



Arafura and Timor Seas Ecosystem Action



ATSEA-2 ANNUAL REPORT 2020



Adapt



Innovate



Deliver



ATSEA-2 Annual Report 2020: Adapt. Innovate. Deliver

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Message from UNDP

There was an air of excitement when Australia, Indonesia, Papua New Guinea, and Timor-Leste together with the GEF, UNDP, and PEMSEA formally launched the Arafura-Timor Seas Ecosystem Action Phase II (ATSEA-2) Program in November 2019. The launching took place during the Inception Workshop and the first Regional Steering Committee (RSC).

Nonetheless, as the COVID-19 pandemic kicked in, it became clearer that the ATS region, like the rest of the world, was forced to shift much of its social interaction onto virtual platforms. The wide-ranging impacts of the global pandemic went beyond human health and cascaded to people's livelihood and economic sectors, including the coastal and marine sector. It is therefore crucial that we value the intrinsic connection of our environment, including the health of our oceans, to overall human, economic, and social well-being. Now, more than ever, we need stronger cooperation in developing science-based policies and interventions if we are to truly achieve sustainable development, as espoused in the UN Sustainable Development Goals (SDGs), as well as the Decade of Ocean Science.

By staying committed to its vision, the ATSEA-2 Program and its partners have proceeded to make headway despite the challenges.

It is heartening to note that while some activities had to be realigned, the ATSEA-2 Program still managed to get the majority of its target activities up and running. As a project implementing partner and as a member of the RSC, the UNDP in ATS member countries was also actively involved in various thematic discussions and consultations on key issues facing the ATS region. The completion of initial ATS assessments on regional governance, marine pollution, climate change, biodiversity and habitats, and fisheries as key outputs in 2020 would serve as an integral contribution in ensuring that ocean science can fully support ATS countries in achieving its Strategic Action Programme (SAP) and their commitment to the 2030 Agenda for Sustainable Development.



Dr. Sophie Kemkhadze
Deputy Resident Representative, UNDP Indonesia

“It is [therefore] crucial that we value the intrinsic connection of our environment, including the health of our oceans, to overall human, economic, and social well-being.”

This initiative aligns well with UNDP's commitment to strengthen integration for green and sustainable recovery. We are pleased that ATSEA-2 has also initiated its Gender Equity and Social Inclusion (GESI) assessments to guide the mainstreaming of GESI principles in the overall project, thus contributing to UNDP's footprint in gender equality and inclusion. Through a concerted effort, commitment and innovation, the project has demonstrated resilience in the midst of a very challenging situation.

Uncertainties still abound as we continue to face the challenges of the global pandemic. But by building on the lessons from 2020 and moving as one region, we are confident that the ATS region will emerge better and stronger.

On behalf of the United Nations Development Programme (UNDP), we would like to thank the Global Environment Facility (GEF) for its support, and to the ATSEA-2 Program and its partners for their good efforts, which were well captured in this first ATSEA-2 Annual Project Progress Report. May the successes from 2019 and 2020 provide the region with a strong resolve as it embarks on a new year.

Message from PEMSEA



Ms. Aimee Gonzales
Executive Director, PEMSEA

“The complementarity between PEMSEA’s SDS-SEA and the ATS SAP provides a good opportunity for further strengthening collaborative efforts.”

The year 2020 is definitely one for the books. For the GEF/UNDP/PEMSEA ATSEA-2 Program and its recently instituted project team and steering committee, the global pandemic has provided both extreme challenges as well as some good opportunities. While it has been a difficult year, the fact that the project has managed to withstand various obstacles and deliver significant outputs is an achievement to celebrate.

This first ATSEA-2 Project Progress Report is a manifestation of the unwavering commitment of the ATS countries and their partners in pursuing their 2014 Ministerial commitment and Strategic Action Programme’s (SAP) vision for a sustainable ATS region. Through adaptive management and recalibration of activities and resources, I commend the ATSEA-2 Regional Project Management Unit which safely navigated the project in 2020 and explored various ‘online’ platforms and means to implement its key target activities.

The Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is proud to serve as ATSEA-2’s executing agency for the regional and Papua New Guinea components. Through PEMSEA’s 27 years of experience in implementing Integrated Coastal Management (ICM) and guided by its regional plan of action, the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), PEMSEA hopes to further contribute and share its wealth of experience to the ATS region. The complementarity between PEMSEA’s SDS-SEA and the ATS SAP also provides a good opportunity for further strengthening collaborative efforts and opens up a wider platform for learning exchange and showcase knowledge, experiences and innovations that would contribute to bigger goals of various international sustainable environmental and ocean commitments.

In 2020, the ATSEA-2 Program initiated the groundwork in gathering key information and identifying crucial elements towards the envisioned establishment of a more formal regional governance mechanism that would facilitate stronger country ownership and commitment to the continued implementation of its regional and national SAPs. In support of this objective, PEMSEA’s experience, together with lessons from other key mechanisms, were shared. In a span of one year, the project was also able to put together more detailed and up-to-date baseline reports for the ATS region, which will serve as integral inputs for the updating of the ATS Transboundary Diagnostic Analysis and SAP in 2021 and 2022.

Building on these and as ATSEA-2 steps into a new year, PEMSEA reaffirms its strong support to the project and commits to further strengthening collaboration towards building a sustainable, inclusive and resilient blue economy and helping bring about a better ATS for tomorrow.

Foreword



Dr. Handoko Adi Susanto
Regional Project Manager of ATSEA-2

“While the way we do business has definitely been altered, our vision and common resolve to ensure a sustainable and healthy future for the ATS region remains the same.”

ensure a sustainable and healthy future for the ATS region remains the same. We are optimistic that 2021 will bring about better developments. To build back better, ATSEA-2 will continue to integrate key lessons from the pandemic including ensuring more efficient working arrangements to reduce carbon footprint, and supporting pandemic rehabilitation plans by promoting habitat and biodiversity protection, responsible waste management, and raising awareness on sustainable means and sources of livelihood, among others.

On behalf of the RPMU, we would like to express our sincere appreciation to the members and partners of the ATSEA-2 Program whose perseverance has motivated all of us to continue moving forward. We hope that you would enjoy reading this report, and may you all be in good health and high spirits as we journey towards another year together.

The Regional Project Management Unit (RPMU) serving as interim Secretariat of the GEF/UNDP/PEMSEA ATSEA-2 Program was formally instituted in the first quarter of 2020, the same time when the pandemic started to stealthily spread globally, bringing with it unprecedented challenges.

This annual report carries the theme of ADAPT, INNOVATE and DELIVER. As 2020 is quite a unique year, this captures how the Project managed to ADAPT with new ways of conducting planning, coordination, and implementation. With guidance from UNDP and PEMSEA, the Project recognized the need to strategize and INNOVATE to keep the project agile. With perseverance and closer coordination, the Project was able to DELIVER good progress and carry on with its mandate.

Through constant communication, albeit virtually, RPMU facilitated regular updating and monitoring of progress both at the regional and country level. By instituting innovative online coordination platforms, the project has successfully linked our international and regional experts with country experts and stakeholders for the conduct of baseline scoping and assessments related to ocean governance, fisheries, marine pollution, biodiversity and habitats, and climate change. These studies are integral in providing clear information and understanding of the status of the region, as well as the challenges and possible opportunities to strategically guide various interventions. Strengthened connection with local partners and stakeholders has also been crucial to ensuring that information and activities on the ground are carried out. These efforts were matched with use of more web-based platforms (web and social media sites), to facilitate information sharing, capacity and awareness building, and collaborations. To ensure that no one is left behind, ATSEA-2 also initiated rapid assessments on gender equity and social inclusion (GESI) with the aim of further mainstreaming GESI principles in the project.

While the way we do business has definitely been altered, our vision and common resolve to

Executive Summary

This report synthesizes the progress and accomplishments in the implementation of the ATSEA-2 Project since its initiation in 2019 up to the end of 2020. With the global health crisis and far-reaching changes in 2020, the stories in this issue show the breadth of work done at the regional, national and local levels, and the various institutions and people who contributed to the regional effort while adapting to innovative ways of communication and collaboration across a range of stakeholders.

A brief **Project Overview** highlights key elements of the ATSEA-2 Project in support of the implementation of the ATS Strategic Action Programme (SAP) and National Action Programmes (NAPs) toward addressing priority governance and transboundary issues identified in the Transboundary Diagnostic Analysis (TDA) in 2011. This is followed by various sections highlighting the key challenges of the region and the initiatives undertaken from 2019 to 2020, with highlights on key milestones at the regional and country level.

As the challenges facing the region's marine and coastal areas are complex and ever-changing, the section **A Deeper Probe of the Region's Common Challenges and Delivering Progress** presents developments with the simultaneous thematic assessments being undertaken at the regional and national/sub-national levels. The article on **Recovering and Sustaining Fisheries** shares preliminary work as well as challenges in generating baseline information on IUU fishing and economic losses in the ATS region, and other initiatives in support of the Regional Plan of Action for Responsible Fishing Practices Including Combating IUU Fishing (RPOA)-IUU. Ongoing preparation of a regional EAFM Plan that balances human and ecological well-being for red snapper fisheries is also presented. The article on **Reducing Land-Based and Marine Sources of Pollution** presents modeling results which show

that the southern coast of Timor Island, specifically the Rote Ndao District, is vulnerable to oil spill occurrences in the Timor Sea. Two hotspot areas for marine debris from derelict fishing gears were also identified. Whereas, in **Restoring and Protecting Habitats and Key Marine Species**, the results of a regional stocktaking and mapping of key biodiversity habitats, valuation of ecosystem services, and identification of priority conservation areas are presented, for use in developing a plan for the establishment of new Marine Protected Areas (MPAs) and a regional MPA Network, and a regional plan of action to protect endangered marine turtles. The article **Promoting Adaptive Capacity and Resilience to Climate Change**, on the other hand, highlights how climate-driven changes are expected to impact on the condition and area of the habitats and various highly vulnerable and high priority species across all sub-regions in the ATS. And considering the range of issues besetting the coastal and marine areas, **ICM in the ATS Region**, presents how ATSEA-2 will support the application of integrated coastal management for addressing various local priorities in a coordinated manner, and how an inter-agency coordination and management mechanism was established to support the ICM process in the Posto Administrativo Barique in Manatuto Municipality, Timor-Leste. All the articles feature related case studies from the work undertaken at key project sites, and their linkages to various international targets.

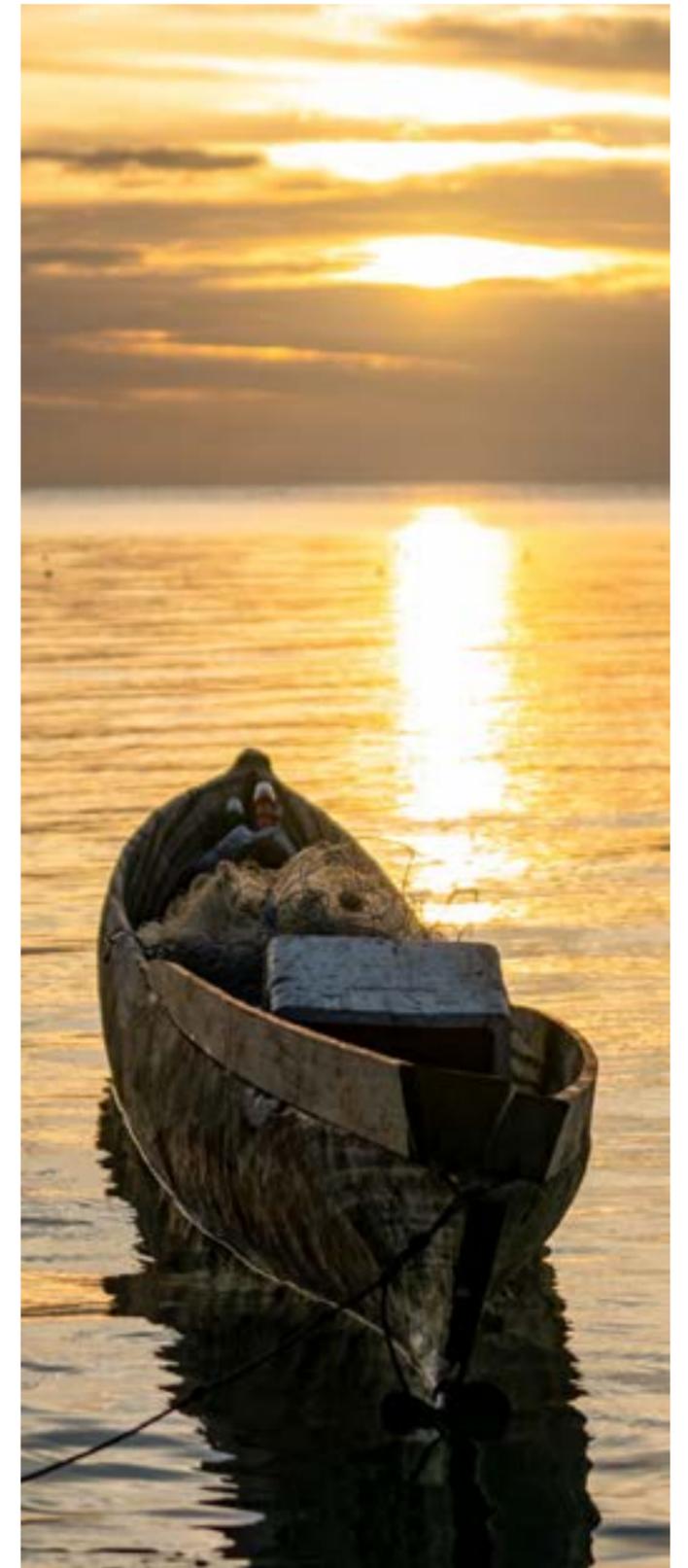
Within the context of the Ministerial Declaration and SAP and NAPs adopted by the ATS countries in 2014, the section on **Building a Sustainable Regional Mechanism for ATS** shares the progress in developing various key governance components that will support a sustainable regional governance arrangement that is reinforced by stronger multi-stakeholder cooperation. The article **Setting in Motion the Establishment of a Sustainable Governance Mechanism for ATSEA** presents key

considerations and a roadmap in developing and achieving consensus on the most viable design options for a country-led regional governance mechanism and a Stakeholder Partnership Forum (SPF), including the development of a monitoring system for the ATS SAP. **Laying the Building Blocks to Inclusive ATSEA Governance and Development through GESI** shares how the project will ensure the participation of women and men with equal voice, starting with rapid assessments on gender equity and social inclusion to support capacity building and further mainstreaming of GESI principles in the overall project. In **Building Awareness and Capacities**, ATSEA-2's communication, awareness and capacity building strategies and initiatives are presented, and how the project has been optimizing its reach through various digital platforms. In recognizing the value of concerted efforts in working toward common goals and objectives, the article **Strengthening Partnerships** shares ATSEA-2's engagement with various entities to explore opportunities for synergies and innovative solutions.

The report's **Special Feature** highlights how ATSEA-2 is paving the way for greater inclusivity and engagement in the governance of the ATS through the **Stakeholder Partnership Forum**. Two **ATSEA Champions** are also featured in the report, initiating the recognition of key individuals for their roles in advancing sustainable coastal and ocean development in the ATS region.

The **Overall Project Status** shows that technical delivery is generally on track, while financial delivery is at 33% in 2019 and 67% in 2020.

Finally, the report acknowledges the members of the Regional Steering Committee and the ATSEA-2 Team who have worked together over the past two years, and looks forward to stronger partnerships and collaborations to accomplish planned activities in 2021.



Project Overview

The ATSEA-2 Project is the second phase of the GEF-financed, UNDP-supported ATSEA programme. The project will run for five years (2019-2024) and is supported by the GEF grant amounting to US\$9.7 million with counterpart co-financing commitments from country and various partners amounting to US\$33.8 million. The regional project involves the Governments of Indonesia, Timor-Leste and Papua New Guinea, with support from the Australian Government.

The project is designed to enhance collaboration and coordination in the Arafura-Timor Seas (ATS) region with the key mandate of supporting the implementation of the endorsed ATS regional Strategic Action Programme (SAP) 2014-2024 and pursuing its long-term objective and vision: **“To promote sustainable development of the Arafura-Timor Seas region to improve the quality of life of its inhabitants through restoration, conservation and sustainable management of marine-coastal ecosystems”**.



Five priority transboundary environmental problems in the ATS region as identified in the Transboundary Diagnostic Analysis in 2011:

1. Unsustainable fisheries and decline and loss of living coastal and marine resources;
2. Modification, degradation and loss of coastal and marine habitats;
3. Marine and land-based pollution;
4. Decline and loss of threatened and migratory species; and
5. Impacts of climate change on the ATS



Map of ATS showing key project area sites in each country

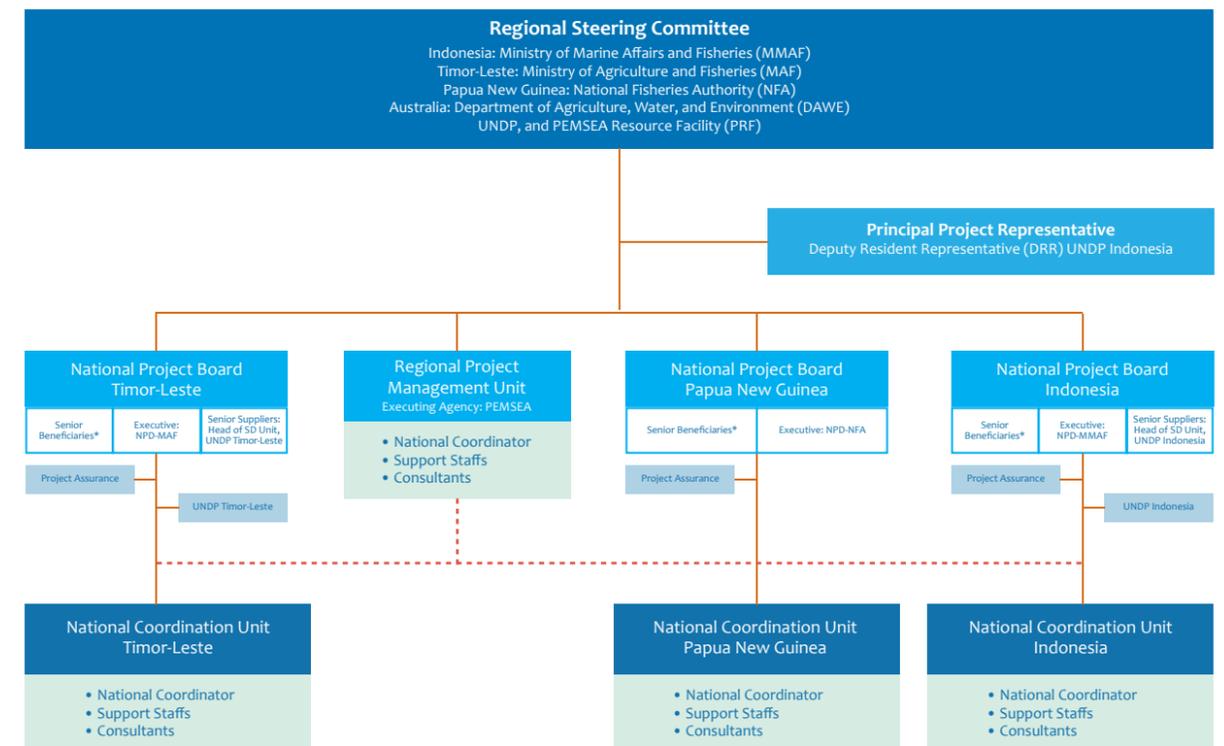
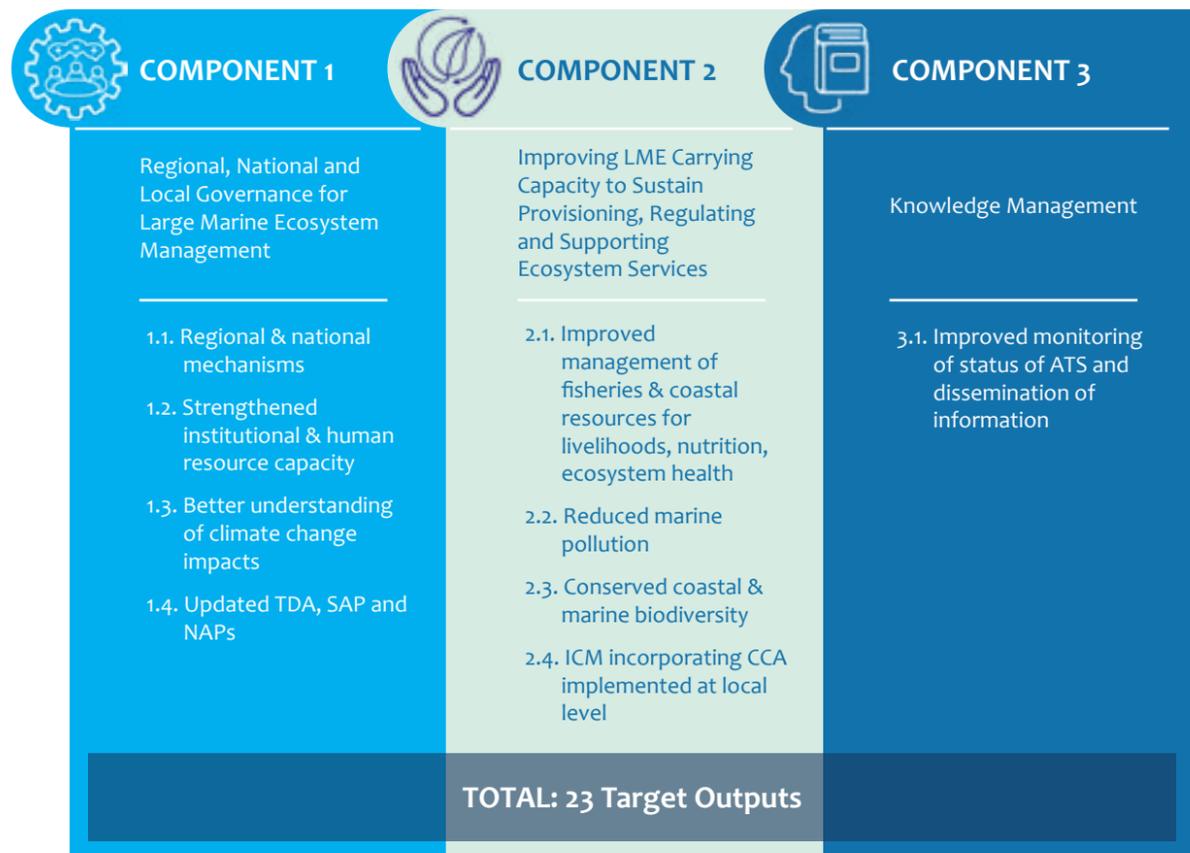
EXPECTED ACHIEVEMENTS OF ATSEA BY 2024

- A functioning regional governance mechanism, supported by a Stakeholder Partnership Forum and National Inter-Ministerial Committees (NIMCs).
- Up to 25% of over-exploited fisheries in the ATS region moved to a more sustainable level.
- Improved fisheries management of red snapper, barramundi, and shrimp fisheries.
- Financial mechanisms in place to support the implementation.
- Approximately 125 km of coastline under ICM (addressing climate change adaptation, livelihood opportunities and strengthening the resilience of local coastal communities).
- Improved scientific knowledge regarding climate change impacts on ATS and strengthened adaptive capacity of local communities.
- Establishment of new Marine Protected Areas (MPAs) and strengthened MPA management effectiveness.
- Inclusion of oil spill response systems and procedures in ICM plans.
- A regional MPA network, and action plan on enhanced protection of marine turtles.



3 COMPONENTS AND 9 EXPECTED OUTCOMES

PROJECT STRUCTURE AND MODALITY



***Senior Beneficiaries:**

- **Timor-Leste:** MAF, MSATM, MoF, MoFA, Secretary of State of Environment
- **Indonesia:** MMAF, Bappenas, MoF, MoEF, CMMAI
- **Papua New Guinea:** NFA, CEPA

A DEEPER PROBE OF THE REGION'S COMMON CHALLENGES AND DELIVERING PROGRESS



The Regional Technical Workshop on Regional and National Thematic Assessments conducted on October 6-7, 2020 facilitated information exchange and updating of preliminary results of studies on ATS' key issue areas.

In 2011, The Transboundary Diagnostic Analysis (TDA) for the ATS region identified 5 major transboundary environmental concerns that impact on the region's overall development and the quality of life of its inhabitants: (1) unsustainable fisheries and decline and loss of living coastal and marine resources; (2) modification, degradation and loss of coastal and marine habitats; (3) decline and loss of threatened and migratory marine species; (4) marine and land-based pollution; and (5) impacts of climate change¹. To tackle these key challenges, ATSEA-2 in its first two years, focused its efforts on gathering up-to-date information to set up plans and better guide interventions related to: promotion of sustainable fisheries by advocating

and implementing Ecosystem Approach to Fisheries Management (EAFM) for high value fishery commodities, such as red snappers, and building local capacity to fight Illegal, Unregulated, and Unreported (IUU) fishing; ensuring habitat and biodiversity protection through the establishment of Marine Protected Areas (MPAs); minimizing impacts of marine and land-based pollution by developing better response systems and pollution task forces; and understanding the impacts of climate change and developing adaptation plans for vulnerable areas accordingly. ATSEA-2 worked across different levels (local, national, and regional) and with multiple stakeholders, while synergizing its actions so that its impacts can be manifold across the region.

¹ ATSEA. 2021. Transboundary Diagnostic Analysis for the Arafura and Timor Seas Region. 101 pp.

RECOVERING AND SUSTAINING FISHERIES

These activities contribute to:

SDG 14
Target 14.4
Enhance the conservation and sustainable use of oceans and their resources

Target 14.b
Provide access for small-scale artisanal fishers to marine resources and markets

Aichi B
B-Target 6
All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably

The ATS region's high productivity supports small- and large-scale fisheries that provide livelihoods for millions of people and is a key contributor to food security. However, many of the ATS fisheries are fully exploited or over- exploited through legal and illegal fishing. Signs of overfishing include: decline in abundance and average size of the individuals²; increase in sailing days of the commercial fishing fleet; and a shift to non-economic bycatch or smaller individuals. Moreover, more than 80% of demersal fish, mostly red snappers (*Lutjanus sp*), caught using bottom long line between 1980 and 2005 were unreported³.

Thus, EAFM is employed to improve fisheries management in the region by balancing human well-being and ecological well-being through good governance. EAFM will be implemented on red snappers, barramundi and shrimps at regional and national scales. To address IUU fishing, at the regional level, ATSEA-2 continues to support the Regional Plan of Action to Promote Responsible Fishing Practices including Combatting IUU Fishing (RPOA)-IUU to strengthen its ATS sub-regional component. Meanwhile, at the country level, a community-based surveillance method was introduced to local fishers so that they can support monitoring, control and surveillance mechanism.

Balancing Human And Ecological Well-Being For Red Snapper Fisheries

Red snapper fishery in the ATS region is diverse and includes small-scale and larger industrial-scale vessels operating from multiple ports in each ATS littoral country. The gears used also vary, from demersal longline, mechanized line, handline, and some traps/pots in nearshore areas. The type of gears determine if the fishery is multi-species, with catches entering both domestic and export supply chains. Nevertheless, government data shows that snappers have been fully exploited in most of Indonesia's Fishery Management Areas, while Timor-Leste and Papua New Guinea lack adequate data.

ATSEA-2 has commissioned Melbourne-based Fishwell Consulting (FC) and Bali-based Starling Resources (SR) to develop an EAFM plan for red snapper in the ATS region. The team has been working to develop an EAFM baseline and plan, while engaging relevant stakeholders to ensure

participatory process and build ownership of the plan. These will specifically contribute to steps 1 to 3 of the five-step EAFM planning process.

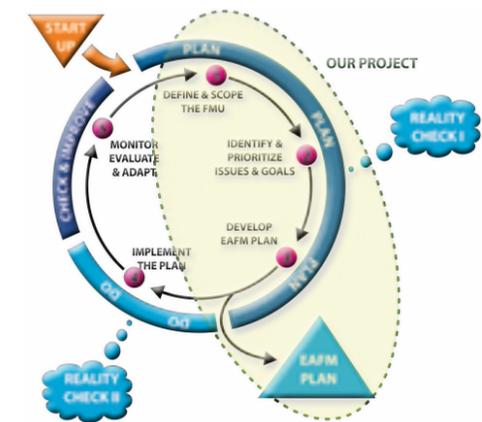


Figure 1. The 5-step EAFM planning process⁴

² Purwanto. 2011. A compromise solution to the conflicting objectives in the management of the Arafura Shrimp Fishery. Indonesian Fisheries Research Journal. 17 (1): 37-45.

³ Wagey, G.A., S. Nurhakim, V.P.H. Nikijuluw, Badrudin, and T.J. Pitcher. 2009. A study of Illegal, Unreported and Unregulated (IUU) fishing in the Arafura Sea, Indonesia. Research Centre for Capture Fisheries, MMAF. Jakarta, 54 pp.

⁴ Pomeroy, R., R. Brainard, M. Moews, A. Heenan, J. Shackeroff, and N. Armada. Coral Triangle Regional Ecosystem Approach to Fisheries Management (EAFM) Guidelines. Publication. Honolulu, Hawaii: The USAID Coral Triangle Support Partnership, 2013



Fishers loading frozen red snappers into container at Aru Islands harbour

In the upcoming year, the team will also hold EAFM Training of Trainers and develop a rights-based management approach to inshore red snapper fisheries, including facilitating a regional exchange trip to Australia once feasible.

Despite the limited time (approximately 3 months) and some challenges due to the pandemic, the team was able to collect relevant information that underpins fishery profile from different areas, such as management arrangements; vessel information, fishing location, and traceability; biological data; economic data; social data; stock assessments; and conservation issues.

As data is fundamental for the ongoing process, the team also initiated identification of data gaps by either borrowing parameters from other countries or by collecting new data to produce such estimates. Thus, more results and progress are expected by 2021.

KEY PRINCIPLES ADDRESSED BY ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT (EAFM)



Figure 2. Key principles addressed by Ecosystem Approach to Fisheries Management (EAFM). (Source: FAO)



CASE IN FOCUS

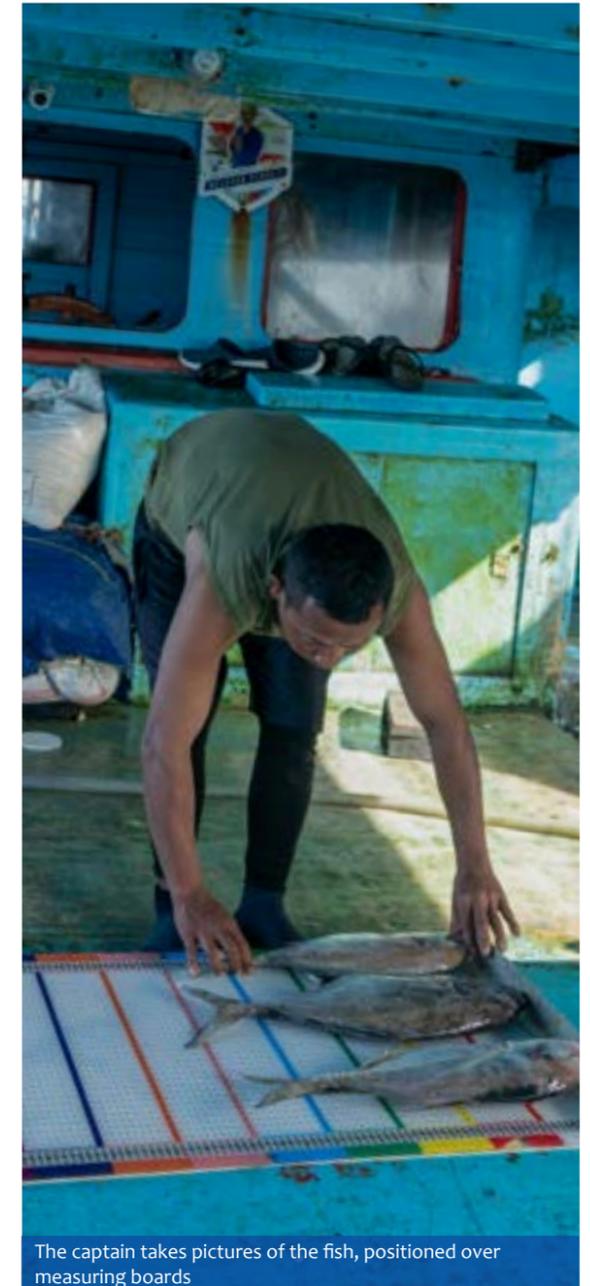
DEVELOPMENT OF A COMPREHENSIVE ACTION PLAN FOR RED SNAPPER IN ARAFURA AND TIMOR SEA

Demand for fishery commodities, particularly demersal snapper fisheries, in the Arafura and Timor Sea region, had undergone massive expansion beginning in the 1990s as evidenced by the 20% contribution to the national annual catch (Blaber et al., 2005)⁵. Approximately 50% of Indonesia's red snapper fishery production comes from the ATS region, making red snappers an important commodity in the country. To manage the fishery sector in the Arafura and Timor Seas, the ATSEA-2 National Coordination Unit (NCU) of Indonesia implemented various activities in support of EAFM and Fisheries Improvement Project (FIP) initiatives, particularly:

- Accelerating EAFM implementation and Progress of FIP in Red Snapper Fisheries Towards Marine Stewardship Council (MSC) certification in Aru District.
- EAFM assessment and pre-assessment for shrimp in Aru Islands District, Maluku Province and Barramundi in Merauke District, Papua Province towards MSC certification.

The EAFM and FIP activities focused on three commodities: (i) red snapper (ii) shrimp and (iii) barramundi. In collaboration with Yayasan Konservasi Alam Nusantara (YKAN), the EAFM Action Plan for Red Snapper was developed. One of the focus during the EAFM field activity was the development and improvement of Fishing Location and Traceability using Crew Operated Data Recording Systems (CODRS). In this system, actual fishing locations in the Arafura and Timor Seas are determined by installing SPOT Trace units on all fishing boats participating in the program. SPOT Trace is a GPS tracking device that uses a satellite network to provide GPS tracking.

The aforementioned activities were all undertaken using a fishery management strategy developed by the Ministry of Marine Affairs and Fisheries (MMAF) with assistance from NCU Indonesia.



The captain takes pictures of the fish, positioned over measuring boards

⁵ Blaber, S.J.M., C.M. Dichmont, R.C. Buckworth, Badrudin, B. Sumiono, S. Nurhakim, B. Iskandar, B. Fegan, D.C.Ramm and J.P. Salini (2005) Shared stocks of snappers (Lutjanidae) in Australia and Indonesia: Integrating biology, population dynamics and socio-economics to examine management scenarios. *Reviews in Fish Biology and Fisheries*. 15: 111-127. [3][8]

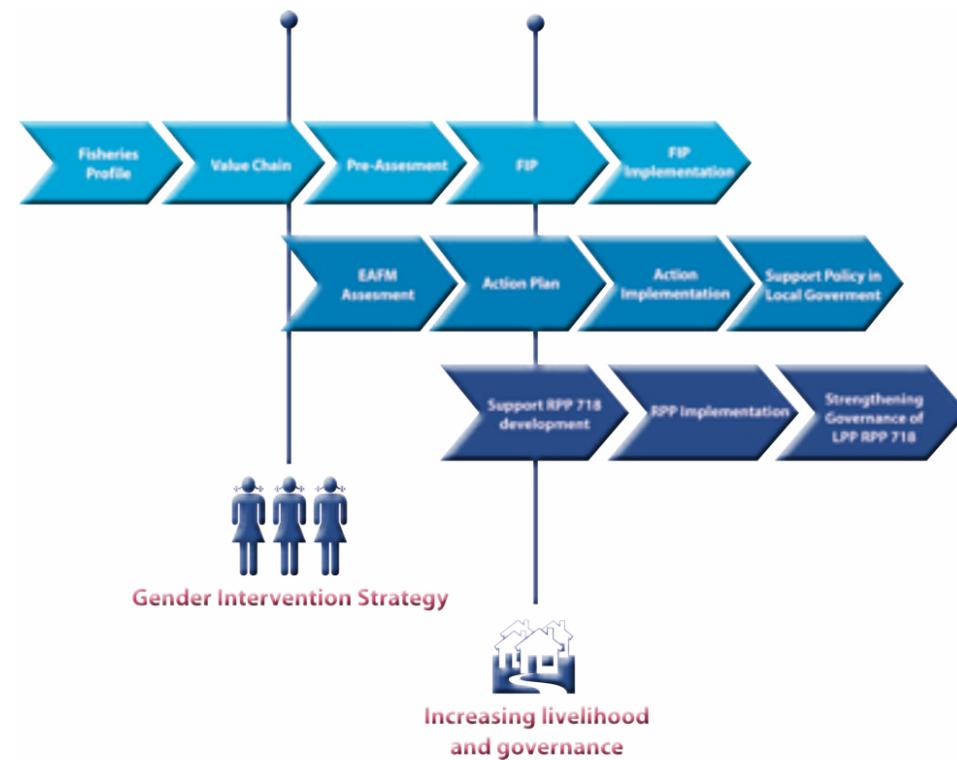


Figure 3. Fishery Management Strategy

The strategy chart shows the different phases in implementing EAFM and FIP by NCU Indonesia, including when to employ gender intervention strategy, and deal with increasing livelihoods and issues related to governance. Out of the three target commodities for EAFM and FIP implementation, the red snapper already reached the EAFM action plan and FIP implementation phase. Under this phase, the project has already engaged a “fish business entity” as one of the main stakeholders in EAFM and FIP implementation. The business entity involved could be categorized as a sourcing company, fish processing company or mixed company (sourcing and processing). Fish business entities are driven by market conditions that have various demands depending on the country and type of buyer (i.e., wholesale, retailer, etc.).

In line with the harvest strategy launched by MMAF in March 2020, the EAFM and FIP aims to contribute in promoting responsible fishing activities (i.e., minimum fish size and weight of capture fisheries, etc.)

One of the challenges that the EAFM action plan and FIP hope to address is the request from US market wholesale buyers for “golden size” red snappers (i.e., below the maturity size of red snapper species). The term “golden size” connotes high price and high demand. Based on the value chain analysis conducted by the project for red snapper, the value of red snapper fishery in the Arafura Sea alone brings nearly USD 200 million per annum in both domestic and international markets, or one-third the value of Indonesia’s deep demersal fishery. The highest contribution comes from the volume and value of the real red snapper group. The United States is one of the key markets of red snapper as shown in Table 1.

The entire process undertaken by the project, including the conduct of field activities and validation with multi-stakeholder engagement, is crucial to transforming EAFM and FIP into an executable plan.

Table 1: Top 20 Species of Red Snapper Fishery Production Market from the Arafura Sea

Species	Market Name	Product Form	Destination Country
<i>Lutjanus malabaricus</i>	Malabar/Red snapper	Frozen skin-on fillet	USA
<i>Pristipomoides multidens</i>	Gold band snapper	Fillet, whole fish	Asia
<i>Atrobuca brevis</i>	Corvina	Frozen skinless fillet natural	Ecuador, USA
<i>Aphareus rutilans</i>	Job fish	Whole fresh	Not to be exported
<i>Lutjanus sebae</i>	Malabar/Red snapper	Frozen skin-on fillet	USA
<i>Lethrinus laticaudis</i>	Sweetlips	Frozen skinless/off fillet natural and portion cut hole fresh	USA, Australia Australia, Asia Countries, Middle East
<i>Paracaesio kusakarii</i>	White snapper	Frozen skinless/off fillet	USA
<i>Diagramma labiosum</i>	Sweetlips	Frozen skinless/off fillet natural or portion	Australia, USA
<i>Etelis radiosus</i>	Ruby snapper (Ehu)	Fillet (not whole)	USA
<i>Epinephelus coioides</i>	Grouper	Frozen whole fish Whole fresh Frozen fillet	China, Taiwan Singapore, Hong Kong, Asian Countries, Middle East USA
<i>Protonibea diacanthus</i>	Corvina	Frozen skinless fillet natural	Ecuador, USA
<i>Pristipomoides filamentosus</i>	Crimson job fish (Opakapaka)		USA
<i>Lutjanus johnii</i>	Red snapper or Lutjanus sp.	Frozen skinless/off fillet	EU, Mauritius
<i>Lutjanus erythropterus</i>	Malabar/Red snapper	Frozen skin-on fillet	USA
<i>Seriola rivoliana</i>	Trevally	Whole fresh	Not to be exported
<i>Plectropomus maculatus</i>	Grouper	Whole fresh	Singapore, Hong Kong, Asian Countries, Middle East
<i>Caranx bucculentus</i>	Trevally	Whole fresh	Not to be exported
<i>Lethrinus nebulosus</i>	Sweetlips	Frozen skinless/off fillet natural and portion cut Whole fresh	USA, Australia Australia, Asia Countries, Middle East
<i>Epinephelus areolatus</i>	Grouper	Frozen whole fish Whole fresh Frozen fillet	China, Taiwan Singapore, Hong Kong, Asian Countries, Middle East USA

SUPPORTING RPOA-IUU TO TACKLE IUU FISHING

These activities contribute to:



SDG 14
Target 14.4
Enhance the conservation and sustainable use of oceans and their resources

Target 14.b
Provide access for small-scale artisanal fishers to marine resources and markets



Aichi B
B-Target 6
All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably

High level of IUU fishing has been identified in the ATS region, especially due to poor coordination in law enforcement; lack of monitoring, control, and surveillance mechanism; and lack of capacity. ATSEA-2 is committed to provide incremental support to RPOA-IUU to better understand the drivers, trends, characteristics, and impacts of IUU fishing and to reduce IUU fishing.

In close coordination with the RPOA-IUU Secretariat in Jakarta, ATSEA-2 with key support from a team of experts from the Center for Sustainable Ocean Policy (CSOP) - University of Indonesia led by Dr. Arie Afriansyah, the following outputs have been achieved from August to December 2020:

- Draft report on IUU Fishing baseline estimates⁶;
- Draft report on IUU Fishing legal review;
- Report on national regulations on monitoring, control and surveillance of fishing and navigation, and challenges in taking part in the FAO Global Record, including a compilation of best practices and lessons learned.

Further validation of these reports will be conducted and completed by the first quarter of 2021. From the legal review, Australia has undertaken significant advancements on its commitment to combat IUU fishing, and has recently updated its second National Plan of Action to prevent, deter and eliminate IUU fishing (NPOA-IUU), while Indonesia, Timor-Leste, and Papua New Guinea are at different stages in implementing their respective NPOAs-IUUs. A summary of ATS countries' adoption of international instruments such as the FAO Agreement on Port State Measures (PSMA), FAO Global Record, and International Plan of Action to prevent, deter and eliminate IUU fishing (IPOA-IUU) is presented in Table 2.

Table 2. Adoption of IUU fishing related international instruments

INTERNATIONAL INSTRUMENT	AUSTRALIA	INDONESIA	PAPUA NEW GUINEA	TIMOR-LESTE
FAO PSMA	v	v	v	x
FAO Global Record	v	v	x	x
IPOA-IUU	v	v	v	v

Preliminary challenges and recommendations regarding participation to FAO Global Record from each ATS country have been identified and are to be finalized in 2021. Nonetheless, the team faced some challenges in estimating IUU fishing baselines (hence focusing only on illegal aspects) and further consultation and validation are still ongoing. Finally, CSOP and the ATSEA-2 team conducted a field visit to Merauke, Papua Province, Indonesia on 30 November - 4 December 2020 which aimed to gather preliminary information on community-based surveillance from various local stakeholders.



CSOP and ATSEA-2 Team visit to the Indonesian Maritime Security Agency (BAKAMLA) in Merauke.

⁶ Due to limitations on available data, the IUUF baseline estimate report focused only on "illegal" aspect. This limitation of study was noted by ATSEA-2 team and will be further considered for future recommendations.



CASE IN FOCUS GEARING UP TO REDUCE IUUF IN TIMOR-LESTE

In the last quarter of 2020, ATSEA-2 partnered with local governments in the municipalities of Viqueque, Manufahi and Covalima in Timor-Leste to build the capacity of 180 local fishers on a community-based surveillance method. The training was aimed at strengthening local fishers' knowledge on safety at sea and how to report illegal fishing and accidents, identifying the characteristics of illegal fishing vessels, and means to monitor and control fishing activities within their territory.

Illegal, Unreported and Unregulated (IUU) fishing is an issue that affects sustainable fisheries around the world, including the ATS region. Major increases in IUU fishing in the Timor Sea have been observed particularly in the waters of Timor-Leste following Indonesian bans for illegal fishing which shifted large-scale, industrial foreign trawling operations in Arafura Sea to Timor-Leste. In many cases, patrolling and reporting of illegal or unregulated fishing vessels have been constrained due to the nature of the open sea and technological limitations. With the growing attention on IUU fishing, a number of methodologies, approaches and technologies have started to emerge to reduce the number of IUU fishing in regions like the ATS.

To address this challenge, ATSEA-2 is targeting to put in place a community-based surveillance method to secure the marine resources and ecosystems of the Arafura and Timor Seas from unsustainable and illegal harvesting. The project will provide incremental support to the regional and national efforts aimed at reducing IUU fishing, including building upon the national responses to the RPOA-IUU Fishing.

Through trainings and meetings conducted in the three municipalities of Timor-Leste, fishers also now understand and appreciate procedures relating to fishing licensing system, the value of

preventing IUU fishing to ensuring greater and sustainable catch for Timor-Leste's fishers, and key legislations on illegal fishing activities (i.e., turtle catching, blast fishing, poison fishing, using beach seine net, fishing in marine protected areas, and the dangers of using compressors). These trainings will continue to be implemented in other fishing centers of the same municipalities, along with conducting dissemination of fisheries legislations and supporting the General Directorate of Fisheries on boat marking and issuance of fishing licenses.



Community-based surveillance training in Manufahi Municipality, Timor-Leste.

REDUCING LAND-BASED AND MARINE SOURCES OF POLLUTION

These activities contribute to:



SDG 14
Target 14.1
Prevent and significantly reduce marine pollution of all kinds



Aichi B
B-Target 8
Pollution has been brought to levels that are not detrimental to ecosystem functions and biodiversity

The ATS region is considered to be sparsely populated in comparison to the adjacent Indonesian Sea Large Marine Ecosystem. However, in the upcoming years, human impacts are expected to accelerate with population growth and increasing economic activities in the ATS. The Transboundary Diagnostic Analysis (TDA) for the ATS region highlighted the growing threat imposed by emerging issues related to marine debris and waste from fishing and shipping vessels, as well as marine-based pollution from oil and gas activities. Through the ATSEA-2 Program, the region aims to enhance information on sources of contaminants, strengthen enabling conditions and capacities on pollution reduction, and initiate preparedness and response to oil spills. As initial steps, ATSEA-2 through NCU Indonesia and Timor-Leste facilitated several on-the-ground activities to build awareness on land-based and marine sources of pollution and their impacts, as well as to institute mechanisms for further development of pollution management plans and facilitate local monitoring and capacity building. In parallel, a marine and land-based pollution assessment was conducted at the regional and national level. The assessment was done to identify pollution hotspots in the ATS region and to build a strategy to mitigate the negative impacts of pollution.



Surveying marine pollution on Timor Leste's south coast.

Determining Oil Spill Hotspots

The ATS region is not only extremely rich in living marine resources, but also oil and gas reserves. Oil and gas exploration keeps expanding with the anticipation of more oil and gas discoveries in the future, especially in the Timor Sea (Figure 4). The increased levels of exploration and exploitation, heightens the chances of oil spill incidents in

the future. As a first course of action, ATSEA-2 collaborated with Dr. Won-Tae Shin from Global Ocean, Inc. to identify oil spill hotspots in the ATS region. Preliminary modeling results showed that the southern coast of Timor Island, specifically the Rote Ndao District was vulnerable to oil spill incident occurrence in Timor Sea.

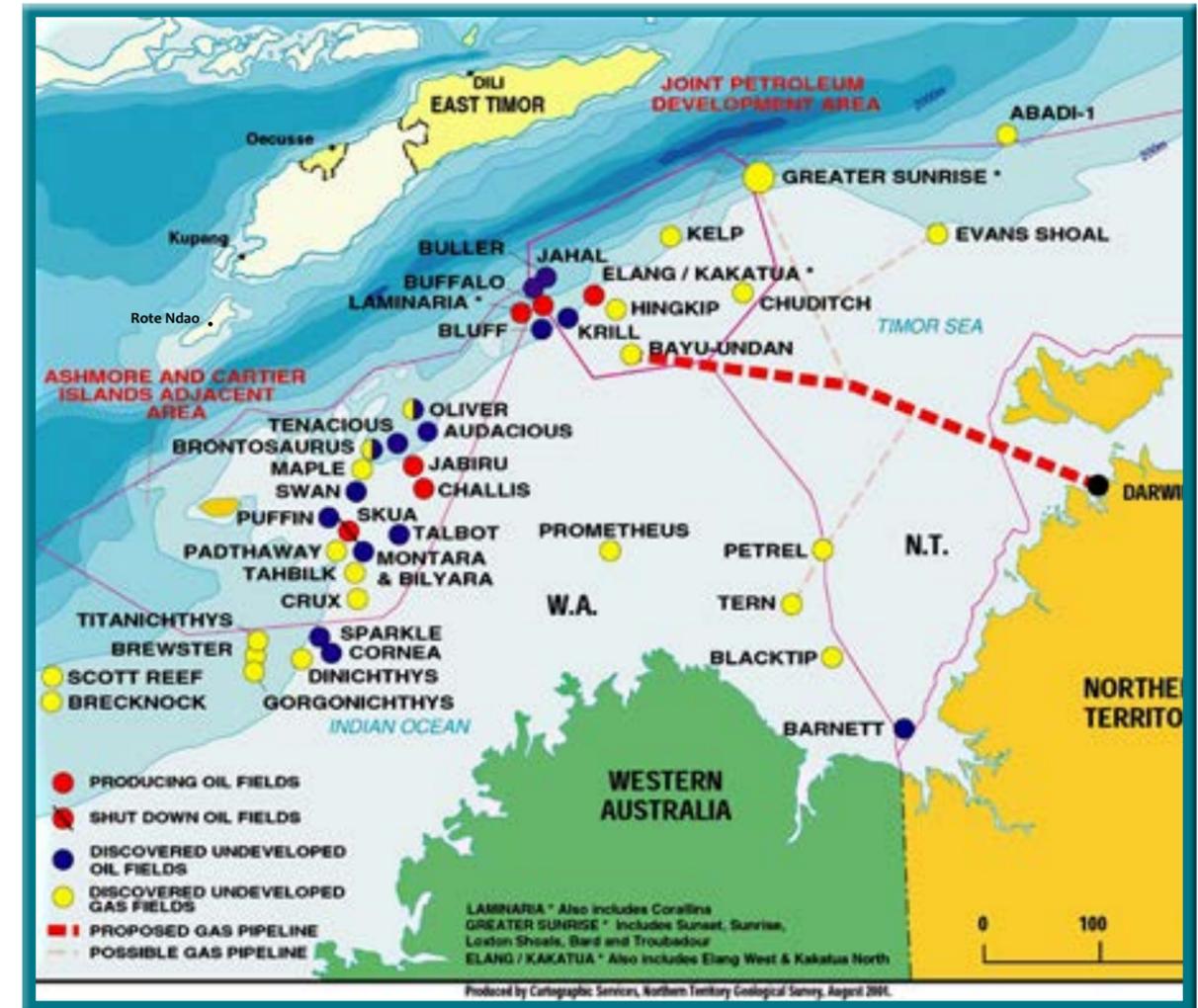


Figure 4. Oil and gas development in Timor Sea (Source: Northern Territory Government)

Investigating the Impacts of Marine Debris

Fishing is one of the most important economic activities in the ATS region with many populations being highly dependent on fish as their source of protein, employment and income. Intensive fishing not only causes depletion of fisheries resources, but also creates a huge amount of marine debris, especially due to derelict, abandoned, and lost fishing gears. To determine hotspots for derelict fishing gears in the ATS region, fishing intensity as a proxy for the derelict fishing gears and analyzed information from Global Fishing Watch (<https://globalfishingwatch.org/>) were used. The analysis showed that a triangular zone of Trangan, Dolok, and Amamapare of the Arafura Sea and the east side of the Joint Petroleum Development Area in

Timor Sea (Figure 5) are two areas with the highest fishing intensity. The preliminary results reflected that these two areas are the hotspots of derelict fishing gears in the ATS region.

To understand local perceptions on marine- and land-based marine pollution, further assistance will be provided to NCU Indonesia to conduct a perception survey in Rote Ndao District in 2021. Additionally, data and information gathered in Timor-Leste by national consultants throughout 2020 and early 2021 will be incorporated into a regional assessment. Soon, the region will have a better understanding of its marine- and land-based pollution hotspots.

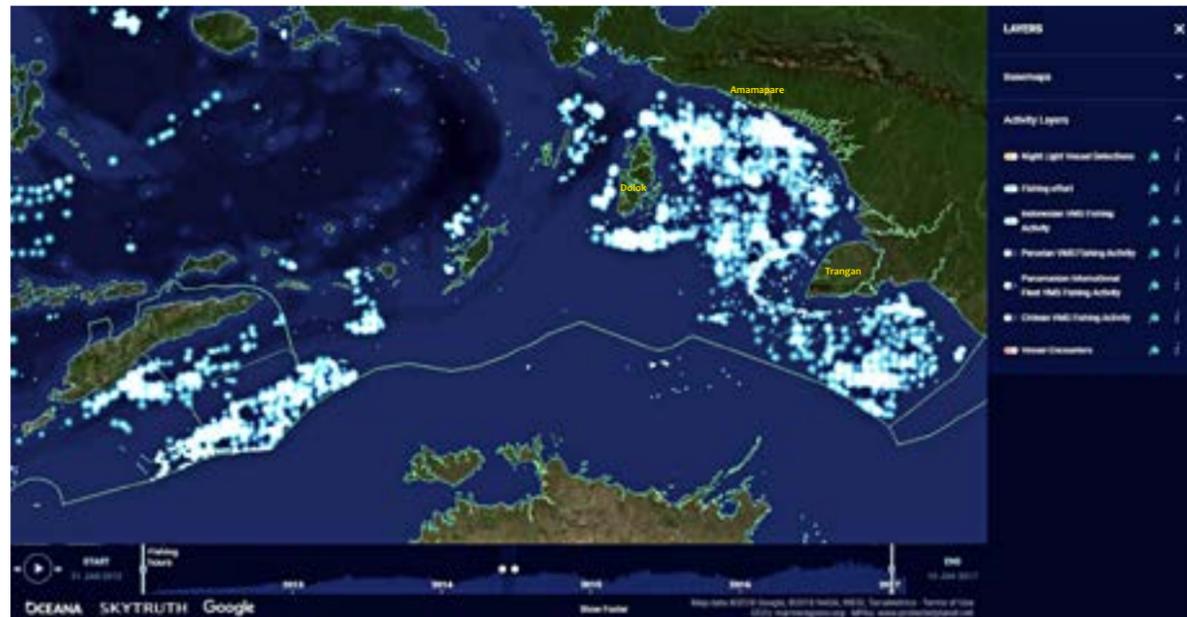


Figure 5. Fishing intensity in Timor Sea in April 2014 (Source: Global Fishing Watch)

CASE IN FOCUS ADDRESSING MARINE POLLUTION IN TIMOR SEA



Marine pollution is one of the key concerns in Indonesia. The pollution often comes from fishing gear, agricultural run-off, chemical waste from companies, oil spill from oil drills, waste disposal of ships and ship crashes into coral reefs. These result in economic and ecological losses due to the damage. Consequently, marine pollution mitigation is urgently needed to protect the marine environment.

In 2009, the Montara well platform spilled over 23 million liters of oil that spread into Timor Sea, Indonesia. The impact of this incident not only damaged the marine environment of the Timor Sea, but also left a detrimental financial impact to fishers and seaweed farmers of Nusa Tenggara Timur including Rote Ndao District. Despite the passage of 10 years since the incident occurred, the dispute resolution process has not been completed. Based on the preliminary hotspot analysis in ATS region and Rote Ndao (Shin, 2020 unpublished), there are two major sources of pollution in Timor Sea: oil spill hazard due to offshore oil platforms and marine debris due to extensive fishing activities. Hence, it is highly important to mitigate marine pollution surrounding Timor Sea since this is one of the areas with a high potential of marine natural resources along with oil and gas.

NCU Indonesia supports the Indonesian National Government and Nusa Tenggara Timur Provincial stakeholders to reduce marine pollution and improve the ecosystem health of the Timor Sea. The ratification of a Marine Pollution Task Force Unit of Nusa Tenggara Timur Province is already in its final process and an action plan has been developed. To further address this challenge, pollution hotspots surrounding the Timor Sea were assessed, and a field survey on land-based and marine pollution in the southern coastal area of Rote Ndao District were conducted.

Once the marine pollution task force unit is officially established, NCU Indonesia in collaboration with key national and local partners, will facilitate capacity building for the team related to data and communication management; develop guidance on marine pollution data collection procedures; facilitate training on data collection, law enforcement and oil spill response and preparedness; and build a monitoring system for environmental conditions as an early warning system and integrated reporting system on marine pollution in Timor Sea. All these efforts aim to further contribute to the ATS SAP's commitment in addressing marine-based pollution, as well as meeting targets under SDG 14 (Life Below Water).



Figure 6. Signing of Action Plan for Marine Pollution Task Force Unit of Nusa Tenggara Timur in December 2020.



CASE IN FOCUS

SPEARHEADING ACTIONS TO REDUCE POLLUTION IN TIMOR-LESTE'S SOUTHERN COAST

The first ever beach clean-ups together with a series of field surveys and workshops were conducted consecutively in four south coast municipalities of Viqueque, Manatuto, Manufahi, and Covalima between 2 August and 15 October 2020. Even though two pollution studies have been conducted in the north coast, the study under ATSEA-2 was the first attempt to identify and assess marine- and land-based pollution hotspots in the southern coast of Timor-Leste. This is a crucial effort for the south coast as a UNDP study on vulnerability of communities in the north and south coast based on physical, environmental, and socio-economic factors showed the south coast to be more vulnerable (Figure 7).

The field survey and workshop were organized and led by Dr. Abilio Fonseca, UNDP National Consultant, while Mr. Gary Spiller, International Marine Pollution Consultant, supported the assessment with remote analysis using satellite images and various data platforms. The Ministry of Agriculture and Fisheries (MAF) of Timor-Leste, with active involvement of the Director General of Fishery and MAF staff, have taken part in the workshop and helped boost the engagement of local communities. In addition, the sub-district and villages where the survey was carried out, were selected in collaboration with local officials and community members. All activities were conducted in a collaborative and participatory manner.

Marine debris survey results showed that there are 14 identified hotspots in the south coast: four sites in Covalima, seven sites in Manufahi, one site in Manatuto, and two sites in Viqueque. The household survey indicated that coastal communities lacked awareness on the importance of waste management and the compounding effects of pollution on human and environment well-being, climate change, and biodiversity loss.

The workshops and beach clean-ups, therefore, enabled the communities to see firsthand how marine debris interfere with fishing activities and their livelihood, and contributed to an increase in community awareness, particularly on the need to reduce risk factors of pollution.



Director General of Fishery, Aquaculture and Marine Resources took part in the beach clean-ups



Figure 7. Coastal vulnerability index map of Timor-Leste

The study is just an initial step, but a crucial one as it can provide valuable baselines for the development of a pollution control and management plan, especially for responding and mitigating oil spill incidents in Covalima which has been designated as the logistical port for oil and gas activities in the Timor Sea based on Timor-Leste 2010-2030 National Strategic Development Plan. Similarly, the study is also expected to contribute to the Integrated Coastal Management (ICM) plan development in Barique Posto Administrativo, Manatuto; Ecosystem Approach to

Fisheries Management (EAFM) plan development in Viqueque; and new MPA establishment from Betano to Clakuk in Manufahi.

This initiative is anchored and aligned with Timor-Leste's Sustainable Development Plan 2011-2030 and also largely contributes to achieving key SDG targets. ATSEA-2 will continue to spearhead actions to control and manage pollution in Timor-Leste, especially in the southern coast.

RESTORING AND PROTECTING HABITATS AND KEY MARINE SPECIES

These activities contribute to:

SDG 14
Target 14.5
Conserve at least 10% of coastal & marine areas

Aichi C-Target 11
At least 17% of terrestrial and inland water, and 10% of coastal & marine areas are conserved

Being adjacent to the Coral Triangle, the ATS region is home to some of the world's highest marine biodiversity and contains some of the most pristine and highly threatened coastal and marine ecosystems. Its diverse habitats include about 25 percent of the world's mangroves, 90 percent of mangrove tree species, 160 species of coral reefs in Timor Sea, and diverse varied species of seagrass in Australian and Indonesian waters, which provide a habitat for hundreds of reef fish.

But years of overfishing and destructive fishing, unsustainable aquaculture practices coupled with watershed-based and marine-based pollution, as well as accelerated coastal development and modification, (Figure 8) have led to major changes in population structure as well as functional group composition (notably on coral reefs), and massive changes in ecosystem services of coral reefs, seagrass beds, and mangroves. The serious decline of habitats and losses in ecosystem and biodiversity not only undermine the ecological sustainability of the ATS coastal and marine environment, but also impact on the health and livelihoods of communities that rely on this important resource.

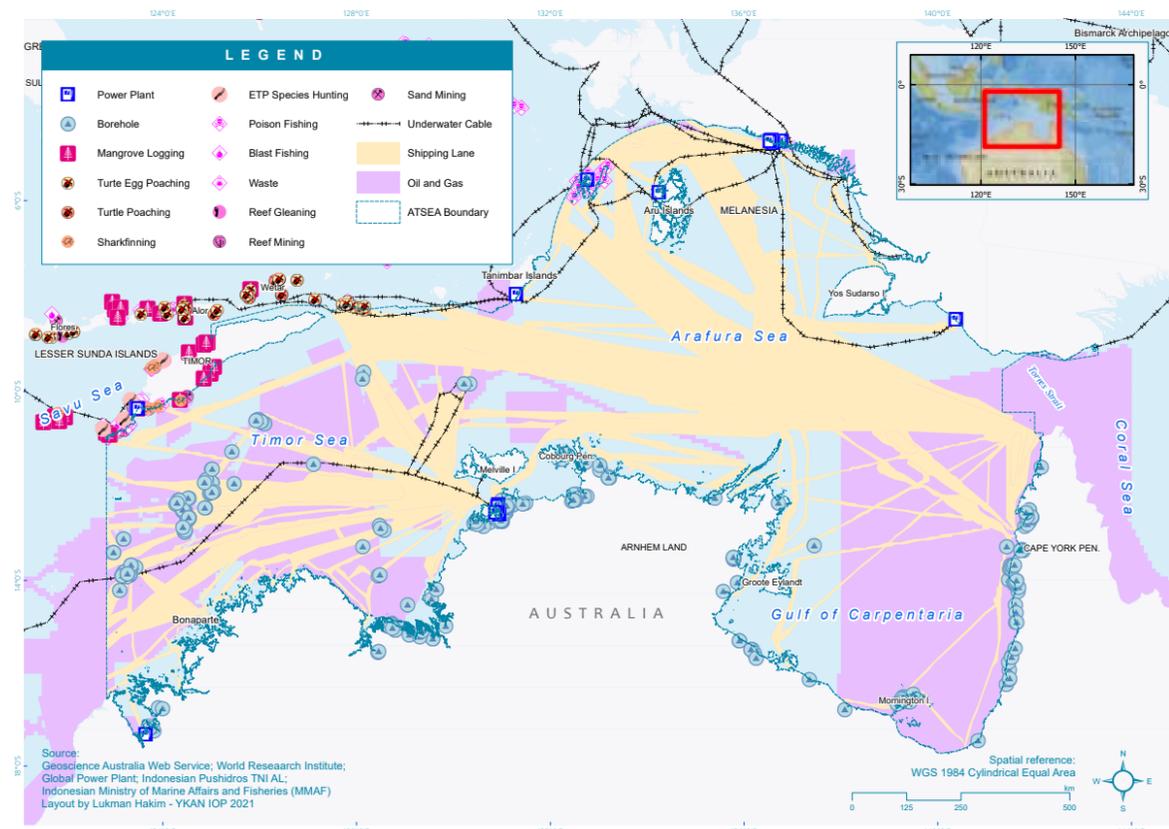


Figure 8. The map distribution of use and threats features

In support of coastal and marine biodiversity protection, the ATSEA-2 Project collaborated with the Coral Triangle Center (CTC) Foundation and Yayasan Konservasi Alam Nusantara (YKAN), and key experts on MPA, marine turtle, and ecosystem valuation, in undertaking a regional stock-taking and mapping of key biodiversity habitats, valuation of ecosystem services, and identification of priority conservation areas.

By the end of 2020, the following have been developed: (a) an Economic Valuation report; (b) a Draft Design and Roadmap for the establishment of an MPA and MPA Network; and (c) a Draft Regional Action Plan to enhance protection of endangered marine turtles.

Assessing the Economic Value of ATS Ecosystem Services

Based on analysis of data sets from desktop studies and information from field locations, the total economic value of ecosystem services in the ATS ranges from USD 48 billion to USD 49 billion, focusing mainly on three services: fisheries, aquaculture and tourism in the four the ATS

countries. Further validation will be conducted and additional values may be considered as deemed most relevant and feasible.

Designing a Regional Network of MPAs and Designating New MPAs

In designing the MPA network, the team collected data and information from various sources (i.e., other NGOs and the Sustainable Ecosystems Advanced (SEA) Project, PEMSEA, ATS countries, various experts). Overall, the team collected, refined and validated 79 of the best available spatial data layers, covering 53 biophysical (4 oceanographic, 25 habitat, 24 species), and 26 socioeconomic-cultural (5 traditional or important areas, 21 other uses and threats).

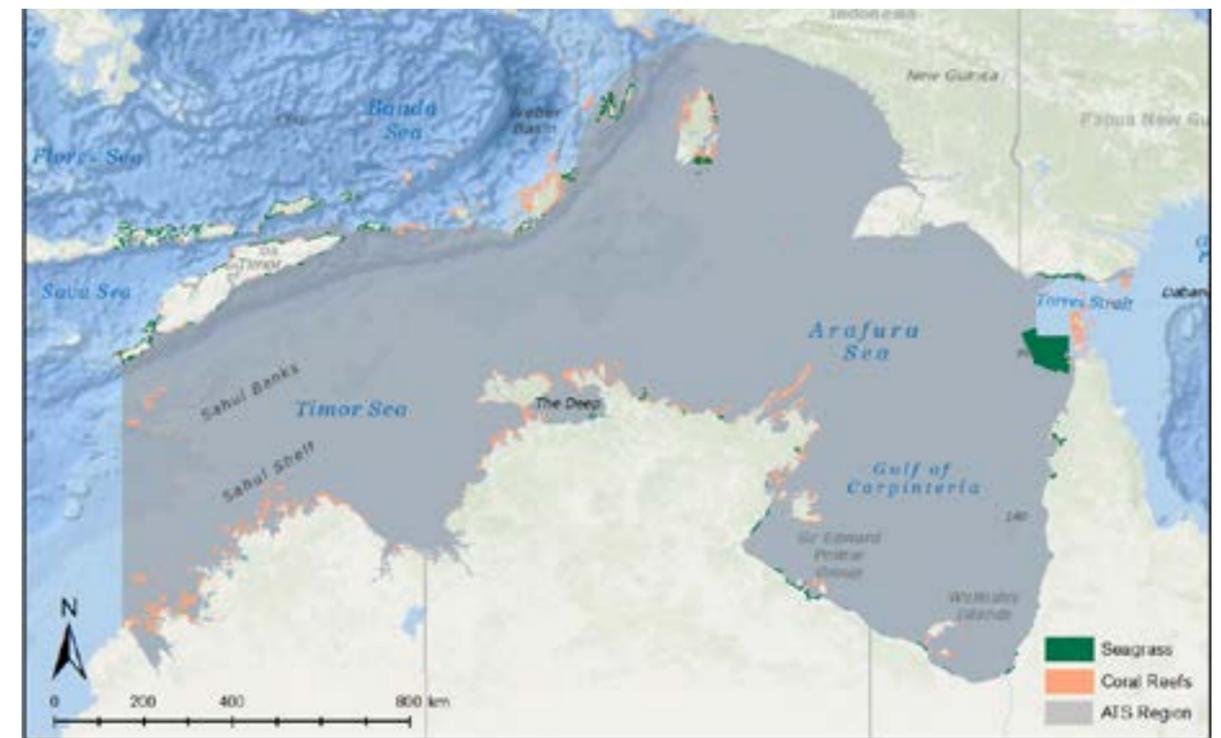


Figure 9. Coral Reef and Seagrass Distribution in ATS Region (CTC)

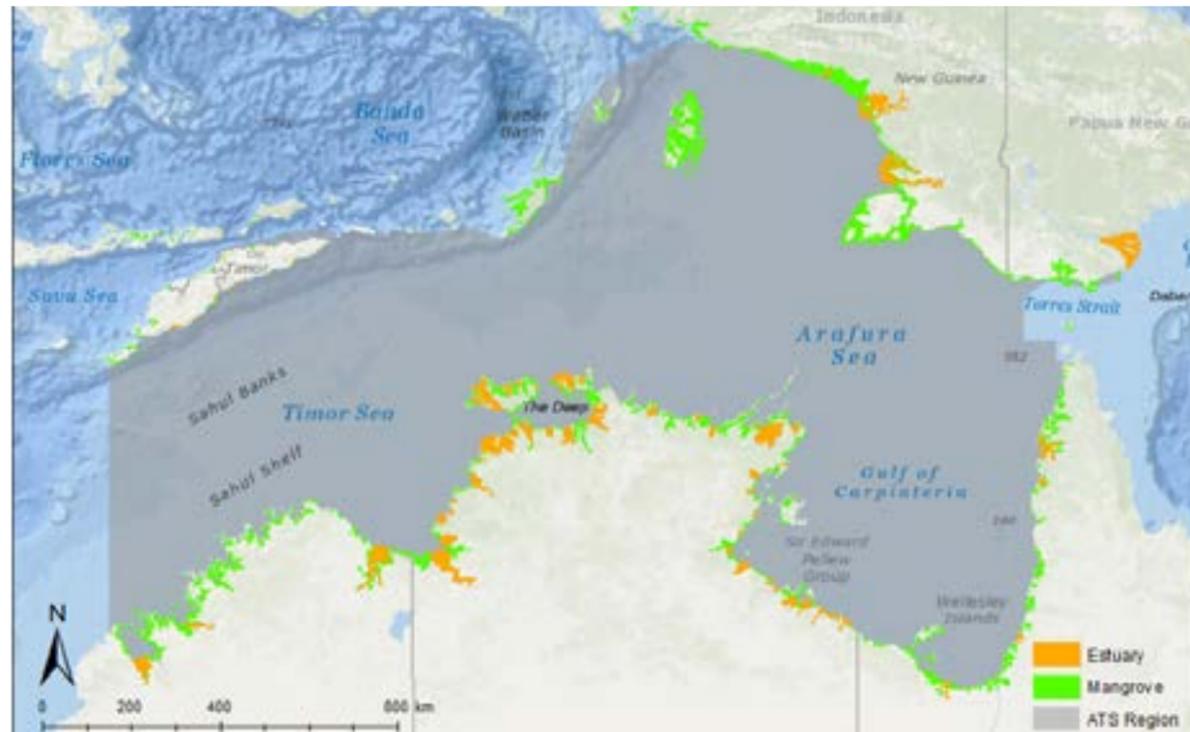


Figure 10. Mangrove and Estuary Distribution in ATS Region (CTC)

Figures 9 and 10 show the distribution of various marine habitats in the region, while Tables 3 and 4 summarize the shallow water habitats and existing MPAs in the region.

Under the ATSEA-2 Project, new MPAs are targeted to be designated in Indonesia and Timor-Leste covering 645,000 ha in area or approximately 220,000 ha of mangrove ecosystems.

Table 3. Shallow Water Habitat Area Coverage per Country (CTC)

Shallow Water Habitat	Area (km ²)					
	Australia	Territory to be Defined	Timor-Leste	Indonesia	Papua New Guinea	Total
Coral	3,634.89	7.44	37.71	1,943.96	52.57	5,676.59
Estuary	7,757.82		0.61	2,310.82		10,069.26
Mangrove	107.93	1.74	0.01	132.70	5.33	247.71
Seagrass	7,056.60	21.93	20.92	296.98	117.20	7,513.63

Table 4: Existing MPAs in ATS region (CTC)

No	Country	MPA AOI	MPA Existing	MPA Proposed	Uncovered	Total (km ²)
1	Australia		1,017,424.43		2,578,866.07	3,596,290.50
2	Territory to be Defined		0.61		255,654.11	255,654.72
3	Timor-Leste		3,683.55	187.39	138,395.01	1,187,928.81
4	Indonesia		24,342.37	13,286.68	1,124,364.72	1,187,928.81
5	Papua New Guinea		1,303.32		57,851.20	59,154.52
	Grand Total		1,046,754.28	13,474.07	4,155,131.11	5,262,681.58

Conceptualization of a Regional Plan of Action for Protecting the Endangered Marine Turtles in the Region

With six of the world's seven species of sea turtles foraging, nesting, and migrating in the ATS region (Table 5), the ATSEA-2 Project aims to improve understanding and regional collaboration on marine turtle management. The project looked into various data including migratory pathways of sea turtles in the region (Figure 11), and their behavior. Data shows that while sea turtles are found in several parts of the ATS region, their migratory pathways form a linked network. Globally, the ATS region is also the largest sanctuary for the green, hawksbill, and loggerhead turtles nesting aggregation core. With their IUCN status ranging from vulnerable to critically endangered, it is crucial for the ATS region to develop a regional plan of action to protect and conserve these charismatic marine species from their breeding grounds on land, to their seagrass feeding areas, up to their marine migration paths.

Table 5. Sea Turtle in ATS Region

Species name	IUCN Red List
Loggerhead (<i>Caretta caretta</i>)	Vulnerable
Olive Ridley (<i>Lepidochelys olivacea</i>)	Vulnerable
Leatherback (<i>Dermochelys coriacea</i>)	Vulnerable
Green (<i>Chelonia mydas</i>)	Endangered
Flatback (<i>Natator depressus</i>)	Data Deficient
Hawksbill (<i>Eretmochelys imbricata</i>)	Critically Endangered
Kemp's Ridley (<i>Lepidochelys kempii</i>)	Critically Endangered

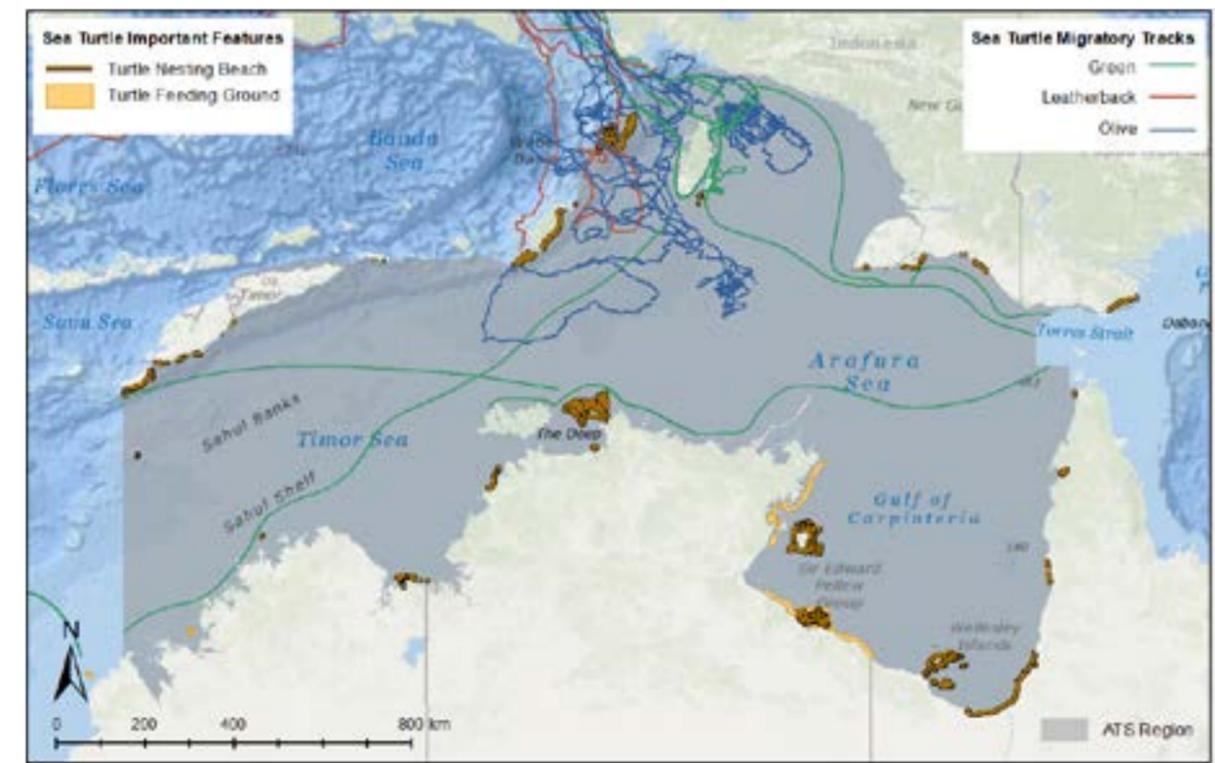


Figure 11. Sea Turtle Nesting Beach and Feeding Ground Distribution in ATS Region (CTC)



CASE IN FOCUS

FULL SPEED AHEAD: WORKING GROUP (POKJA) ADVANCES THE ZONING PLAN IN KOLEPOM ISLAND

Indonesia's Ministry of Marine Affairs and Fisheries (MMAF) is committed to developing Marine Protected Areas (MPA) covering 32.5 million hectares by 2030. Based on the Second Quarterly Performance Report from the Directorate General of Marine Spatial Management, Indonesia already has 23.42 million ha of Marine Protected Areas (MPA). As stipulated in Act No. 27 of 2007 concerning Management of Coastal Areas and Small Islands, provincial governments are given the authority to manage conservation areas in

its territory of up to 12 miles. Currently, Papua Province is working on establishing a new MPA in eastern Indonesia, in Kolepom Island, Merauke Regency, Papua Province which has conservation targets for white snapper (barramundi), shrimp, pelagics, and sawfish (Figure 12).

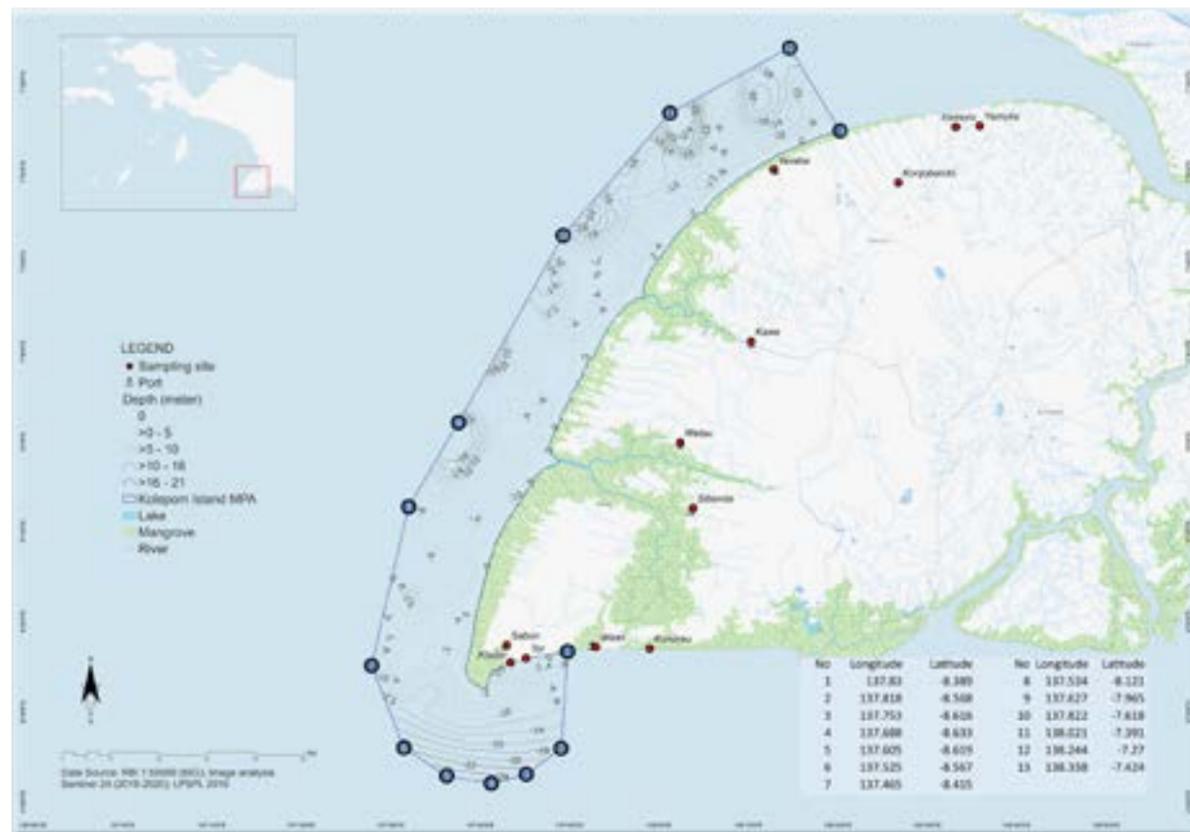


Figure 12. Map of zoning boundaries of Prospective Marine Protected Areas in Kolepom Island. (Source: LPSPL Sorong)



Coastal and Marine Resource Management Center (LPSPL) - Sorong conducted public consultation on Kolepom Island MPA initiation at Tabonji District, Merauke

To support the preparation of the Zoning Plan for MPA in Kolepom Island, a number of activities have been carried out: (a) preparation of a roadmap for strengthening the management of prospective MPA in Kolepom Island; (b) webinar on profiles of fisheries in waters from Merauke district to support food security in Indonesia; (c) coordination meeting with the MMAF, Papua provincial government, and Merauke district government; (d) Focus Group Discussion (FGD) on the design of conservation targets for prospective of MPA in Kolepom Island; (e) meeting on the formation of a Working Group (Pokja) for the preparation of a Zoning Plan for Marine Protected Areas; and (g) preparatory and coordination meetings with working group members of the MPA Zoning Plan to discuss preparations for field assessment which will be carried out in February - March 2021.

These efforts have led to significant results. On 26 September 2019, the Governor of Papua, Lukas Enembe, signed a Government Decree

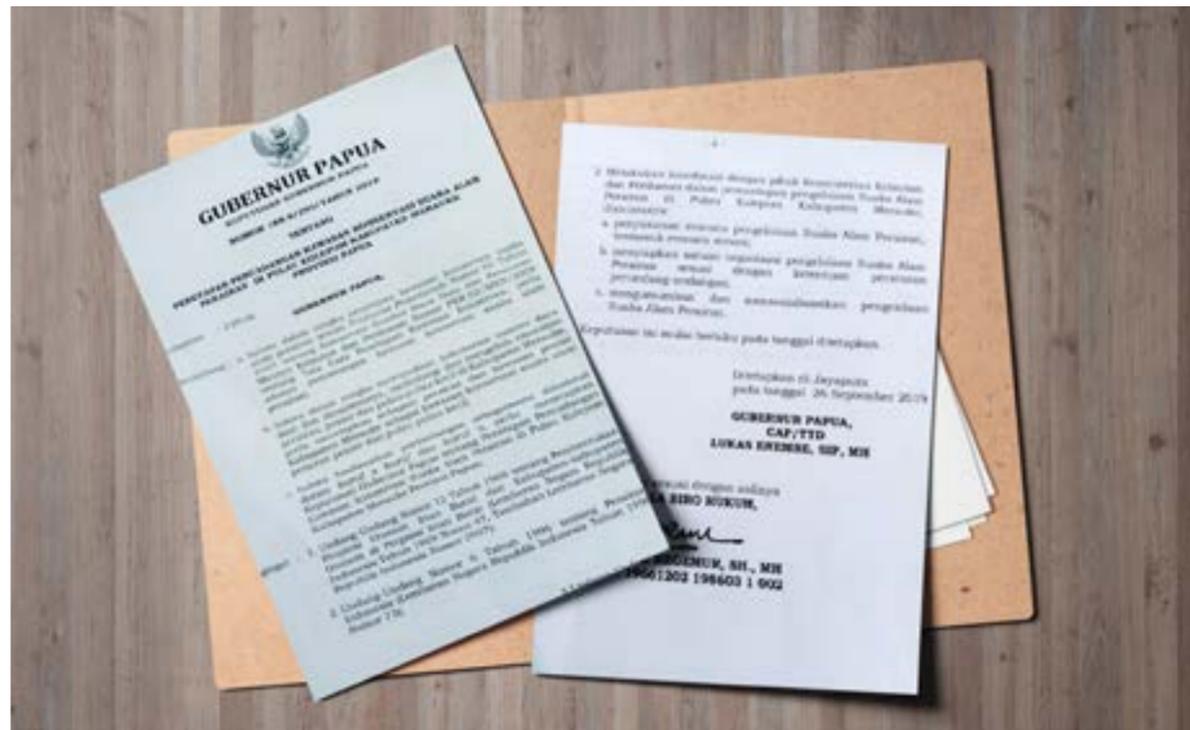
No.188.4/295/2019 to instate Kolepom Island as an MPA, with an area of 353,287 ha. The establishment of the Working Group (Pokja) was ratified on 30 December 2020. The Regional Secretary of Papua, Doren Wakerkwa, also signed appointment Decree No. 188.4/21536/SET on Compilation of a Zoning Plan in Kolepom Island. The Pokja team is led by the Marine and Fisheries Office of Papua and consists of a regional apparatus organization with technical elements at the provincial and district levels such as Regional Development Planning Agency, Fisheries Department, Coastal and Marine Resource Management Center (LPSPL) - Sorong, Cendrawasih University, Musamus University, as well as community leaders and existing customary institutions in Kolepom Island, consisting of representatives of three districts (Kimaam, Waan, and Tabonji).

The Working Group will help produce management plans, zoning plans, data and information regarding coastal and marine resources on

Kolepom Island in a comprehensive, detailed and complete manner which gives consideration on the wealth, biodiversity and socio-culture of the people. Currently, the working group (Pokja) has compiled a roadmap for future action plans through a coordination meeting conducted online on 20 January 2021.

The ATSEA-2 Program, in collaboration with the Working Group (Pokja) team, plans to carry out field assessment activities to collect data and important information to determine and manage the proposed MPA in Kolepom, which later can be analyzed and compiled into a final document on the Conservation Area Management Plan in Kolepom Island.

Despite the challenges posed by the pandemic, the enthusiasm in Kolepom to carry out its targets did not waver. It is hoped that coastal and marine resource management strategies within and outside the Kolepom Island network area can be used to address issues, problems and threats in the future and that the establishment of the MPA can help ensure fisheries supply to improve the community's economy.



Government Decree No. 188.4/295/2019 signed by the Governor of Papua formally instated Kolepom Island as a new MPA.

PROMOTING ADAPTIVE CAPACITY AND RESILIENCE TO CLIMATE CHANGE

These activities contribute to:

13

SDG 13
Target 13.1
Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

10

Aichi B
B-Target 10
Minimize multiple anthropogenic pressures on reefs and other vulnerable ecosystems

The ATS region is particularly vulnerable to the impacts of climate change due to its low-profile coasts, shallow continental shelves, and macro-tidal conditions. Projections of global mean sea level by 2100 range from 0.28-0.61 m for the Representative Concentration Pathway-RCP2.6 scenario to 0.53-0.63 m under the RCP 8.5 scenario⁷. Sea level rise will increase salinity of coastal groundwaters, and bring adverse impacts on rocky intertidal, mud- and sand-flats, coral reef, seagrass, and mangrove communities. Due to increasing temperatures, coral bleaching is expected to be more prevalent, while ocean acidification will occur at a faster rate. These changes will not only affect the habitats, but also key marine species, such as marine turtles.

Recognizing the increasing impacts of climate change in the ATS region and building from the findings of the TDA and strategic objectives of the SAP, ATSEA-2 has undertaken a climate change vulnerability assessment to identify highly vulnerable habitats and key species in the ATS region. A decision-making guidance toolkit is also being developed to assist decision makers in developing adaptation strategies. These knowledge products and strategies are important to ensure communities are well-informed and well-prepared to respond to climate change impacts.

At the national level, the results of this initiative will provide a good guidance for planning and interventions in support of climate change actions; while at the local level, these will also be incorporated into Integrated Coastal Management (ICM) plans developed at vulnerable locations within the ATS region.

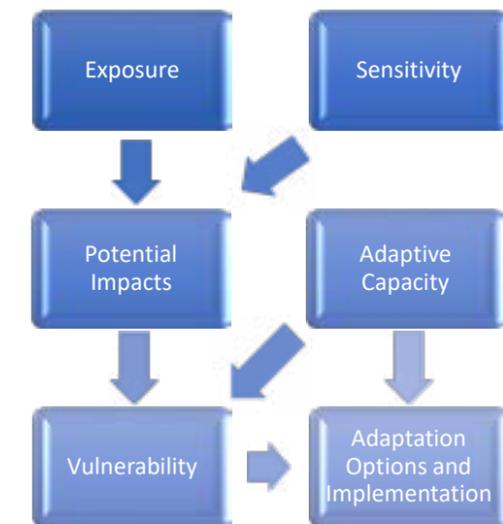


Figure 13. Vulnerability assessment framework adopted by the Intergovernmental Panel for Climate Change (adapted from Schroter et al. 2004)



⁷ Intergovernmental Panel on Climate Change (IPCC) AR5 Working Group I, Projections of Sea Level Rise, Gregory J., 2013. RCP: representative concentration pathway.



CASE IN FOCUS

UNDERSTANDING CLIMATE CHANGE IN THE ATS REGION

The coastal and marine environments of the ATS region are under multiple pressures, making them more vulnerable to the impacts of climate change. As climate change impacts are expected to increase, affecting more and more people and disrupting ecosystems and infrastructure, it is imperative to educate national and local government planners and other decision makers, as well as the general public, on the causes and sources of vulnerability, and available adaptation practices and mechanisms, which will pave the way for science-based decision-making on climate change adaptation and mitigation.

A number of projects and studies in the ATS region (including ATSEA-1 TDA) have provided foundational baseline information on the potential climate change impacts.

Building on this, ATSEA-2 embarked on a deeper probe using up-to-date information and data to improve understanding of climate change impacts on marine and coastal ecosystems, especially the impacts on fisheries that are critical to sustaining socio-economic development in the ATS region.

From July to December 2020, ATSEA-2 conducted a climate change vulnerability assessment on habitats and species in the ATS region led by Dr. Johanna Johnson, Director of C2O Pacific, using the framework adopted by the Intergovernmental Panel for Climate Change (Figure 13). The vulnerability assessment approach draws on and collates existing empirical data, including climatology, climate projections, species and habitat thresholds and response, status and trends, demographics, available modelling and expert knowledge.

Table 6. Summary of Key Drivers of Vulnerability vis-à-vis Type of Habitats in the ATS region

	Type of Habitats	Timor Leste	Indonesia/Arafura	Western PNG	Northwest Australia & GoC
Drivers of Vulnerability	Mangrove	Rainfall declines; sea-level rise; low connectivity; limited formal management	Sea-level rise; poor current condition	Poor current condition; low species diversity; lack of management	Sea-level rise
	Seagrass Meadows	SST+; sea-level rise; limited formal management	Rainfall increase/coastal runoff; sea-level rise; low connectivity; non-climate pressures	Historic SST+ exposure; rainfall increase/coastal runoff; low diversity; no management	SST+; historic SST+ exposure; rainfall changes; low species diversity
	Shallow Coral Reefs	Projected SST+; poor current condition; limited formal management	Poor current condition; non-climate pressures, particularly pollution	Low diversity; lack of management	Projected SST+
Expected Impacts	Mangrove	Decline in condition and area			Stable
	Seagrass Meadows	Decline in area	Decline in condition and area		Stable in Northwest Australia, but Decline in condition and area in GoC
	Shallow Coral Reefs	Declining condition, diversity and area			Stable to declining

GoC = Gulf of Carpentaria
SST+ = Increase in sea surface temperature

Three sources of data were used for the assessment: (1) existing published data, (2) expert judgment, and (3) critical data collection to fill knowledge gaps. Structured expert elicitation through questionnaires was conducted to secure insights from various stakeholders in Indonesia and Timor-Leste. This helped determine the relative local 'importance' of each species from the prioritized species lists for each region using a separate semi-quantitative framework that incorporated: (1) cultural importance, (2) subsistence importance, (3) economic importance, and (4) conservation importance, depending on the sub-region. Based on the preliminary key findings of the assessment, the climate-driven changes are expected to impact on the condition and area of the habitats in the sub-regions level.

Thus, adaptations should focus on addressing the source of vulnerability. Table 6 shows the drivers and future impacts influenced by climate conditions specific for three different types of habitats in all sub-regions in the ATS. While Figure 14 shows vulnerability maps of coral reefs and seagrass in the region. Therefore, understanding how climate change is likely to influence key habitats is important when seeking to assess how these resources are likely to respond under future climate change.

Based on the preliminary key assessment, the following recommendations were provided and are deemed applicable to all habitats or species across all sub-regions in the ATS project area and are aimed at addressing common drivers of climate change vulnerability:

SEVEN UNIVERSAL RECOMMENDATIONS

- 1 Effective mitigation to address multiple chronic cumulative pressures
- 2 Complementary and coordinated management of vulnerable species, part of shared stocks with adjacent jurisdictions
- 3 Protection of species of conservation interest (SOCl) (e.g. green turtle and dugong)
- 4 Primary fisheries management (using ecosystem-based approach)
- 5 Measures that restore, conserve and protect critical habitats (e.g. MPAs)
- 6 Identification of alternative species as local food source to reduce community dependence on vulnerable species
- 7 Assessing potential land-use change implications on downstream marine environments

Species vulnerability was also spatially variable, with highly vulnerable and high priority species identified for each sub-region. A key driver of species vulnerability was their stock status, with many species in Timor-Leste, western Papua New Guinea, and Indonesia, and several in northern Australia, either overfished or potentially overfished due to a lack of information. Lack of management in the northern sub-regions of the ATS, as well as other pressures such as habitat loss, poor water quality and illegal, unregulated and unreported fishing, were other key drivers. Species of conservation concern also tended to be

assessed as highly vulnerable to climate change impacts. Driven by their already threatened status, they tend to be low productivity species that take many years to recover from impacts. The recommendation based on species vulnerability itself is served differently regarding the sub-region which has different key local species.

The climate change vulnerability assessment is undergoing validation and is expected to be completed and published by 2021, together with a decision-making guidance toolkit to assist decision makers in developing adaptation strategies for climate change in the ATS region.

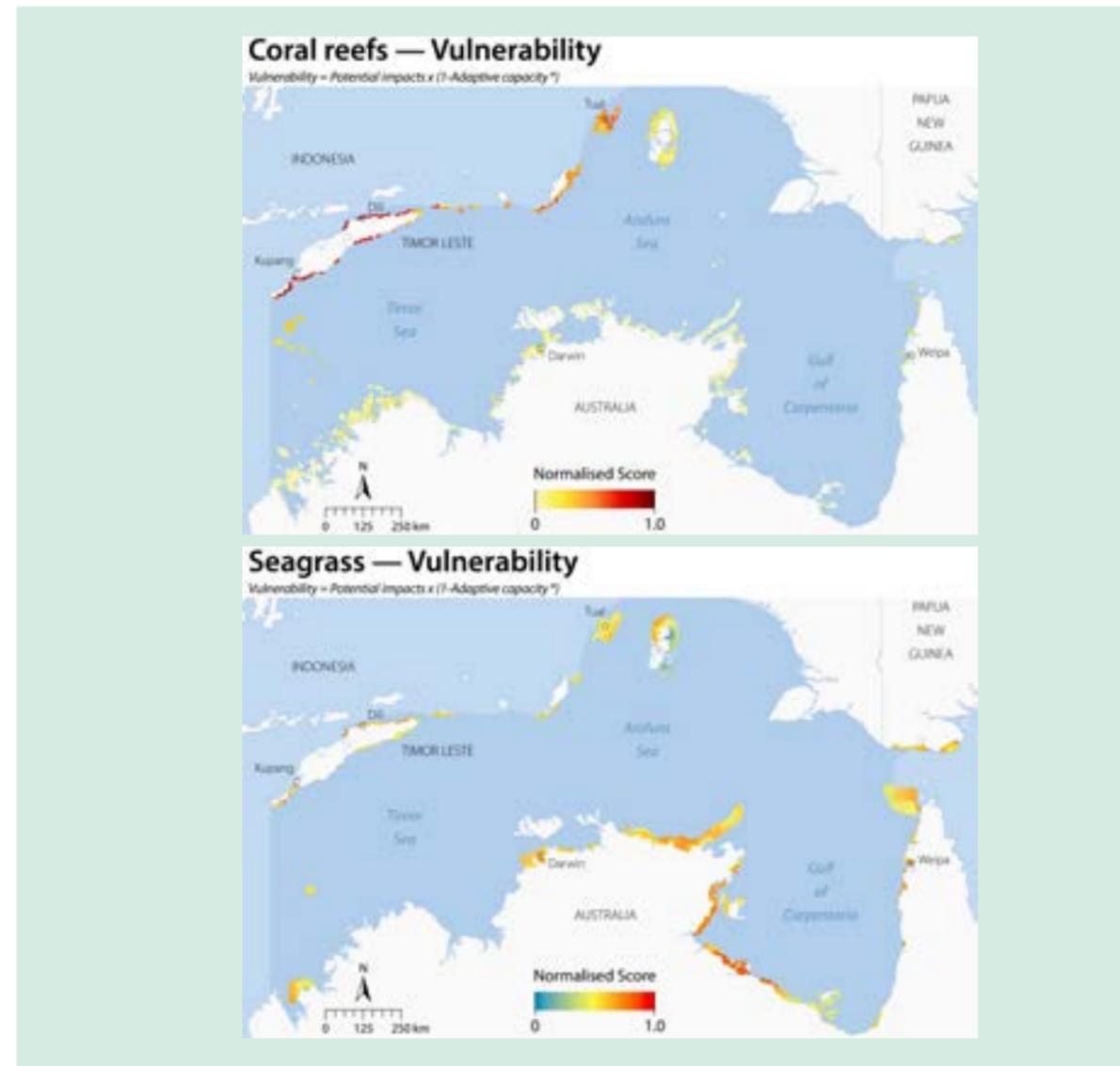


Figure 14. Habitat Vulnerability Maps for Coral Reefs and Seagrass

INTEGRATED COASTAL MANAGEMENT (ICM) IN THE ATS REGION

Integrated Coastal Management (ICM) has been demonstrated by the GEF and other organizations to be an effective, multi-stakeholder approach in addressing multivariate threats to coastal habitats and marine ecosystems, laying out a roadmap for sustainable development. The ATSEA-2 Project is supporting ICM planning and implementation in Rote Ndao District in Nusa Tenggara Timur (NTT) Province, Indonesia, and Barique Posto Administrativo in Manatuto Municipality, Timor-Leste, as a means of leveraging coordinated and sustainable stakeholder buy-in with respect to development and conservation priorities in these areas. The ICM activities are designed to complement ongoing efforts by national and local governments, and with other donor-funded initiatives.

In both local sites, ICM plans that integrate SAP/NAP priorities including biodiversity conservation, sustainable fisheries, marine pollution prevention, climate change adaptation and gender concerns will be developed through participatory approaches, considering the results of related studies or assessments. Women and vulnerable groups will be involved in the ICM planning and implementation to ensure that their needs and priorities will be incorporated in the ICM plans, which will be submitted to the local governments for adoption and consideration in their local development and budget planning processes (Figure 15).

Upon enactment of local decisions in support of the ICM plans, the project will also support their initial implementation in selected pilot sites (village/s) through activities that directly benefit local communities including development of sustainable and resilient livelihoods, and implementation of specific adaptation measures such as preservation and rehabilitation of mangrove forests and other vegetation to strengthen climate-resilient ecosystems. The project will specifically support women-led alternative livelihood development, including training on seaweed/fish culture, food processing/ value adding activities, improving access to the market, and business and financial management.

Local government units are also expected to benefit from the project through capacity building opportunities on integrated, participatory and science-based approaches that can improve their spatial planning and socio-economic development functions, and also through achieving a scaleable framework that promotes participatory and sustainable development. The ICM plans can serve as the local government's framework and reference for engaging potential partners, including the private sector, NGOs, academe and donors in support of its sustainable development priorities. Good practices on ICM application in the pilot sites will be documented for potential replication and scaling up within and outside the project areas.



Figure 15. The ICM Development and Implementation Cycle



CASE IN FOCUS

INITIATING ICM IMPLEMENTATION IN PA BARIQUE

Posto Administrativo (PA) Barique is a sub-district in the South Coast of Manatuto Municipality, the only municipality in Timor-Leste with both a north and a south coast.

Agriculture is the main source of livelihood of many people in PA Barique, with 91.7% of private households engaged in crop production, although most farms are characterized by subsistence farming. Food security is a primary challenge, which is likely to be compounded by projected changes in climatic conditions in the country such as increase in length of the dry season, increased intensity of rain and wind events, higher temperatures, and sea level rise. Poor harvests may in turn result in increased activities in communal areas, such as increase in fishing efforts, and harvesting of mangroves and other unsustainable resource uses, which may further intensify the area's vulnerability to climate change. Some aquaculture activities have been initiated but these are small-scale, and constrained by the price of imported feeds which hinder profitability of the enterprises. Pollution from land and sea-based sources are also emerging threats in the south coast of Timor-Leste, particularly marine debris and potential oil spill from sea-based activities.

Integrated coastal management (ICM), incorporating climate change adaptation considerations, will be implemented in PA Barique in order to address priority issues in a coordinated manner among concerned stakeholders, and support livelihood and socio-economic improvement while promoting more sustainable use and conservation of local coastal and marine resources.

To facilitate inter-agency and multi-sectoral collaboration in developing the ICM plan and pilot projects, an ICM Sub-Task Team for PA Barique was established, which will work with the existing ICM Task Team of Manatuto Municipality under the framework of the municipality's ICM program. Consultation meetings were undertaken with the local government of Manatuto Municipality and the municipal ICM Task Team on 24 August and 24 September 2020 to discuss the coordination and management mechanism for the ICM planning process in Barique and review key institutions to be involved and their representatives. This was followed by a consultation in Barique on 8-9 October 2020, where the structure, composition, roles and responsibilities, and work plan of the ICM Sub Task Team were discussed and agreed on.



ICM program consultation in Barique

With the endorsement of the Administrator of PA Barique, an official order was issued by the Municipal Administrator of Manatuto Municipality for the establishment of the sub task team (Figure 16).



Figure 16. Official order by the Municipal Administrator of Manatuto Municipality for the establishment of ICM Sub Task Team for PA Barique

The ICM Sub Task Team was officially launched, and an ICM orientation for the team was conducted on 25-26 November 2020. The former Manatuto ICM Coordinator, engaged by the project, worked with the municipal Task Team and the ATSEA-2 Coordinator in Barique to conduct the ICM orientation.

The ICM Sub Task Team will work under the overall guidance of the Municipal Administrator and direct supervision of the Administrator of PA Barique, and in collaboration with heads of key agencies, the municipal task team and other sectors. As members of the ICM Sub Task Team come from various related ministries, the team can facilitate communication/coordination with, and facilitate data and technical support from their respective offices in the implementation of ICM and the ATSEA-2 Project in Barique, and ensure coordination and harmonization among key stakeholders.

A consultancy team was engaged in December 2020, and has been working with the ICM Sub Task Team in the conduct of a baseline assessment on socioeconomic and ecological conditions and climate change vulnerability, which will provide inputs to the development of the ICM Plan, in addition to proposed actions arising from the pollution hot spot analysis conducted in 2020. In line with the ICM Plan and the ATSEA-2 Project targets, the ICM sub task team will also support the implementation of public awareness and related training activities, as well as the pilot projects on initiating local production and/or sourcing of affordable fish feed for the aquaculture sector; establishment of a women-led cooperative for the sale of local fish which will be accompanied by trainings on fish handling, sourcing, and business and financial management skills; introduction of climate-resilient gardens and conduct of mangrove restoration to improve coastal defense in key areas; and training on oil spill preparedness and response for stakeholders in the south coast region.

The ATSEA-2 ICM Project in PA Barique supports the scaling up of the ICM program in Manatuto Municipality, which was established through the GEF/UNDP/PEMSEA Project on Scaling Up the Implementation of the SDS-SEA, which had a pilot site in the north coast. It demonstrates how ICM can be further scaled up to other sub-districts under the framework of the municipal ICM program, and how donor projects can build on each other's accomplishments in support of local and national priorities and programs. It also supports capacity building of local governments, promotion of integrated approaches for consideration in the ongoing development of the local government system, and demonstrates implementation of the (draft) National Oceans Policy that promotes integrated management approaches at the local level.

SPECIAL FEATURE WE ARE ALL IN THIS TOGETHER

FROM ATSEF TO SPF

In 2003, a group of individuals from governmental and non-governmental organizations from Australia, Indonesia, Papua New Guinea, and Timor-Leste came together and formed a voluntary partnership which became known as the Arafura and Timor Seas Experts Forum (ATSEF). ATSEF blazed the trail for information sharing and cooperation in the ATS region, particularly on the research and scientific level, and aided the completion of the first ATS Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP).

Building on the foundational knowledge and experience accumulated from ATSEF, the ATS member countries recognized the need to further step up regional and multi-stakeholder cooperation in order to achieve its common vision of a sustainable ATS region. Through the ATSEA-2 Project, the ATS region is paving the way for more inclusivity by further strengthening participation in ATS governance through a new mechanism called the ATS Stakeholder Partnership Forum (SPF).



ATSEA-2 held a focus group discussion (FGD) on ATSEF in Jakarta on 3 March 2020 to seek inputs for the establishment of Stakeholder Partnership Forum (SPF)



What is SPF?

A platform of multi-stakeholder partners within the ATS governance mechanism that would facilitate deeper engagement in addressing the region's major transboundary issues and in achieving sustainable development through SAP and NAP implementation.



What role will they play?

- o Support the ATSEA Secretariat and the ATS Regional Coordination Committee by providing technical and policy advice.
- o Facilitate incorporation of diverse insights, information, experiences, knowledge and expertise in the planning and decision process and in carrying out activities/programs towards a better ATS.



Who can be part of SPF?

Representatives from key stakeholder groups in the 4 ATS countries, including:

- o civil societies
- o community groups
- o NGOs
- o women's organizations
- o private sectors
- o national and sub-national governments
- o academic and scientific institutions

To jumpstart the establishment of SPF, the ATSEA-2 Project has undertaken the following:

- Mapping and assessment of stakeholders in the ATS region to gauge the needs, interests, concerns and capacities of different stakeholder groups.
- Survey of initial expressions of interest on SPF garnered over 100 interests. Subsequent consultations with countries will be undertaken to assess and finalize regional members of SPF and to ensure a balanced representation and engagement of key stakeholders.
- Introduction and solicitation of wider stakeholder inputs on the conceptualization of SPF, as well as to the different transboundary issues and assessments being undertaken for the ATS region, through a 4-day SPF Consultative Webinar Series entitled, "Building a Better ATS for Tomorrow." The webinar series which was conducted from 2-5 November 2020 via Zoom and live streamed via the ATSEA-2 Facebook page, was a huge success with more than 400 individuals from 16 countries participating in total.



ATSEA CHAMPIONS

Prof. Ir. R. Sjarief Widjaja, Ph.D.

Among the key prime movers of Indonesia in promoting sustainable fisheries and ocean governance, as well as on research and human resource development. As the current Head of the Research and Human Resources Agency of the Ministry of Marine Affairs and Fisheries (MMAF), Dr. Widjaja is leading the strategic programs of MMAF particularly in advancing research as well as improving the capacity and human skills among Indonesian fisherfolks to help improve their welfare.

Dr. Widjaja serves as one of the 70 members of the global Expert Group of the High Level Panel for a Sustainable Ocean Economy. He is the lead author of the Blue Paper 15 on “Illegal, Unregulated and Unreported Fishing and Its Associated Drivers” submitted to the High Level Panel for A Sustainable Ocean Economy. Previously, Dr. Widjaja held the positions of Secretary General of MMAF (2013-2017), and Director General of MMAF’s Capture Fisheries (2017-2018), and is a member of the Sepuluh Nopember Institute of Technology (ITS) Alumnae Association Advisory Board.



Mr. Celestino da Cunha Barreto

One of the key leading figures in the Ministry of Agriculture and Fisheries (MAF) of Timor-Leste, with more than 20 years of service to the General Directorate of Fisheries of MAF. Dir. Barreto is one of the pioneers of the National Directorate of Fisheries and Aquaculture (NDFFA), having been designated as one of its first five senior staff in April 2000. As the Senior Staff of Aquatic Resources and National Director for Marine Spatial Planning, Capture Fisheries and Aquatic Resources Management, Dir. Barreto has been a key supporter in advancing the objectives and goals of the ATSEA Phase 1 and Phase 2 programs in Timor-Leste. As the Operational Focal Point for PEMSEA and ATSEA-2, Dir. Barreto supports the National Focal Point on the country’s commitments related to management of aquatic resources. He is a co-author of a number of studies and publications related to marine megafauna, marine protected areas, coastal and marine habitat analysis, and mapping in Timor-Leste.



BUILDING A SUSTAINABLE REGIONAL MECHANISM FOR ATS

On 15 May 2014, the ATS member countries entered into a landmark Ministerial Declaration wherein the region’s first Strategic Action Programme (SAP) and corresponding National Action Programmes (NAPs) of Indonesia and Timor-Leste were adopted⁸. The SAP embodies the region’s 10-year vision that will be pursued through a set of governmental and environmental objectives. But in order to sustain the implementation of the SAP and to realize the desired future for the ATS region, the countries recognized the need to transform from an informal regional cooperation into a more efficient, formal, and sustainable regional governance arrangement that is reinforced by stronger multi-stakeholder cooperation.

In 2020, the ATSEA-2 Project initiated the process of setting up various key governance components for the envisioned regional mechanism. Key initiatives included: (a) an assessment of governance mechanisms including a review of legal frameworks such as policies, legislation, and regulations, institutional arrangements, and political economy of the region;

(b) implementation of various awareness and capacity building activities; (c) collaborative and partnership discussions and activities; and (d) review and development of a Gender Equity and Social Inclusion (GESI) plan. Recognizing the interlinkages of these elements is integral to enable the region to put in place a good ocean governance mechanism that will support the implementation of its various thematic or issue-specific activities on the ground. Details on these initial efforts are provided in the succeeding subsections.

Building on these initial efforts and to cover other governance elements, the ATSEA-2 Project aims to pursue the following in 2021: completion and securing of consensus on the ATS regional mechanism; initial assessment on financial mechanism in support of SAP and NAP implementation; roll-out of the communications and stakeholder engagement plan as well as GESI plan; and development of a monitoring system to effectively gauge progress in the SAP and NAP’s implementation.



Ministers from Timor-Leste, Indonesia and the Australian Ambassador to Indonesia signed the Ministerial Declaration on 15 May 2014

⁸ Papua New Guinea was an observer country under the ATSEA-1 Project, and became a formal member country under the ATSEA-2 Project. Thus, the NAP of PNG will be developed under ATSEA-2, while Australia sits as a member of the Regional Steering Committee but is not a GEF-project beneficiary.

SETTING IN MOTION THE ESTABLISHMENT OF A SUSTAINABLE GOVERNANCE MECHANISM FOR ATSEA

In line with the objectives of the ATS SAP to strengthen the regional governance of the ATS region and stakeholder participation in ATS governance and management, PT Hatfield Indonesia was engaged by the ATSEA-2 Project to undertake an assessment on the development of a regional governance mechanism to support sustainable management of the coastal and marine resources in the ATS region. In consultation with the ATS countries and other stakeholders in the region, the assessment is expected to generate recommendations on the most viable design options for a country-led regional governance mechanism, and a Stakeholder Partnership Forum (SPF) that will facilitate the engagement of other regional stakeholders as partners of the Regional Coordination Committee (RCC) for sustainable development of the ATS region.

A desktop assessment of existing regional and national governance and stakeholder partnership mechanisms was undertaken to identify characteristics that support effective regional governance. National consultations through virtual meetings were also conducted to identify priority regional actions that require a mechanism for regional collaboration. Insights from regional stakeholders and experts were gathered through



the regional Technical Workshop on Regional and National Thematic Assessments (6-7 October 2020), the Stakeholder Partnership Forum Consultative Webinar Series: Building a Better ATS for Tomorrow (2-5 November 2020), and the 2nd Regional Steering Committee (RSC) Meeting (25 November 2020).



KEY OUTPUTS FROM THE ASSESSMENT

- 1 Summary of key stakeholders and their potential roles and activities in the ATS related to the five key transboundary issues.
- 2 Review of 12 regional initiatives and their attributes that may be applicable and beneficial to fostering the envisioned cooperation in the ATS.
- 3 Summary of different regional collective actions to be considered for ATSEA members, including coordination, cooperation and collaboration that require voluntary consultation and agreement; and harmonization, economic integration, and administrative/ legal/ institutional integration that require legally binding arrangements.
- 4 Design principles and criteria to identify which targets would benefit most from the development of a regional mechanism.
- 5 Draft Terms of Reference (ToR) and options for the structure of the SPF.
- 6 Decision Trees to guide national consultations on priority actions that will require regional collaboration or external support, key value-adding services of the regional mechanism, and ranking of the most viable options for a sustainable regional governance mechanism and the SPF.

Key Findings and Recommendations:

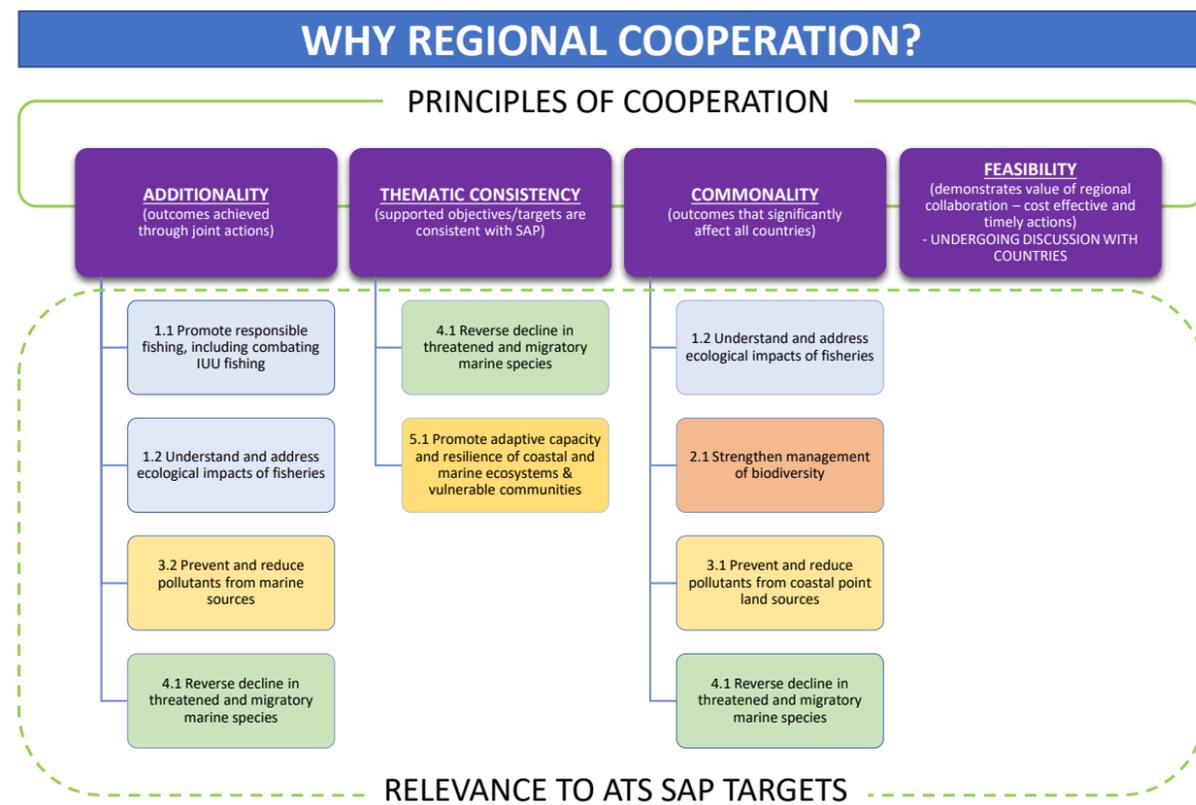
The assessment of 12 regional initiatives, though varying in scope, size and purpose and each having strengths and challenges, highlighted the following common themes and success factors that can be considered in developing the ATS regional governance mechanism:

- Strong country ownership and commitment and support from partners and other stakeholders.
- Alignment of initiatives with relevant international and national priorities and commitments (i.e., SDGs, Paris Agreement on Climate Change, Aichi Biodiversity Targets, the RPOA-IUU, etc.).
- Synergize scaling-up programs around common geographies and themes to reinforce mutually related work.
- Tap the private sector as the primary engine of growth, coupled with the public sector as an enabling body.
- Demonstrate the quantitative benefits of regional collaboration in addressing coastal and marine issues, versus losses from the business-as-usual scenario.
- Proactively identify specific pipeline projects and their cost implications.
- Consideration of Monitoring and Evaluation as a critical component of regional initiatives, and a key function of Regional Secretariats.
- Inclusion of activities into the work plan and budget of relevant government agencies and partner institutions.
- Given the largely decentralized nature of coastal and marine resources management in most of the ATSEA member countries, local government participation is vital.
- Set physical and financial goals.
- Utilization of various forms of financing mechanisms in partnership with government and non-government entities.

Fostering Regional Cooperation through the ATSEA-2 RSC and National Partners

The current Regional Steering Committee (RSC) for the ATSEA-2 Project has revitalized and laid the ground for the proposed regional cooperation mechanism. The RSC, composed of representatives from the four littoral countries in the ATS region (Australia, Indonesia, Papua New Guinea, and Timor-Leste), serves as the interim regional governance mechanism for the ATSEA program. The RSC meetings in 2019 and 2020 have provided oversight and strategic guidance to the implementation of the ATSEA-2 Project with component activities that provide direct

support to the implementation of the ATS SAP and NAPs. Meanwhile, the ATSEA-2 Regional Project Management Unit (RPMU) coordinates the day-to-day operations in collaboration with National Coordination Units working with national focal agencies and stakeholders at the national and local levels. The proposed regional governance mechanism can build on the operating modalities, networks and relationships cultivated in the current ATSEA-2 Project RSC, RPMU, ATSEA country members and other partners.



Key Governance Initiatives in ATS Countries:

At the national level, National Project Boards (NPBs), composed of key ministries/agencies responsible for fisheries, environment, planning, finance, foreign affairs, etc., and UNDP, have been set up to coordinate project implementation particularly in Indonesia and Timor-Leste. Building on the NPBs, National Inter-Ministerial Committees (NIMCs) that will provide a coordinated approach across different ministries and stakeholder groups in Indonesia and Timor-Leste for the implementation of the

SAP and NAP have been initiated, while Papua New Guinea is targeted to establish its NIMC in 2021. In the case of Australia, while the country is not a beneficiary of the ATSEA-2 Project, its various initiatives in the ATS region complements ATSEA-2's objectives and targets. Under the framework of the ATSEA-2 Project RSC, access to specific information or data in Australia, and potential links to government initiatives that may support the project and implementation of the ATS SAP and NAPs, may be facilitated.

Indonesia

Key initiatives in 2020

- NPB established and operational.

Targets for 2021:

- National governance assessment to support the development of NIMC governance, operational mechanisms and guidelines.
- Promote synergies between the NIMC and other bodies addressing regional cooperation, such as the CTI-CFF, RPOA-IUU and others.
- Identify national representation of the SPF and roles of members in support of SAP and NAP implementation.

Australia

Complementary initiatives in the ATS on:

- IUU fishing under the Southeast Asian RPOA-IUU
- Marine protected areas management
- Marine pollution (ghostnets and marine plastic and oil pollution)
- Marine turtles protection and habitat restoration
- Various ecosystem level research
- Key complementary regional engagements on environment

Timor-Leste

Key initiatives in 2020

- NPB established and operational
- Consultation meetings conducted with key stakeholders on the establishment of NIMC and national representation in the SPF.
- Supported stakeholders' workshop to harmonize and improve inter-sectoral coordination of national and local programs among development partners and the Secretary of State for Fisheries.
- Discussions with other regional projects (CTI and ISLME) on information-sharing and having a common NIMC.

Targets for 2021:

- Establishment and operation of NIMC and SPF
- Assessment of national policies, regulations and capacities to support institutional strengthening for integrated fisheries and natural resources management, biodiversity conservation and climate change adaptation.

Papua New Guinea

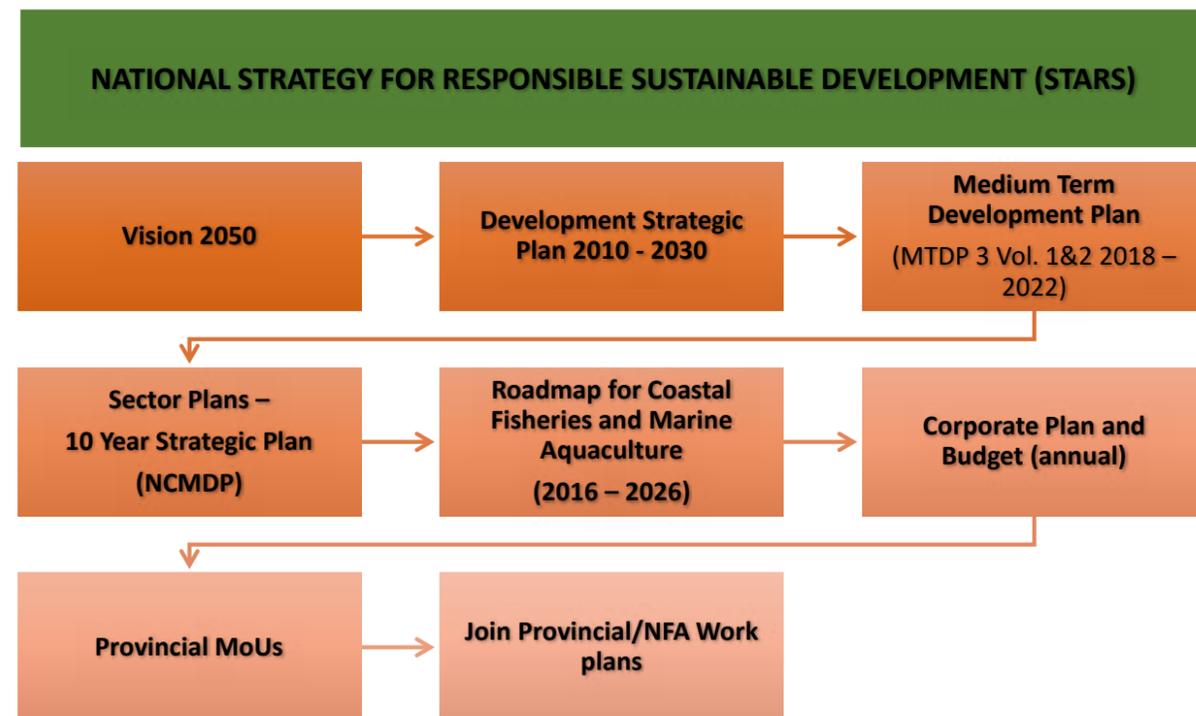
Targets for 2021:

- Stakeholder analysis and institutional assessments
- Development of TORs and establishment of NIMC and SPF, considering experiences from Timor-Leste and Indonesia.

Papua New Guinea Formally Onboard as ATSEA-2 Member Country

During ATSEA-1, Papua New Guinea (PNG) served as an observer country and thus had limited participation in the foundational activities of ATSEA, particularly in the development of the ATS TDA and SAP. PNG is a key country in the overall management of ATS, in particular on fisheries management as the Arafura Sea fisheries is supported by the same fish stocks from the adjacent Torres Strait that borders Australia and PNG. Thus, as one of the four countries sharing the Arafura-Timor Seas, PNG's integration into the Project is crucial if the regional SAP is to achieve its objective.

In support of global sustainable development objectives and in line with PNG's Sustainable Development Plan (SDP) 2010-2030 and Vision 2050, the government of PNG through the National Fisheries Authority (NFA) recognized the importance of regional collaboration and pursued its formal membership in the ATSEA project. The decision of PNG to take part in the ATSEA-2 program will further strengthen the region's response toward better regional governance mechanism of ATS marine resources. On 29 July 2019, the NFA signed the ATSEA-2



Project Document. After more than a year of close coordination, the implementing arrangements for the national implementation of ATSEA-2 was signed in November 2020 between NFA and PEMSEA as its executing agency.

As its first priority, the ATSEA-2 PNG component, with assistance from the Eco Custodian Advocates (ECA), undertook an assessment of the legal and institutional frameworks in PNG with respect to governance and management of coastal and marine resources focusing on fisheries and their linkages to the South Fly District, Western Province of PNG as project site. Anchored on PNG's 1975 Constitution are laws and various policies, strategies and plans that emphasizes wise use and



conservation of the country's natural resources and environment. One of the defining features of PNG's legal framework is the recognition and localization of its customary laws. The long-term plan of the country (PNG's SDP 2030 and Vision 2050) also expanded the scope of environmental sustainability by incorporating the need to address climate change. To ensure continued economic benefits and biological and ecological sustainability of PNG's marine resources, the NFA has put in place the Roadmap for Coastal Fisheries and Marine Aquaculture 2017-2026.

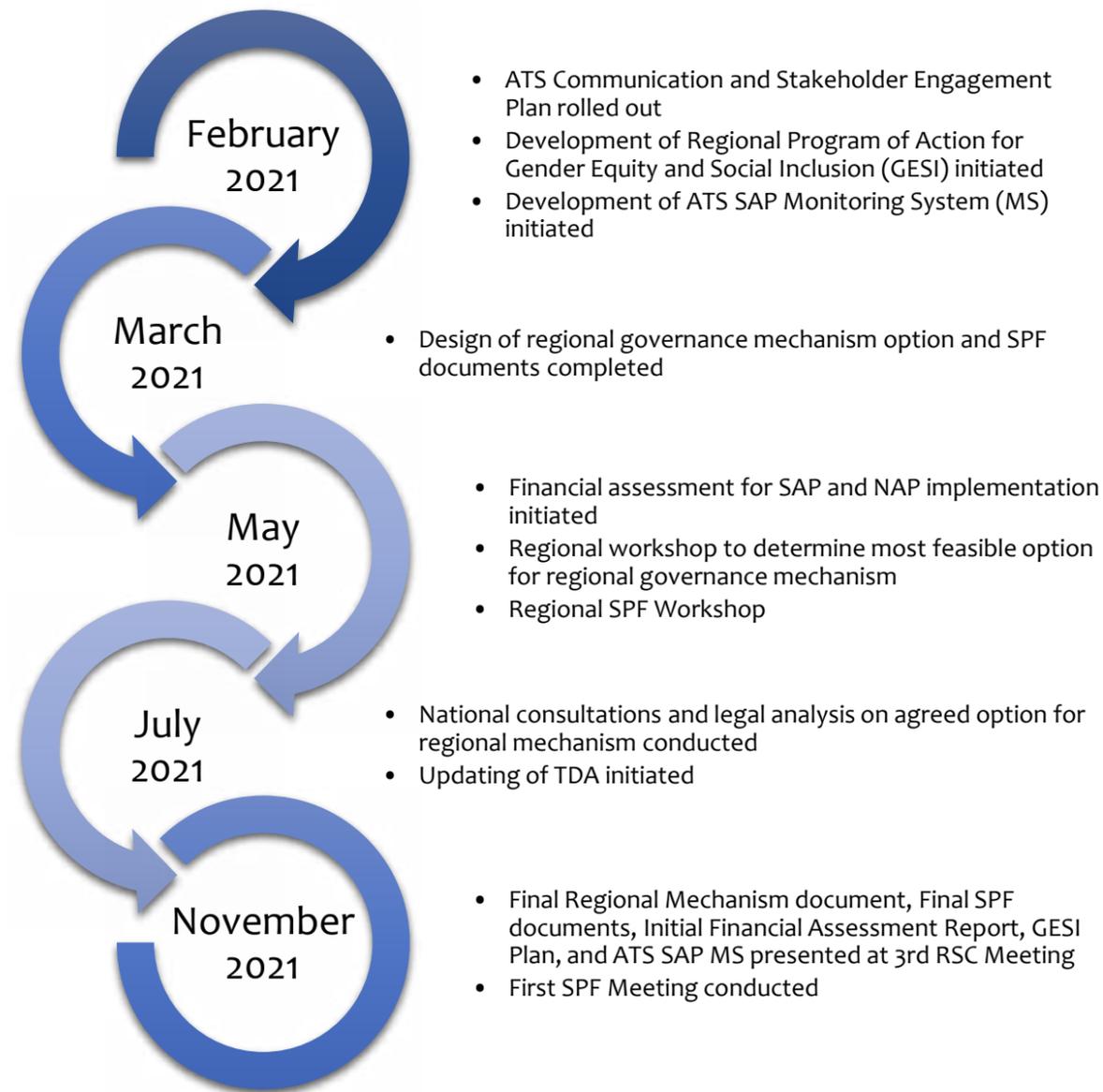
In South Fly District, the National Beche-de-Mer Fishery Management Plan 2016 is in place and jointly managed by NFA with the Western Province government and the South Fly local government. Under this, total allowable catch (TAC) by species, size limits, gear restrictions, open-closed seasons and limitation in number of exporters or buyers are implemented. South Fly is also covered by a Barramundi Fishery Management Plan. In line with these, through the ATSEA-2 Project, an artisanal fisheries management plan for South Fly will be developed supported by EAFM-awareness and capacity building initiatives. Community-based monitoring, control and surveillance will also be strengthened in the Western Province.

The result of this legal and institutional assessment will support the bigger ATSEA-2 objective of harmonizing national and legal policies of member countries to strengthen regulatory and institutional frameworks in support of SAP/NAP implementation. This will be followed by a biophysical and socio-economic assessment of PNG coastal and marine ecosystems in the ATS region that will feed into the development of PNG's National Action Programme (NAP) as well as the updating of the ATS TDA and SAP, thereby providing the region with a strategy that is representative of the entire ATS region.

2021 Roadmap to Building the Region's Governance Mechanism

Through the collaboration of all country partners and stakeholders, the challenges posed by the COVID-19 pandemic did not deter efforts for setting in motion the establishment of a sustainable governance mechanism for the ATS region. Instead, it provided opportunities for exploring innovative ways of communication, consultation and information and knowledge exchange that are vital for developing and operationalizing

collaborative arrangements within and among countries and other stakeholders in the ATS region. Building on the good practices and accomplishments in 2020, efforts in 2021 will focus on further developing key elements that underpin the sustainability of the regional cooperation for sustainable marine and coastal management in the ATS region.



LAYING THE BUILDING BLOCKS TO INCLUSIVE ATSEA GOVERNANCE AND DEVELOPMENT THROUGH GESI



Women in shrimp fishery in Aru Islands

In support of the UN SDGs and in line with the gender equality and social inclusion strategies, guidance, and standards of both UNDP and GEF, the ATSEA-2 Project is designed to ensure the participation of women and men with equal voice. The ATSEA-2 Project design is rated with Gender Marker Code 2 (GEN 02) to ensure that gender equality and women empowerment takes place. This means that while gender equality is not the primary objective of the expected output, the project output will still promote gender equality in a significant and consistent way through “gender mainstreamed” initiatives.

GESI in ATSEA-2 and why it matters?

Compounded by climate change, the broad range of impacts brought about by the different environmental challenges in the ATS region have significant consequences for all the inhabitants in the area. The subsequent effects of climate change to fisheries, habitats, and biodiversity is poised to threaten lives and livelihoods both in the waters and on the coasts, and will further exacerbate existing gender and other social inequalities, with women and other vulnerable groups bearing the brunt of the negative consequences.

Prevailing social conditions and gendered labor divisions in the fishing sector tend to provide women with less access to income, assets, resources, technology, training and decision-making power than men. These disparities can potentially limit adaptive capacity and expose women to greater risk, making them more vulnerable to the impacts of climate change. Adaptive capacity is further impaired when these inequalities restrict the involvement and contribution of women to climate change planning and decision-making.

Additionally, there is a lack of quantification on the true scale of women's contributions. In the ATS region, fishing is perceived as male-dominated, but many women spend hours gleaning for invertebrates, fruit, and seaweed in near-shore areas. They are integral to pre- and post-harvesting activities such as mending nets, selling fish at the market, and determining market prices. Globally, women outnumber men in processing and trading fish. Women also have unique responsibilities within small-scale fishing villages, as opposed to rural or urban communities. Whereas men are involved in offshore fishing, women are left responsible for child care, buying, processing, and selling fish, and managing all household activities. However, limited access to resources such as aquaculture ponds, technology, education, information and skills, weakens the power of women within the sector. As fisheries yields decline, women take on added responsibilities to supplement income and subsistence needs, including food production and collection of fuel, wood and water.



Selling fish catch at the local market

Progress made and ongoing initiatives

Recognizing that gender equality is crucial in order to meet the different cross-cutting goals and targets of sustainable development, the project has ensured and encouraged from its inception that representation, participation, access and benefits are enjoyed by both men and women in various ATSEA-2 activities. From 2019 to 2020, a total of 3,100 individuals have been engaged in various ATSEA-2 meetings, forums, and various awareness and capacity building activities. Out of this, 2,000 (65%) are men and 1,100 (35%) are women (Table 7 and Figure 17). It is envisioned that more equal opportunities and engagement from various sectors, and from both men and women as well as other marginalized groups, will further improve as ATSEA-2's GESI initiatives and interventions are rolled out in 2021.



A woman and her children engaged in nearshore fishing

Stakeholder Involvement in Various ATSEA-2 Activities in 2019-2020

Cross-cutting gender issues were integrated in the stakeholders' engagement plan and communications strategy plan. The project will ensure inclusive communication that caters to the different needs of different genders, people with disability, and ethnicity. Equal consultation with men, women, and other minority groups will continue throughout the project implementation, monitoring and evaluation phases; as well as in the planning and decision-making process for implementing the interventions. The communication activities, materials and messages will consider gender norms, roles and relations for women and men, and how these affect access to and control over ATS resources and marine protection. The communication strategies will also acknowledge ways to transform harmful gender norms, roles and relations with regard to managing ATS resources and protection.

At the regional level, a rapid GESI Training Needs Assessment of the NCU and RPMU was conducted last December 2020. The aim of the assessment was to document current knowledge and capacity of the ATSEA-2 team and partners on addressing gender and inclusion issues throughout the project cycle; and to identify gaps and challenges at the individual level in addressing gender and inclusion issues. The results of the needs assessment showed that most of the staff at the regional team had the knowledge to competently define

gender, mainstreaming and inclusion. Most could also identify gender-responsive indicators of the project. However, most staff indicated that they need further training on communicating the intersectionality of gender, inclusion, climate change and coastal resource management; as well as further training on integrating gender with actual project activities. Based on the results of the needs assessment, a series of GESI learning sessions will be conducted in 2021.

A comprehensive gender assessment was already conducted between 2015 and 2016 prior to the ATSEA-2 Project design, with Indonesia having re-assessed their Gender Analysis in 2020 at the national level. The re-assessment was carried out with the objective of designing activities that sustainably respond to climate change impacts with an aim towards empowering women and other vulnerable groups. It included suggestions for integration of gender-specific activities and contribution to the development of gender specific and disintegrated project indicators throughout the project components. Formulation of the proposed gender specific activities was detailed, including examining the rationale, risks, benefits and implementation strategies for each gender-specific activities. More importantly, the Indonesia re-assessment report will feed into the regional GESI Analysis and Action Plan to be crafted in 2021.

Table 7. Summary of stakeholder involvement in various ATSEA-2 activities in 2019-2020

2019 Sex Disaggregated Data	Men	Women	Total
	385	262	647
2020 Sex Disaggregated Data	Men	Women	Total
	1,615	838	2,453
Overall (2019-2020)	2,000 (65%)	1,100 (35%)	3,100

STAKEHOLDER INVOLVEMENT IN ATSEA-2 ACTIVITIES

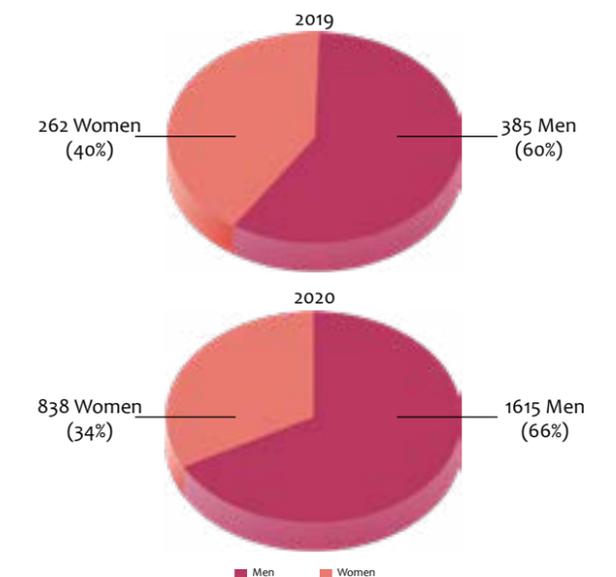


Figure 17. Summary of Stakeholder Involvement in Various ATSEA-2 Activities 2019-2020

KEY GESI TARGETS FOR 2021



Crafting a GESI Framework and GESI Action Plan for ATSEA-2



Conducting a series of capacity building workshops for NCU and RPMU based on the results of the GESI Audit



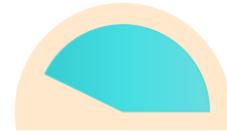
Designing a GESI Analysis for Timor-Leste, Indonesia and Papua New Guinea including country-specific recommendations



Ensuring GESI consideration and inputs to the various regional and national thematic assessments/studies, including in the updating of the TDA



Conducting a joint communications & GESI regional exchange workshop



Ensuring that various ATSEA-2 workshops, meetings, networking events, and capacity and awareness-building activities are gender-responsive



Applying GESI principles and guidance in all ATSEA-2 communication and knowledge platforms and products

BUILDING AWARENESS AND CAPACITIES

Embedded within the different initiatives of the ATSEA-2 Project highlighted in the earlier sections of this report is the commitment to building knowledge, capacities and awareness. To do this effectively, the ATSEA-2 Project conducted a more extensive analysis of the region's stakeholders building on the preliminary assessment conducted during the project design. The analysis included the identification of various types of stakeholders, key issues that matter to them, capacity or training needs, and key communication and learning

platforms that would work best in the varying situations of countries in the ATS region. This resulted to the ATSEA-2 Communications and Stakeholder Engagement Plan.

The ATSEA-2 Project simultaneously established and launched its key communication platforms online, including the ATSEA-2 Project website and social media sites. These enabled the project to initiate the sharing of various knowledge products in collaboration with various entities.



 Official website for the ATSEA Programme
www.atsea-program.com

- Formally launched in June 2020
- Available in English, Bahasa and Tetun
- Serves as the main platform to disseminate information and best practices from the project activities, including from implementing partners.
- Key features: programme's background, goals, objectives, and partners; information on the three main components of the ATSEA-2 Project, (governance mechanism, environmental, and knowledge management).
- 1,329 visitors with 4,913 pageviews (as of December 2020).



 ATSEA Social Media Sites

- On You Tube, ATSEA's published videos have been viewed by 1,031 viewers with an estimated 7,588 impressions. ATSEA tweeted six times, generating 7,289 impressions. Through Facebook, ATSEA published 54 posts, generating 19,517 reach and 2,574 engagements. On Instagram, ATSEA published 20 posts and Instagram stories and generated more than 6,000 impressions.



Knowledge/Information Products

- Published three editions of the ATSEA E-Newsletter which are available on the ATSEA website for download in PDF format. Each newsletter consists of updates from regional and country levels, including stories from the field. Until December 2020, the e-newsletters have been delivered to 279 people. Information sheets were also published online focusing on the different components of the project, as well as the member countries.
- ATSEA-2 Primer video released
- Contributed three articles to IW: Learn, *Moving towards a collaborative management of the Arafura and Timor Seas* published on June 2020, *New Hope for Karey Village and Aru Tenggara Marine Protected Area* published on October 2020 and *Teamwork Matters in Marine Protected Area (MPA) Management: The Aru Tenggara Experience* published on December 2020.



Participation in Forums/Events

- Promoted ATSEA programme through various online forums/events, including the Indonesia Maritime Talk Series organized by IPB University, as well as special webinars in Indonesia during the World Earth Day, International Day of Biodiversity, World Oceans Day celebration, and Webinar on Support from Fisheries for Food Security in Merauke.



STRENGTHENING PARTNERSHIPS

In the vast ATS region, a number of entities, projects, and mechanisms exist that pursue various aspects of coastal and marine governance that complement ATSEA-2's project objectives. Through partnerships and collaborations, ATSEA-2 and its partners are able to create mutual value that is greater than what can be achieved if undertaken individually. In particular, partnerships are expected to allow the project to generate the following benefits: a) relate better to the local context; b) provide technical excellence; c) follow international good practice; d) harmonize with other development partners and projects;

and e) reflect a broad range of information and perspectives.

In 2020, ATSEA-2 coordinated with several entities from the national to international levels, mainly to explore areas of possible collaboration, as well as to share information. In addition to the strong support from GEF/UNDP, PEMSEA, and collaboration of local government agencies in the project sites, as well as various government ministries and agencies in ATS countries, ATSEA-2 is pleased to have initiated engagement with the following on regional-related initiatives:

- Regional Plan of Action to Combat Illegal Unreported and Unregulated Fishing (RPOA-IUU)**
 - Joint undertaking on regional assessment on implementation of RPOA-IUU
 - ATSEA-2 participation in RPOA-IUU Coordination Committee Meeting
- The Indonesian Seas Large Marine Ecosystem (ISLME)**
 - Collaborative discussion on possible areas of cooperation (information sharing and possible joint capacity-building activities)
 - ATSEA-2 participation in ISLME TDA Workshop
- The Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF)**
 - Collaborative discussion on possible areas of cooperation (information exchange and sharing of information on regional governance mechanism)
- The Yellow Sea Large Marine Ecosystem (YSLME)**
 - Expert input from YSLME Regional Project Manager at ATSEA-2 Technical Workshop on Regional and National Assessments
 - ATSEA-2 participation in YSLME's 5th Interim Commission Council Meeting
- Yayasan Konservasi Alam Nusantara (YKAN)**
 - Participation of YKAN and sharing of area of cooperation at Project Inception Workshop
 - Expert support in conduct of EAFM assessment and planning with NCU Indonesia
- Coral Triangle Center (CTC)**
 - Participation of CTC and sharing of area of cooperation at Project Inception Workshop, as well as participation in Timor-Leste initial NIMC meeting as partner
 - Expert support in developing MPA network design, and coastal and marine habitat assessment with RPMU
- Meteorology, Climatology and Geophysical Agency- BMKG Indonesia**
 - Collaborative discussion on possible areas of cooperation (inclusion of BMKG's climate change projection and related studies in the ATS regional climate change vulnerability assessment)
- Oceanographic Research Center Indonesian Institute of Sciences (P2O-LIPI)**
 - Collaborative discussion and participation of ATSEA-2 in virtual workshop of P2O-LIPI of Indonesia in line with initiatives on fisheries assessment of ATSEA
- Oil Spill Response Limited**
 - Collaborative discussion on possible areas of cooperation (trainings related to oil spill preparedness and response, and possible support in development of oil spill preparedness and response plan in ATS)
- Yayasan WWF-Indonesia**
 - Participation of WWF-Indonesia and sharing of area of cooperation at Project Inception Workshop

OVERALL PROJECT STATUS AT-A-GLANCE

Project Technical Delivery

In 2019, the ATSEA-2 Program focused on the formal signing of the Project Document by member countries, conduct of country project kick-off meetings, conduct of Project Inception Workshop and 1st Regional Steering Committee Meeting (RSC), and recruitment of staff for the National Coordination Units (NCUs).

Signing of Project Document	<ul style="list-style-type: none"> » Indonesia (01 February 2019) » Timor-Leste (05 March 2019) » PNG (29 July 2019)
Signing of Project Cooperation Agreement (PCA) between UNDP Indonesia and PEMSEA	24 July 2019
Installation of NCUs	<ul style="list-style-type: none"> » Indonesia (March to June 2019) » Timor-Leste (April to September 2019) » PNG (scheduled in 2021)

The status of project delivery based on AWP targets were regularly monitored by the NCUs and the RPMU through a monthly check-in, and reported to the RSC Meetings, and through UNDP and GEF mid-year and annual project reporting requirements. Given the varying signing dates of the Project Document, the delivery of actual

on-the-ground activities also varied per country with Indonesia slightly ahead of other countries in 2019 given its early signing of the Project Document, while Timor-Leste mainly focused on the installation of its NCU, and Papua New Guinea focused on the discussion of project implementing arrangements in the country.

In 2020, the installation of RPMU was completed and the project initiated the implementation of activities in accordance with the approved Annual Work Plans (AWP) and Budget. Based on the internal monitoring of the 2020 AWP of Country and Regional Components (Indonesia and Timor-Leste), the project is ON TRACK in delivering its AWP targets for Component 3 (Knowledge Management), while targets for Components 1 (Governance) and 2 (Improving LME Carrying Capacity) are ON TRACK WITH MINOR ISSUES. As for Papua New Guinea, the Memorandum of Agreement (MOA) on Project Implementing Arrangements with PEMSEA was signed only in November 2020, thus the RSC decided to move actual activities in PNG to 2021.

Detailed accomplishments under the different aspects of the project were provided in the preceding sections of this report. The following provides an at-a-glance of project status vis-à-vis the 2020 AWP targets:

Table 8. Summary of project status vis-a-vis the 2020 AWP targets:

PROJECT COMPONENT	KEY 2020 Targets	KEY ACCOMPLISHMENTS / STATUS
Component 1: Governance	<ul style="list-style-type: none"> o Interim RSC and Secretariat operationalized, and RSC meeting conducted o Regional governance mechanism assessment conducted o TOR and Guidelines for Stakeholder Partnership Forum developed o Regional climate change vulnerability assessment conducted o National Inter-Ministerial Committees in Indonesia and Timor-Leste established 	<p>ON TRACK WITH MINOR ISSUES</p> <p>See section on “Governance” pages 41 to 55. (RSC and RPMU operational; 2 RSC meetings conducted; SPF consultative webinar series conducted; Key regional assessments conducted with initial reports presented at 2nd RSC Meeting and finalization of reports extended to early 2021; NIMC in Timor-Leste established and met, while TOR of NIMC in Indonesia in place but NIMC have yet to be established)</p>

PROJECT COMPONENT	KEY 2020 Targets	KEY ACCOMPLISHMENTS / STATUS
Component 2: Improving LME Carrying Capacity	<ul style="list-style-type: none"> o Regional: Scoping and baseline assessments on fisheries, IUU fishing, land-based and marine sources of pollution, habitats and marine biodiversity, and threatened migratory species conducted o Indonesia: EAFM and FIP for red snapper, shrimp and barramundi assessment and implementation; public consultations and meetings on RPP 718; Profiling of 3 fisheries commodities; Establishment of MPA in Kolepom Island and MPA effectiveness in SAP Aru Tenggara facilitated; Marine Pollution Task Force in NTT initiated o Timor-Leste: EAFM baselines for red snapper in TL; Pollution hotspot analysis in 4 municipalities; Profiling of coastal and marine ecosystem and species; Scoping study of new MPA in Manufahi; Initiate ICM in PA Barique including development of ICM plan 	<p>ON TRACK WITH MINOR ISSUES</p> <p>See section on “Deeper Probe of Region’s Common Challenges and Delivering Progress”, pages 10 to 35. (Regional thematic scoping and baseline assessment initial reports developed with country and experts inputs and presented at 2nd RSC.</p> <p>In Indonesia: key targets undertaken with supporting reports (i.e., EAFM plan for red snapper, FIP and profiles of 3 commodities; provincial decree on Kolepom MPA establishment; Marine Pollution Task Force) available.</p> <p>In Timor-Leste: marine pollution hotspot analysis conducted and shared, validated report to be submitted in early 2021; IUUF awareness and training conducted; ICM sub-task team created in Barique. While EAFM baseline initiated only in December 2020 and will continue to 2021; Profiling of coastal and marine ecosystem as well as scoping study for new MPA were moved to 2021 due to difficulties encountered in recruitment of expert consultants.)</p>
Component 3: Knowledge Management	<ul style="list-style-type: none"> o GEF and other related project indicators reviewed to strengthen ATS SAP indicators and facilitate development of ATS SAP Monitoring System o Communications and Stakeholder Engagement Plan developed o Contacts database created and maintained o ATSEA-2 website and social media sites launched o Project results and information disseminated (including in IWLearn) o Participation in related international and regional forums undertaken 	<p>ON TRACK</p> <p>See section on “Building Awareness and Capacities” and “Strengthening Partnerships”, pages 53 to 54. (All targets undertaken; 2nd RSC recommended development of a Theory of Change for the project to guide succeeding development of ATS SAP Monitoring System)</p>

Progress towards Project Objectives

Overall, and during the two-year period (2019-2020), the project managed to deliver majority of its technical targets. These outputs and results provide the necessary foundations as part of the project’s stepwise approach to achieving the project’s overall objective. In particular, the key scoping and baseline assessments undertaken both at the regional and country level will serve as crucial inputs to the updating of the TDA scheduled

in mid-2021 and the subsequent updating of the SAP scheduled in 2022. The efforts on regional governance also provides the region with clear basis in the identification of the most viable model for a long-term governance mechanism in the region. Initial on-the-ground initiatives by countries on various transboundary issues are envisioned to build efforts that are innovative and can be replicated in the long-term.

Project Financial Delivery

The total approved budget of the ATSEA-2 Project for 2019 was USD670,941, while the 2020 budget was USD 1,848,288 covering Regional, Indonesia, and Timor-Leste components. Overall financial delivery in 2019 and 2020 was at 33% and 67% respectively. With regard to Papua New Guinea (PNG), there were no activities and no disbursements made in 2019 and 2020 as PNG focused on the finalization of project

implementing arrangements between PEMSEA and NFA.

AWP and Budget review and approval in Indonesia and Timor-Leste were undertaken with the National Project Boards (NPBs) respectively and presented at the RSC meetings. While AWP and Budget review and approval for the Regional component was undertaken during the RSC meetings.

Table 9: Project Delivery Rate for the Period 2019

ATSEA 2 PROJECT	APPROVED BUDGET	PROJECT DISBURSEMENT	BUDGET DELIVERY RATE
REGIONAL	140,963	25,168	18%
INDONESIA	365,425	176,887	48%
TIMOR-LESTE	164,553	16,082	10%
TOTAL	670,941	218,136	33%

Note: Approved budget as reflected in PBB. Expenditures are based on CDR and exclude commitments.

Table 10: Project Delivery Rate for the Period 2020

ATSEA 2 PROJECT	APPROVED BUDGET	PROJECT DISBURSEMENT	BUDGET DELIVERY RATE
REGIONAL	702,186	689,991	98%
INDONESIA	668,801	373,850	56%
TIMOR-LESTE	477,301	171,061	36%
TOTAL	1,848,288	1,234,902	67%

Note: Approved budget as reflected in PBB. Expenditures are based on CDR and exclude commitments.



Figure 18 ATSEA-2 Financial Delivery rate

Aspects related to low delivery rate in 2019 are mainly attributed to: delay in project start-up in view of varying signature dates of the project in different countries, staff recruitment, and various administrative requirements.

For 2020, initially approved AWP and Budget were re-assessed and realigned taking into consideration the impacts and challenges posed by COVID-19, with significant impacts particularly from 1st to early part of 2nd quarter of 2020. Since activities requiring field visits were mainly cancelled, most activities were undertaken virtually, and reinforced by stronger local support in the countries.

UNDP Spot Check

In line with GEF/UNDP administrative and financial requirements and to ensure that quality project management standards are met, the ATSEA-2 Project underwent a spot check in December 2020 by UNDP-selected external international

auditor Samman and Co Public Accountant, a firm based in Jordan. The spot check covered the period of Q4 2019 and Q1 - Q2 2020. Due to the global pandemic situation, the spot check was conducted virtually. Overall, the team found no findings or observations on the ATSEA-2 Project financial component, while a low risk finding on administrative aspect related to staff attendance list and stamping of "Paid" to all supporting documents for payments were clarified, to which the Project Management has responded, and necessary actions confirmed to be undertaken and to be reported in the next spot check. The team also looked into the recommendations from the Micro assessment undertaken prior to Project initiation in 2018, and noted that all recommendations have already been resolved.

ATSEA-2 will continue to strive to deliver good project results, and ensure continuing improvement in performance both at the technical and financial levels.



MEMBERS OF THE RSC AND ATSEA-2 TEAM



The Regional Steering Committee (RSC) currently serves as the interim Regional Coordination Committee (RCC) of the ATS region. It is the ATSEA-2 Project's ultimate decision-making and guidance body responsible for the oversight of the project's implementation, including review and assessment of progress/performance. The RSC also acts as a vehicle in facilitating local to international networking and knowledge sharing.

Regional Steering Committee Members:

- Indonesia: Ministry of Marine Affairs and Fisheries (MMAF)
- Timor-Leste: Ministry of Agriculture and Fisheries (MAF)
- Papua New Guinea: National Fisheries Authority (NFA)
- Australia: Department of Agriculture, Water, and Environment (DAWE)
- UNDP
- PEMSEA Resource Facility (PRF)
- Regional Project Management Unit (RPMU)

The **Regional Project Management Unit (RPMU)** currently serves as the interim ATS Secretariat for the RSC. The RPMU office is hosted by the Government of Indonesia and is situated in Bali. The RPMU oversees the day-to-day coordination and management of all aspects of the project, as well as collaboration with RSC members and various partners and collaborators. The RPMU is composed of both local and international staff.



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Project M&E Specialist



Deti Triani
Marine Technical Assistant



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Ferdyani Atikaputri
RPMU Project Assistant



Lyris Lyssens
Communication & Knowledge Management Specialist

Implementation of activities in project beneficiary countries (Indonesia, Papua New Guinea, and Timor-Leste) are coordinated through the **National Coordination Units (NCUs)**. NCUs in Indonesia and Timor-Leste have been operationalized since 2020, while NCU in PNG is targeted to be established in 2021. Australia, on the other hand, is not a beneficiary country but has a designated National Coordinator or representative at the RSC.



Gerson Alves
National Project Coordinator



Almerindo Oliverira Da Silva
Field Coordinator



Ines Da Costa Pereira
Admin/Finance Associate



Dwi Ariyoga Gautama
National Project Coordinator



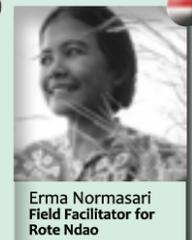
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Field Facilitator for Rote Ndao



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KEY ACTIVITIES TO WATCH OUT FOR IN 2021

The ATSEA-2 Project has lined up a number of exciting activities for 2021 at the regional, national

and local levels. Watch out for and be part of these major activities:



Capacity & Awareness Building Activities

REGIONAL:

- Stakeholders Partnership Forum Workshop
- Climate Change Workshop
- Training of Trainer on EAFM
- MCS Training with RPOA-IUU Secretariat
- Workshop on Marine Pollution
- Exchange Trip/Workshop on Oil Spill Preparedness and Response
- Workshop on MPA Network Design and Marine Turtle Action Plan

TIMOR-LESTE:

- Train the Trainer Workshop for Government Officials
- Training on Community-Based Surveillance in Support of Combatting IUU Fishing
- Training on Oil Spill Preparedness and Response for South Coast Region
- Training on MPA Planning and Management in Klakuk and Nino Konis Santana MPA
- Awareness Campaign Activities on Marine Pollution in Barique and Manatuto

INDONESIA:

- EAFM Training for Stakeholders in Aru and Merauke
- Training and Awareness Activities on Sea Turtles and other endangered, threatened and protected (ETP) species
- Capacity and Awareness Building Activities on Marine Pollution in Rote Ndao and Timor Sea
- Training on Responsible Seaweed Aquaculture
- Business and Financial Management Training and Empowerment of Women-Run Home-Based Small Business Activities
- Training of Community Members in Ecosystem Restoration and Related Livelihoods in Rote Ndao



Consultative/Collaborative Discussions

REGIONAL:

- Consultation on ATS Governance Mechanism
- First SPF Meeting
- Working Group on the Development of ATS SAP Monitoring Mechanism

INDONESIA:

- Public Consultative Meetings on the Development of Zonation for MPA in Kolepom

TIMOR-LESTE:

- Consultations and Implementation of ICM Pilot Activity in PA Barique

PAPUA NEW GUINEA:

- Focus Group Discussion on the Development of Artisanal Fisheries Management Plan for South Fly District
- Stakeholder Consultations on Conduct of Baseline Studies and Assessments (Institutional, Policies and Regulations on Fisheries and Biodiversity, Capacity Needs and Priorities, and Biophysical and Socio-Economic Characteristics of PNG ATS Ecosystems)



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