>ARAP | Email SENACYT FID<br>2012                                    |
|                                     | The first formal stock assessment is conducted by CeDePesca and recommendations for a management plan were delivered to ARAP and PROMARINA  | March<br>2015     | CeDePesca<br>PROMARINA<br>ARAP                                | Stock assessment and recommendations                         |
|                                     | Draft management plan presented to ARAP   | September<br>2015 | CeDePesca<br>PROMARINA<br>ARAP                                | Available on request   |
|                                     | Second stock assessment conducted by CeDePesca and recommendations for a management plan were improved and presented to ARAP and PROMARINA  | March<br>2016     | CeDePesca<br>PROMARINA<br>ARAP                                | Stock assessment (in Spanish)  Stock assessment (in English) |
| FIP members are engaging regulators | Updated proposal for a management plan is presented to ARAP   | July<br>2016      | PROMARINA<br>CeDePesca<br>ARAP                                | Available on request   |

|           | ARAP provided comments to the FIP's proposal for a   | June<br>2017      | ARAP   | Confidential   |
|-----------|--|-------------------|--|--|
| CONTINUED | management plan  Changes to the management plan proposal were discussed with authorities   | August<br>2017    | PROMARINA<br>PROBASA<br>CeDePesca<br>ARAP              | Confidential   |
|           | The Maximum Allowable<br>Catch (CMA) was estimated<br>for the 2018   | May 2018          | CeDePesca<br>PROMARINA<br>PROBASA                      | The Maximum Allowable Catch (CMA), Season 2018 (Spanish)                           |
|           | Memorandum of<br>Understanding (MoU) was<br>signed   | August 2018       | ARAP PROMARINA PROBASA TABOGUILLA AnimalFeed CeDePesca | MoU  |
|           | RESOLUTION ADM / ARAP No. 027 of August 28, 2018 was signed and published in Official Gazette No. 28605-B of September 5, 2018. By means of which the Management Plan of the fishery of small pelagic, | August 2018       | ARAP   | RESOLUTION ADM /<br>ARAP No. 027 of<br>August 28, 2018                             |
|           | The Fishing Season 2018 closes, according to Resolution DGOMI No. 048 of November 8, 2018, Official Gazette No. 28653.   | November<br>2018  | ARAP   | Resolution DGOMI<br>No. 048 of November<br>8, 2018, Official<br>Gazette No. 28653. |
|           | The Fishing Season 2019 began according to Resolution DGOMI N ° 025 of April 02, 2019.   | April 2019        | ARAP   | Resolution DGOMI N ° 025 of April 02, 2019.  |
|           | The 2019 anchovy fishing season is officially closed through Resolution No. DGOMI-189 of Tuesday, September 24, 2019. Published in Official Gazette No. 28870 of Friday, September 27, 2019;           | September<br>2019 | ARAP   | Resolution No<br>DGOMI-189<br>September 2019                                       |
|           | It was agreed to close the 2019 Fishing Season on Friday, October 15.  | October<br>2019   | ARAP<br>PROMARINA<br>PROBASA<br>CeDePesca              |  |
|           | CeDePesca fortifies the relations with Panama's National University to beef up the On board observers capacities.  | June<br>2020      | CeDePesca Panama National University                   | Current meeting summary  |

|   |                           | A catch and effort database for the period 1996/2012 is available.   | November<br>2012        | PROMARINA<br>ARAP<br>CeDePesca   | Database<br>available at<br>stakeholders'<br>request. |
|---|---------------------------|--|-------------------------|--|---|
|   |                           | The first formal meeting of the Management Commission por the small pelagics fishery took place and approved the internal statute of the commission, and the chair and secretary were elected. Also, a new rule was approved issuing anchovy licenses for traditional small scale fishers. | August<br>2021          | ARAP<br>PROMARINA<br>PROBASA<br>CeDePesca                                    | ACTA-No1-<br>Pequenos-Pelagicos-<br>31-08-21          |
|   |                           | A meeting was held between CeDePesca representatives, regional ARAP officials and the fishing community in Herrera to discuss the situation of the small scale sub-fishery and train the fishers and ARAP officials on determining sex and maturity of anchovies.                          | November<br>2021        | ARAP<br>CeDePesca  | <u>Pictures</u>                                       |
|   |                           | The second meeting of the Commission was programmed for February 2022.   | February<br>2022        | ARAP<br>PROMARINA<br>PROBASA<br>CeDePesca                                    | Call to meeting                                       |
| FIP is<br>delivering<br>improvement<br>in policies or<br>practices<br>(Stage 4) | Fishery practices changed | ARAP agreed to restart monitoring activities when the 2013 season opens in April. PROMARINA skippers are being trained on a new logbook and basic sampling protocols.  | March-<br>April<br>2013 | ARAP<br>PROMARINA<br>CeDePesca   | Logbook<br>template<br>available on<br>request        |
|   |                           | First national workshop on fisheries research identified key research needs.   | April<br>2013           | ARAP, UP,<br>UMIP, STRI,<br>PROMARINA,<br>Panalang,<br>CeDePesca,<br>CONAPAS | Workshop report available on request                  |
|   |                           | Onboard Observer Program is successfully collecting data   | May<br>2013<br>to date  | PROMARINA<br>CeDePesca   | <u>Undercurrent News</u>                              |
|   |                           | First formal stock assessment was performedand recommendations for a management plan were delivered.   | March<br>2015           | CeDePesca<br>PROMARINA<br>ARAP   | Stock assessment and recommendations                  |

| PROMARINA commits itself<br>to the adoption of the<br>management plan as self-<br>regulating practice   | May<br>2015                              | PROMARINA<br>and<br>CeDePesca                                     | LoC  |
|---|--|---|--|
| Second formal stock assessment is completed, and its outcomes are presented to stakeholders and recommendations are presented to regulators.  | March<br>2016                            | CeDePesca<br>PROMARINA<br>ARAP                                    | Picture 1 Picture 2                                      |
| Second stock assessment available to the public   | July<br>2016                             | CeDePesca   | Stock assessment   |
| An hydroacoustic survey in the Gulf of Panama was conducted by AlborTecnológico, hired by PROMARINA. The survey was conducted with collaboration from FIP partners.   | February<br>2017                         | PROMARINA<br>CeDePesca  | Hydroacustic survey Report (in Spanish)                  |
| A hydroacoustic survey of small pelagic species was carried out in the Gulf of Panama conducted by AlborTecnológico, hired by PROMARINA and PROBASA. The survey was conducted with collaboration from FIP partners. | March 2018                               | PROMARINA<br>PROBASA<br>ARAP<br>CeDePesca                         | Hydroacoustic survey report                              |
| The Maximum Allowable<br>Catch (CMA)  | May 2018                                 | CeDePesca<br>PROMARINA<br>PROBASA                                 | The Maximum Allowable Catch (CMA), Season 2018 (Spanish) |
| A hydroacoustic survey of small pelagic species was carried out in the Gulf of Panama conducted by FIP partners.  | February<br>2019                         | PROMARINA<br>PROBASA<br>ARAP<br>CeDePesca                         | Hydroacoustic survey<br>Report                           |
| The FIP partners approved a Voluntary Environmental Code of Conduct to monitor and eventually minimize the impacts on the ecosystem   | March 2019                               | PROMARINA<br>PROBASA<br>Pesquera<br>Taboguilla<br>Central Pacific | Code of Conduct  |
| A new report on bycatch according to the data from the Onboard Observers Program has been prepared.   | April 2019                               | CeDePesca   | Observers Report<br>2018                                 |
| Weekly monitoring of the catch per unit effort (CPUE) corresponding to the current season.  | July, August<br>and<br>September<br>2019 | ARAP<br>CeDePesca   | Database<br>available at<br>stakeholders'<br>request.    |

FIP is delivering improvement in policies or practices (Stage 4)

|                    | T                                    | Ι          | T         | Τ                     |
|--------------------|--------------------------------------|------------|-----------|-----------------------|
|                    | Monthly monitoring of                | August and | ARAP      | Database              |
|                    | bycatch, the percentage per          | September  | CeDePesca | available at          |
|                    | area by species of unwanted          | 2019       |           | stakeholders'         |
|                    | catch was estimated.                 |            |           | request.              |
|                    | Estimation of bycatch per            | November   | CeDePesca | Database available to |
|                    | month per species per area           | 2019       |           | stakeholders on       |
|                    | was continued.                       |            |           | request               |
|                    | The estimate of the bycatch          | December   | CeDePesca | Database available to |
|                    | per month per species per            | 2019       |           | stakeholders on       |
|                    | area was continued                   |            |           | request               |
|                    | A formal stock assessment            | January    | CeDePesca | Stock assessment      |
|                    | was conducted and                    | 2020       |           | report                |
|                    | presented to the authorities         |            |           |                       |
|                    | The report of the observers'         | September  | CeDePesca | Observers report for  |
|                    | program for the season 2019          | 2020       |           | 2019                  |
|                    | was delivered                        |            |           |                       |
|                    | The hydroacoustic surveys            | March 2021 | PROMARINA | Hydroacoustic survey  |
|                    | have been reinitiated after          |            | PROBASA   | report                |
|                    | the pandemic                         |            | ARAP      | <u></u>               |
|                    | the pariacime                        |            | CeDePesca |                       |
|                    | The observers on board               | May 2021   | CeDePesca | First preliminary     |
|                    | program have been                    | 1410 2021  | PROMARINA | report for 2021       |
|                    | reinitiated after the                |            | PROBASA   | season                |
|                    | pandemic with participation          |            | ARAP      | <u>3Cu3OII</u>        |
|                    | of ARAP and an improved              |            | Alvai     |                       |
|                    | Technical Register                   |            |           |                       |
|                    | A peer review for the stock          | May 2021   | CeDePesca | Peer review report    |
|                    | assessment was conducted             | 1VIAY 2021 | CeDeresca | reel review report    |
|                    | and delivered to the                 |            |           |                       |
|                    |                                      |            |           |                       |
| Fish on a policies | authorities The Government of Panama | March      | ARAP      | Executive Decree      |
| Fishery policies   | issues Decree N° 107 on              | 2016       | AKAP      | N°107-2016            |
| changed            | March 29 <sup>th</sup> , effectively | 2016       |           | <u>N 107-2010</u>     |
|                    | updating measures that were          |            |           |                       |
|                    | first set in 1977. This is a         |            |           |                       |
|                    | huge step forward for the            |            |           |                       |
|                    |                                      |            |           |                       |
|                    | fishery's sustainability and is      |            |           |                       |
|                    | considered an important FIP          |            |           |                       |
|                    | milestone. The first Management Plan | Octobor    | ADAD      | Management Dian       |
|                    | _                                    | October    | ARAP      | Management Plan       |
|                    | for the Fishery was approved         | 2018       |           |                       |
|                    | and published by ARAP                | Marsh 2024 | ADAD      | Agondo and duett      |
|                    | The Management Plan                  | March 2021 | ARAP      | Agenda and draft      |
|                    | created a Management                 |            |           | internal rules of     |
|                    | Committee with                       |            |           | <u>procedure</u>      |
|                    | participation of ARAP, the           |            |           |                       |
|                    | industry and CeDePesca,              |            |           |                       |
|                    | started working after the            |            |           |                       |
|                    | new President of the country         |            |           |                       |
|                    | took office.                         |            |           |                       |
|                    | The 2021 fishing season was          | April 2021 | ARAP      | <u>Fishing season</u> |
|                    | opened once again through            |            |           | opening resolution    |
|                    | an official resolution based         |            |           |                       |
|                    | on the technical report.             |            |           |                       |
|                    | •                                    |            |           |                       |

| ARAP issued the Technical    | August,  | ARAP | <u>Informe Tecnico de</u>  |
|------------------------------|----------|------|----------------------------|
| Report based on the          | 2021     |      | <u>Cierre de Temporada</u> |
| Management Plan criteria     |          |      | de Anchoveta 2021          |
| and used as fundament for    |          |      |                            |
| the closure of the anchovy   |          |      |                            |
| season, which is issued The  |          |      | Resolucion de cierre       |
| Resolution DGOMI 122-2021    |          |      | <u>de temporada</u>        |
| where the closure was made   |          |      | anchoveta 2021             |
| effective.                   |          |      |                            |
| The Management               | October  | ARAP | <u>Reglamento</u>          |
| Commission Statute was       | 2021     |      | Comision de                |
| officially published by ARAP |          |      | pequeños pelagicos         |
| with the signature of the    |          |      |                            |
| chair and secretary.         |          |      |                            |
|                              |          |      |                            |
| ARAP issued the Resolution   | November | ARAP | Resolucion cierre          |
| DGOMI 189-2021               | 2021     |      | temporada arenque          |
| establishing the closure of  |          |      | <u>2021</u>                |
| the thread herring fishing   |          |      |                            |
| season because of the low    |          |      |                            |
| level of catch.              |          |      |                            |
|                              |          |      |                            |