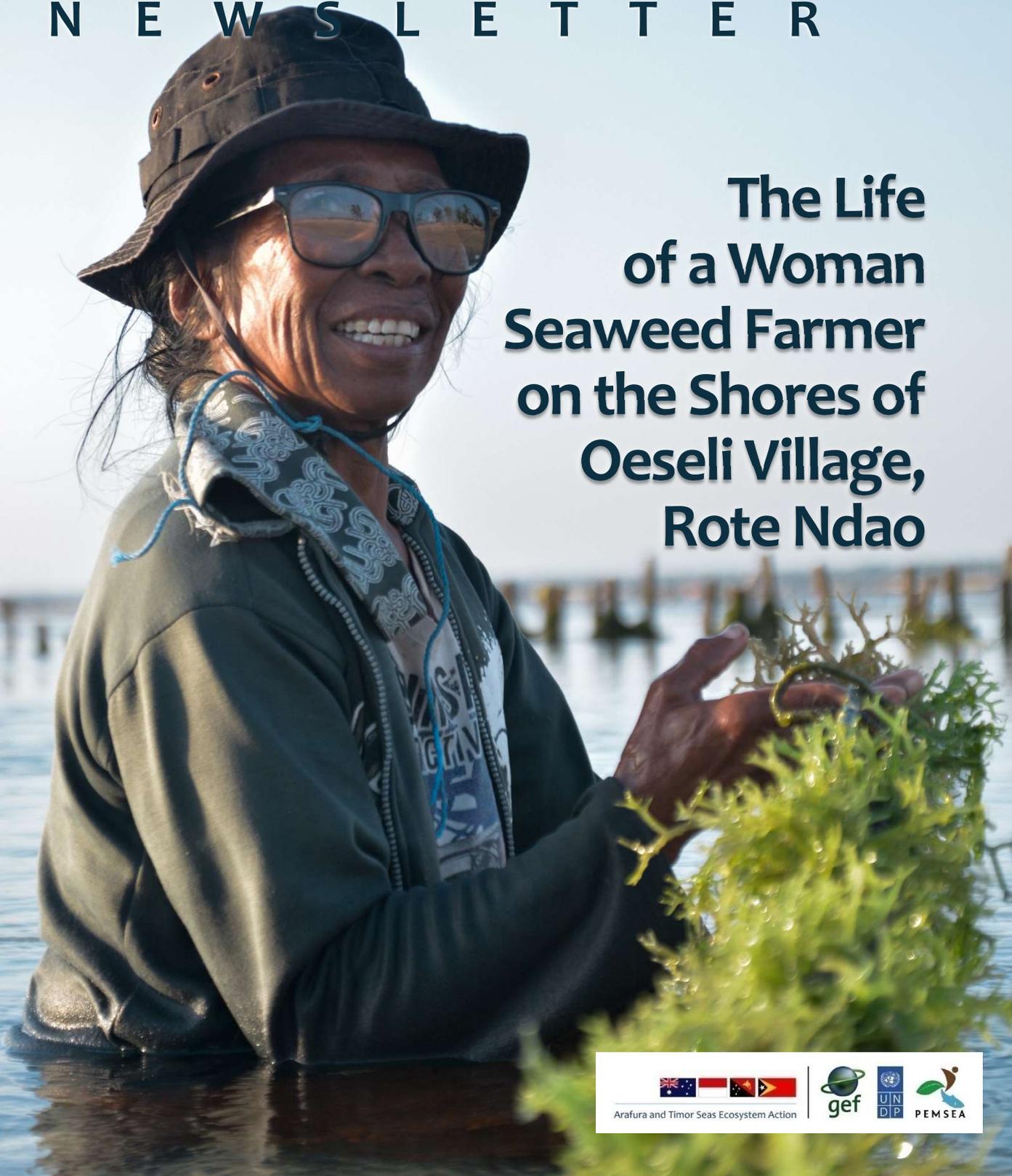


# ATSEA

N E W S L E T T E R

**The Life  
of a Woman  
Seaweed Farmer  
on the Shores of  
Oeseli Village,  
Rote Ndao**



Best wishes for  
a Merry Christmas and  
a prosperous New Year!



Photo by: Christopher Alexander

Photo by: Chris Alexander for ATSEA-2 Programme



# WELCOME

Merry Christmas and Happy New Year!

Welcome to the fourth edition of the ATSEA Newsletter in 2021.

In this issue of our newsletter, we look at inspiring women working for conservation and sustainable marine resources management as the key role as a change enabler in the region. Our feature article highlights the life of a women seaweed farmer on the shores of Oeseli Village, in Rote Ndao, Indonesia.

Some exciting news also come from Indonesia, Timor-Leste and Papua New Guinea, where a new coordination forum established to tackle violations of fisheries in Papua, fishing communities' efforts to improving catches and seafood processing skills in Timor-Leste, and action taken to improve stakeholder engagement in Papua New Guinea.

We also deliver highlights from the regional spanning the last three months of programme activities; from the third RSC meeting, EAS Congress collabs, to the ATSEA's animation contest.

We hope you enjoy reading this fourth edition of the ATSEA Newsletter as we embark on a new prosperous new year.

Take care and stay well,  
The ATSEA-2 Team

## REGIONAL

- 1 Third RSC Meeting: ATSEA-2 Looks Ahead to 2022
- 2 Making Asia-Pacific Resilient to Climate Change  
ACB, PEMSEA Hold a Virtual Session on
- 3 Transboundary Cooperation for Marine Protected Areas (MPAs) in the ASEAN Region  
Climate Change Adaptation Measures to Benefit
- 5 Coastal Communities in East Asia, Arafura and Timor Seas
- 7 Replicable Models on Marine Plastic Pollution Monitoring
- 9 Coaching New Trainers for Sustainable Red Snapper Fisheries
- 11 ATSEA-2 Animation Contest – Winners Announced!

## INDONESIA

- 13 The Life of a Woman Seaweed Farmer on the Shores of Oeseli Village, Rote Ndao
- 17 New Coordination Forum Established to Tackle Violations of Fisheries Law in Papua
- 19 Chris' article on IUU Fishing in Merauke
- 21 Overcoming Gender Disparities in the Marine and Fisheries Sector, Aru District
- 25 Gender and Inclusion Survey Reveals Impact of Pandemic on Women, Informs Effective Response

## TIMOR-LESTE

- 27 Improving Seafood Processing Skills for Women in Manufahi
- 29 Improving Catches and Reducing Post-Harvest Losses for Fishing Communities in Lautem
- 31 Tree Planting to Tackle the Climate Crisis in Timor-Leste

## PAPUA NEW GUINEA

- 33 Taking Action to Improve Stakeholder Engagement in Papua New Guinea

## OBITUARY

- 35 In Memoriam: Dr. Wijopriyono

## 2022 KEY TARGETS

- 36 ATSEA-2 Key Targets for 2022

### Talk to us

✉ 3rd Floor Annex Building of Tuna Research Center, MMAF  
Jl. Mertasari No. 140, Sidakarya,  
Denpasar 80224 Bali, Indonesia

P: +62 361 4484 147  
E: infoatsea2@pemsea.org  
W: atsea-program.com





## Third RSC Meeting: ATSEA-2 Looks Ahead to 2022

Hosted by the Government of Australia through the Department of Agriculture, Water and the Environment (DAWE), the Third Regional Steering Committee (RSC) meeting of the GEF/UNDP/PEMSEA Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) took place on 6 and 7 December 2021. Using a hybrid format (both offline and online via Zoom), the event reviewed 2021 target implementation, while also presenting the 2022 Work Plan and budget for regional and national components.

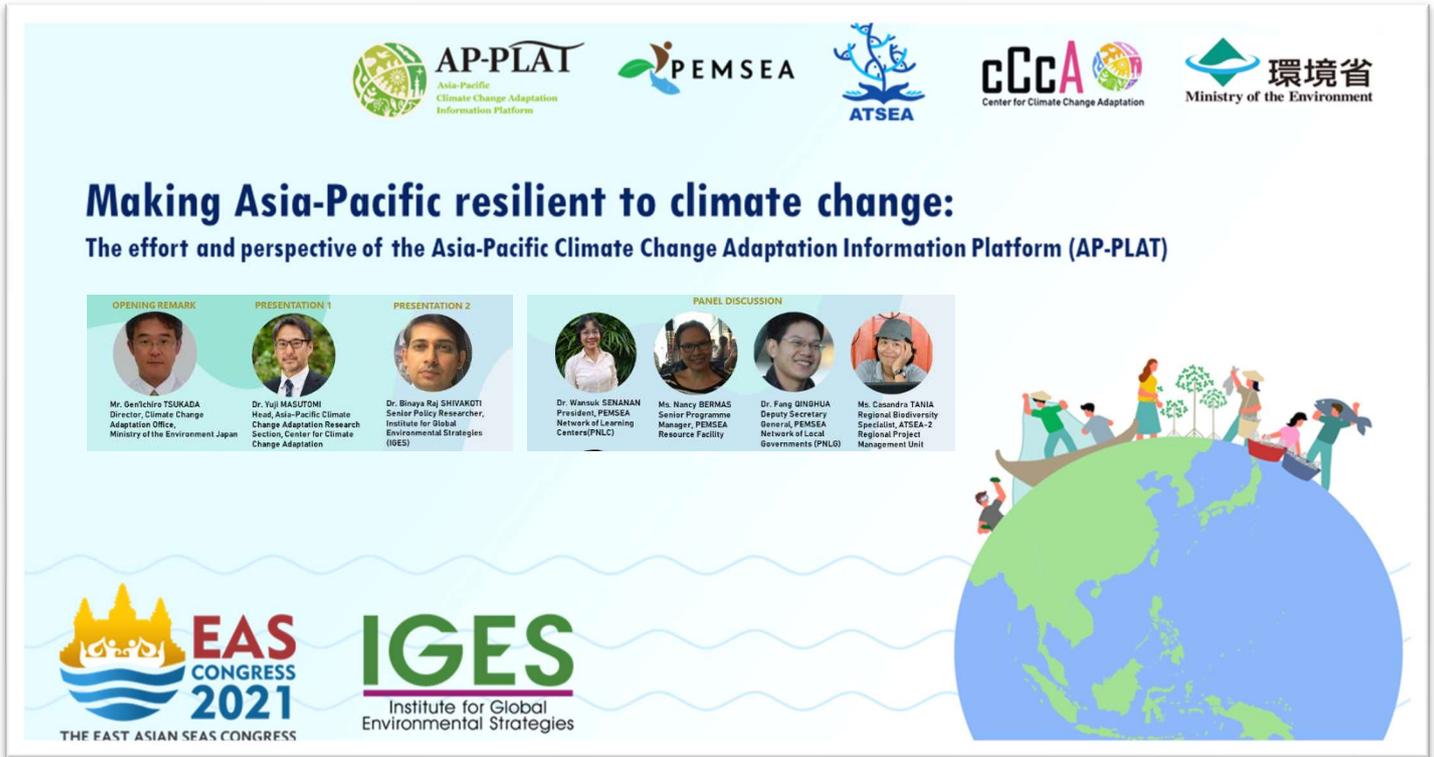
On behalf of the Government of Australia, Ms. Mahani Taylor, Assistant Secretary of International Strategy and Engagement Branch and a Representative of DAWE Australia, expressed her gratitude to the ATSEA-2 Programme team for delivering a number of key project outputs, in spite of challenges posed by the pandemic. Apart from reviewing the project progress and key outputs, she highlighted the importance of the RSC in identifying emerging opportunities and possible areas of synergies and various partnerships, as well as providing guidance to address challenges and ensure the project is progressing according to its objectives and goals.

In her opening remarks, Dr. Sophie Kemkhadze, Deputy Resident Representative of UNDP Indonesia underscored the opportunity for members to reflect on ATSEA-2 Programme progress and to agree on the plans and commitments for the coming year. Dr. Kemkhadze also added that the full agenda of the third RSC was actually a reflection of the many works delivered by the ATSEA-2

Programme and thanked the ATSEA-2 team for their hard work in achieving progress via the Programme.

Looking back on the year 2021, the ATSEA-2 Programme has reason to be excited for the New Year. Some of the key decisions taken at the meeting include the approval of the proposed budget revision for 2021 and the proposed 2022 Annual Work Plan and Budget for the regional component; acknowledge the completion of the project's Theory of Change (TOC); endorsement of the proposed roadmap for completing the Regional Governance Mechanism (RGM); endorsement of the proposed next steps for completing the financial landscape assessment report up to the end of January 2022; and endorsement of the MPA Network Design and draft Regional Plan of Action for the Protection of Marine Turtles by Australia, Papua New Guinea and Timor-Leste. Further discussions will also be conducted in Indonesia to facilitate a more detailed review in early 2022 and endorsement of the documents.

The meeting was attended by a total of 68 representatives from the four member countries – Australia, Indonesia, Papua New Guinea, and Timor-Leste. Representatives from the United Nations Development Program (UNDP) Country Offices of Indonesia, Timor-Leste, Papua New Guinea and the UNDP Bangkok Regional Hub also participated on behalf of the Global Environment Facility (GEF) and the UNDP. Representatives from PEMSEA were present as the executing agency of the Programme's regional and Papua New Guinea components. Dr. Andrew Chek, who is Director of the Pacific Engagement Section of DAWE Australia; and Dr. Sophie Kemkhadze, Deputy Resident Representative of UNDP Indonesia, served as Meeting Chair and Co-Chair, respectively.



# Making Asia-Pacific Resilient to Climate Change

The risk of extreme climate-related disasters is expected to increase further due to climate change. Severe impacts of climate change on nature and society have already been observed globally and locally. Thus, taking steps toward adaptation is crucial to mitigate and avoid such impacts.

The Asia-Pacific Climate Change Adaptation Information Platform (AP-PLAT) welcomes potential collaboration for improvements suggested by PEMSEA, including implementing pilot projects among the PEMSEA network to link scientific information to planning, thereby managing climate change adaptation, disaster response and preparedness at the local level. The first step is to identify potential areas of collaborative action, by understanding the working areas and frameworks of both AP-PLAT and PEMSEA. This can help to avoid overlap or duplication. A co-learning and co-developing approach are helpful to tailor or fine-tune capacity development programmes to address the real needs of local communities.

On 25 October 2021, the Institute for Global Environmental Strategies (IGES), in collaboration with the Ministry of the Environment Japan (MOEJ), the Centre for Climate Change Adaptation (CCCA), Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Programme

and PEMSEA hosted a session titled ‘Making Asia-Pacific Resilient to Climate Change: The Effort and Perspective of the Asia-Pacific Climate Change Adaptation Information Platform (AP-PLAT)’, as part of the East Asia Sea Congress 2021. Casandra Tania, Regional Biodiversity Specialist at the ATSEA-2 Programme, was one of the speakers to present the climate change vulnerability assessment in the Arafura and Timor Seas (ATS) region.

This event highlighted the latest scientific findings and capacity-building content provided by AP-PLAT, which will be useful for making the region more resilient to climate change – especially in the Asian basins and coastal areas covered by PEMSEA. It also addressed how synergy can be achieved through the AP-PLAT and PEMSEA partnership, as well as the role of IGES as the PEMSEA Regional Centre of Excellence (RCoE) in Climate Change Adaptation and Disaster Risk Reduction and the promotion of capacity-building activities in AP-PLAT.

The panels underscored a significant gap in international capacity development efforts and the needs of local stakeholders, including local communities. Local stakeholders have unique priorities and are situated on a different stage; in other words, there is no one-size-fits-all solution – tailor-made data sets, knowledge and tools should be accessible. Future capacity building needs to consider not only the transfer of knowledge and tools, but also the integration of the entire solution package, including financial access for local communities on the frontline of climate change impacts.



## MANAGING NETWORKS AND TRANSBOUNDARY COOPERATION ON MARINE PROTECTED AREAS (MPAS) IN THE ASEAN REGION

21 October 2021, 9:00 AM - 12:00 PM (GMT+8)  
Zoom Webinar



Watch the [Webinar on Managing Networks and Transboundary Cooperation on Marine Protected Areas \(MPAs\) in the ASEAN Region](#) on PEMSEA YouTube channel.

### ACB, PEMSEA Hold Virtual Session on Transboundary Cooperation for Marine Protected Areas in the ASEAN Region

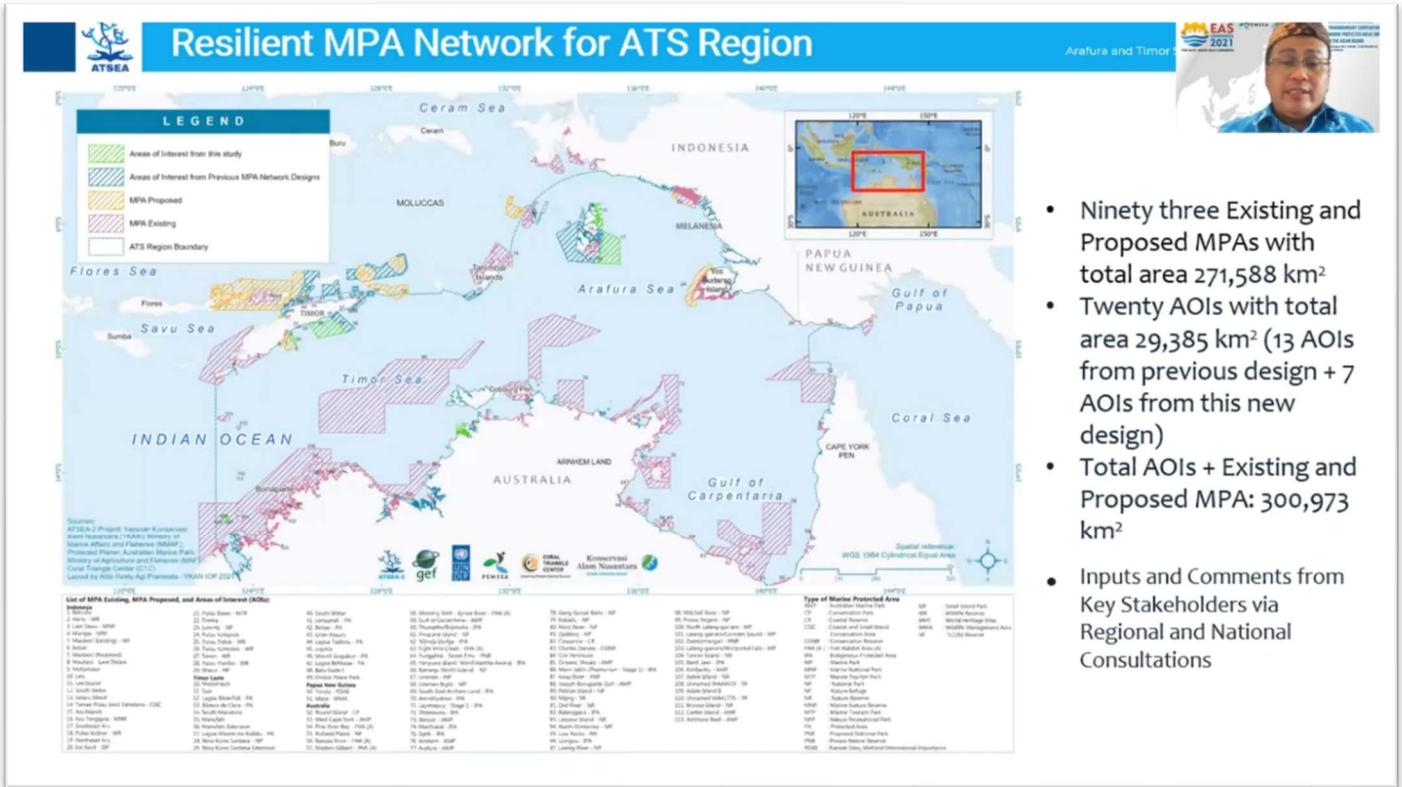
MANILA, PHILIPPINES – The ASEAN Centre for Biodiversity (ACB) and Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) resource facility jointly organised a virtual session on 21 October 2021, from 9:00 a.m. to 12:00 p.m. to discuss the status and progress of conservation and transboundary management of coastal and marine biodiversity in the region. Entitled “Managing Networks and Transboundary Cooperation on Marine Protected Areas (MPAs) in the ASEAN Region”, the session was one of the pre-congress events of the 2021 East Asian Seas (EAS) Congress, which was subsequently hosted by the Royal Government of Cambodia from 1-2 December 2021.

Participants included the national focal points of the ASEAN Working Group on Nature

Conservation and Biodiversity (AWGNCB) and ASEAN Working Group on Coastal and Marine Environment (AWGCME), as well as local, national, regional and international stakeholders and development partners working on coastal and marine conservation.

Speakers included Dr. Theresa Mundita Lim, ACB Executive Director; Dr. Ca Vu Thanh, PEMSEA Executive Committee Member; Dr. Leah Bunce Karrer, GEF Secretariat Senior Project Manager; Mr. Sapon Thongdee, AWGCME Chairperson and Director-General of Thailand’s Ministry of Natural Resources and Environment; Dr. Jose Padilla, United Nations Development Programme (UNDP) Regional Technical Advisor; Ms. Clarissa Arida, ACB Programme Development and Implementation Director; and Dr. Handoko Adi Susanto, UNDP/GEF Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Regional Project Manager.

The session underscored the various initiatives and collaborative actions on sustaining healthy coastal and marine ecosystems through transboundary cooperation. Among the topics discussed were effective management practices, capacity development tools, communication, education and public awareness, and possible collaborations among the ASEAN Member States.



- Ninety three Existing and Proposed MPAs with total area 271,588 km<sup>2</sup>
- Twenty AOIs with total area 29,385 km<sup>2</sup> (13 AOIs from previous design + 7 AOIs from this new design)
- Total AOIs + Existing and Proposed MPA: 300,973 km<sup>2</sup>
- Inputs and Comments from Key Stakeholders via Regional and National Consultations

Dr. Handoko Adi Susanto from ATSEA-2 Programme presenting MPA Network Design for the ATS Region during the Webinar on Managing Networks and Transboundary Cooperation on Marine Protected Areas (MPAs) in the ASEAN Region.

### Virtual Poster Presentations

Among the unique features of the session were the virtual posters presented by the proponents of various projects involved in transboundary resource management. The posters provided insights into implementing cross-border cooperation efforts and how threats concerning the management effectiveness of these MPAs have been addressed. Additionally, the virtual posters showed approaches, tools and technologies being implemented in their respective projects.

Dr. Arvin Diesmos, Director of the ACB's Biodiversity Information Management (BIM) Unit, presented the ASEAN Biodiversity Dashboard. Presentations from ASEAN Member States on transboundary park initiatives featured virtual posters from selected ASEAN Heritage Parks (AHP), and ASEAN-Norwegian Cooperation Project on Local Capacity Building for Reducing Plastic Pollution in the ASEAN Region (ASEANO).

Original article by [PEMSEA](https://www.pemsea.org/).



Visual presentation on Managing Networks and Transboundary Cooperation on Marine Protected Areas (MPAs) in the ASEAN Region



## Climate Change Adaptation Measures to Benefit Coastal Communities in East Asia, Arafura and Timor Seas

Countries in the East Asian Seas (EAS) region and its neighbouring Pacific countries are highly vulnerable to rising sea levels, due to its low-lying communities and densely populated coastal cities. Additionally, the region also has the highest proportion of weather-related disaster displacement in the world. A recent climate change vulnerability assessment for the Arafura and Timor Seas (ATS) region has also identified hotspots (or highly vulnerable marine habitats) and species in the region.

In response, several Climate Change Adaptation (CCA) initiatives have emerged in the EAS and ATS regions. These include the implementation of climate-responsive integrated coastal management (ICM) and the application of a practical CCA decision-making guidance document for policy-makers and other stakeholders. Lessons learned and good practices generated from these efforts will be shared amongst the EAS and ATS networks through a virtual pre-2021 EAS Congress collab that will discuss best practices and enable their replication across other sites.

Entitled “Climate Change Adaptation for Coastal Communities: Learning from East Asia and Arafura and Timor Seas Regions,” the webinar was held on 25 October 2021 from 9:00 am to 11:30 am (GMT+8) and was organised by the GEF/UNDP/PEMSEA Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Programme. Co-organisers were the Partnerships in Environmental Management for the Seas of East Asia Resource Facility (PRF) and the Institute for Global Environmental Strategies (IGES) of Japan.

**Climate Change Adaptation for Coastal Communities:**  
LEARNING FROM EAST ASIA AND ARAFURA AND TIMOR SEAS REGIONS

25 October 2021, 9:00 - 11:30 AM (GMT+8) • Zoom Webinar

**S P E A K E R S**

- Ms. Aimee Gonzales**  
Executive Director  
PEMSEA Resource Facility  
**OPENING REMARKS**
- Dr. Johanna Johnson**  
Director  
C20 Consulting
- Ms. Cristine Ingrid Narcise**  
Policy and Result-Based  
Management Specialist  
ATSEA-2
- Ms. Nisakorn Wiwekwin**  
Integrated Coastal Management  
Program Coordinator  
Saensuk Municipal Office,  
Saensuk Municipality, Chonburi, Thailand
- Dr. Handoko Adi Susanto**  
Regional Project Manager  
Arafura and Timor Seas Ecosystem  
Action Phase II (ATSEA-2)  
**CLOSING REMARKS**
- Dr. Brian Johnson**  
Deputy Director  
Adaptation Water Area,  
IGES
- Mr. Ikbal Alexander**  
Director  
Kertabumi Recycling Center
- Dr. Prabhakar Sivapuram**  
Research Manager  
Adaptation Water Area, IGES  
**MODERATOR**
- Ms. Nagisa Shiiba**  
Policy Researcher  
Adaptation and Water Area, IGES  
**MASTER OF CEREMONIES**

Watch the [Webinar on Climate Change Adaptation Measures to Benefit Coastal Communities in East Asia, Arafura and Timor Seas](#) on PEMSEA YouTube channel.

**CLIMATE CHANGE ADAPTATION FOR COASTAL COMMUNITIES:**  
LEARNING FROM EAST ASIA AND ARAFURA AND TIMOR SEAS REGION

**Key Message**

ICM has evolved into a comprehensive system for sustainable management and use of coastal and marine areas

- Providing a systematic approach to planning, developing, implementing, monitoring and evaluating programs that address local issues and priorities in an integrated manner, including those related to climate change

Ms. Cristine Ingrid Narcise from ATSEA-2 Programme, presenting ICM during the Webinar on Climate Change Adaptation Measures to Benefit Coastal Communities in East Asia, Arafura and Timor Seas

The event had several aims, namely (1) to raise awareness and develop a better understanding of climate change impacts on coastal communities in the EAS and ATS regions; (2) to share climate change vulnerability assessment results and introduce a decision-making guide developed for the ATS region; (3) to showcase best practices and share lessons learned from the EAS and ATS regions in developing and/or implementing local climate change adaptation strategies; and (4) to contribute to enriching discussions and synergise CCA efforts in support of the EAS region’s Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), the ATS region’s Strategic Action Programme (SAP), as well as the wider objectives of the United Nations Framework Convention on Climate Change (UNFCCC).

Featured key speakers included:

- Dr. Brian Johnson, Deputy Director, IGES
- Dr. Johanna Johnson, Director, C20 Consulting
- Ms. Cristine Ingrid Narcise, Policy and Result-Based Management Specialist, ATSEA-2
- Ms. Nisakorn Wiwekwin, ICM Program Coordinator, Saensuk Municipal Office, Chonburi, Thailand
- Mr. Ikbal Alexander, Director, Kertabumi Recycling Center

The event was open to the general public and attended by climate change scientists and practitioners, local decision-makers and coastal community members from the EAS and ATS regions.

Original article by [PEMSEA](#).



Watch the [Webinar on Replicable Models on Marine Plastic Pollution Monitoring](#) on PEMSEA YouTube channel.

# Replicable Models on Marine Plastic Pollution Monitoring

On 9 November 2021, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) held a webinar on replicable models on marine plastic pollution monitoring. Taking place from 2 p.m. to 5 p.m. (GMT+7) via Zoom, the webinar was open to all interested parties.

“This event aims to highlight all lessons learned from the ASEAN-Norwegian Cooperation Project on Local Capacity Building for Reducing Plastic Pollution in the ASEAN Region (ASEANO) and other efforts in Asia to reduce the flow of plastic waste into the ocean,” said PEMSEA Executive Director Aimee Gonzales.

The event was one of several pre-Congress events, called *Collabs*, which are technical and public-orientated discussions, workshops and training sessions organised by PEMSEA partners, networks and other organizations. PEMSEA’s Collabs

culminated in the East Asian Seas (EAS) Congress, which took place on 1 and 2 December 2021.

Speakers included Deputy Secretary-General of the Association of Southeast Asian Nations for ASEAN Socio-Cultural Community Mr. Ekkaphab Phanthavong; Ambassador of Norway to ASEAN, H.E. Kjell Tormod Pettersen; Norwegian Institute for Water Research (NIVA) Section for Catchment Biogeochemistry Researcher, Dr. Hans Fredrik Veiteberg Braaten; Indonesian Society of Limnology Chairman, Dr. Hidayat S.Kom., M.Sc.; OceansAsia Research Director, Dr. Teale Phelps Bondaroff; Our Sea of East Asia Network Founder and President, Dr. Sunwook Hong; De La Salle University – Dasmariñas Social Sciences Department Chair, Dr. Edwin Lineses; NIVA Researcher, Dr. Rachel Hurley; UNDP/GEF Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) National Project Coordinator for Timor-Leste, Mr. Almerindo Olivera da Silva; WWF Extended Producer Responsibility and Global Plastics Policy Coordinator, Mr. Huy Ho; and Cavite Provincial Government Environment and Natural Resources Officer, Ms. Anabelle Cayabyab. The event was moderated by Arisman, Executive Director of the Centre for Southeast Asian Studies (CSEAS) Indonesia.

Almerindo Olivera Da Silva, National Project Coordinator for Timor-Leste within the UNDP/GEF Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Programme, highlighted the marine debris issues in the Arafura and Timor Seas (ATS) region,

**REPLICABLE MODELS ON MARINE PLASTIC POLLUTION MONITORING**

From regional marine and land-based pollution (Shin, 2021)

- Region-wide concerns:
  - Oil spill
  - **Marine litter (including plastics and derelict fishing gears)**

- Localised pollution concerns:
  - Nutrients (animal manures and sewerage)
  - Sedimentation from local mining activities
  - Toxic substances from agricultural practices

Presentation by Almerindo da Silva, National Project Coordinator for Timor-Leste within the UNDP/GEF Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Project

notably plastics and other derelict fishing gear. A study in East Nusa Tenggara found most residents saw sea-based pollution as more serious than land-based pollution, and were also aware of the impacts of pollution had on marine life. In surveys in Timor-Leste, plastic and other debris from in-shore and off-shore fisheries were the most common sorts of waste noted by respondents.

Going forward, the ATSEA-2 Programme aims to initiate a citizen science approach similar to that which is in well-established use by OSEAN. Within the ATSEA-2 region, the need to tackle plastic pollution at source has been deemed critical. Better integration of integrated coastal management (ICM) plans into government policies is needed. Closing up this presentation was a short public communications video on the impacts of plastic pollution.

Funded by the Norwegian Development Programme to Combat Marine Litter and Microplastics, ASEANO is led by NIVA and CSEAS Indonesia, in close collaboration with the PEMSEA Resource Facility and ASEAN Secretariat and under the purview of the endorsing ASEAN sectoral body, the ASEAN Working Group on Coastal and Marine Environment (AWGCME).

The ASEANO project aims to develop a set of sound and sustainable measures to reduce the impacts of plastic pollution and their implications for socioeconomic development and the environment,

focusing on the city or municipal level, with West Java in Indonesia and Cavite in the Philippines as project sites.

A novel catchment-based model will be developed to quantify the release, transport and ultimate fate of plastic pollution, plus their future trends under different management options. This will result in the development of targeted and cost-efficient measures for the reduction of plastic waste. The project will also work on the monitoring and evaluation aspect of plastic pollution, particularly the development of a catalogue of monitoring methods, plus capacity building for allies.

The results of the project will then be synthesised into sector-specific roadmaps on plastics management for potential extrapolation to the ASEAN region.

Original article by [dailycuardian.com](http://dailycuardian.com).



Opening remarks by Dr. Handoko Adi Susanto, Regional Project Manager of ATSEA-2. Image credit: Vivekananda Gitandjali/ATSEA-2 Programme

# Coaching New Trainers for Sustainable Red Snapper Fisheries

Various species of snappers are increasingly coming under threat in the Arafura Timor Seas (ATS) region, due to overfishing of individuals that are yet to reach maturity. In response to this problem, and building upon a previous round of training and group discussions, the ATSEA-2 Programme invited 18 fisheries managers from Indonesia, Timor-Leste and Papua New Guinea to attend an Ecosystem Approach to Fisheries Management (EAFM) Training of Trainers (ToT) session.

The event was held from 12-14 October 2021, in collaboration with Melbourne-based Fishwell Consulting and Bali-based Starling Resources. This hybrid learning provided simultaneous live instruction from Bali, Indonesia; Dili, Timor-Leste; and Port Moresby, Papua New Guinea. The training was led by an accredited Essential-

EAFM trainer, Dr. Mohammad Mukhlis Kamal, M.Sc., who has been the Principal National EAFM trainer of EAFM ToT for Indonesia's Ministry of Marine Affairs and Fisheries (MMAF) since November 2020.

A total of 18 participants were selected to attend the EAFM ToT based on their test scores, attendance records, commitment and performance during the previous E-EAFM training conducted in June 2021. These participants were made up of representatives from the MMAF, Nusa Cendana University, Pattimura University, WWF-Indonesia, Nino Konis Santana National Park, the Ministry of Agriculture and Fisheries of Timor-Leste, Conservation and Environment Protection Authority of Papua New Guinea, and the University of Papua New Guinea.

The three-day ToT covered both theory and practical aspects of EAFM, adapted to meet the specific needs of ATS red snapper fisheries, while also drawing on the first-hand experience and expertise of participants. Throughout the ToT, participants explored how to successfully manage training sessions – from understanding the audience, to planning and delivering the training sessions effectively.

At the beginning of the training, participants reflected on their strengths and weaknesses as

trainers, in order to make themselves more aware of what needed to be strengthened and improved. Then, they developed their knowledge about EAFM via two mini-sessions, in which they presented an EAFM training topic in front of their peers and received feedback on their performance.

Participants also conducted some problem-solving roleplays to simulate real situations in the field. Training materials also focused on becoming an EAFM agent, which involved leveraging their circle of influence and concern.

"This is a great opportunity for me to improve my capacity as an EAFM trainer," said Saraswati Adityarini from WWF-Indonesia, "I look forward to implementing the knowledge I learnt and making significant changes to improve the sustainability of the fisheries sector and local people's livelihoods," she added. Fidel de Castro Gutierrez, from the Ministry of Agriculture and Fisheries of Timor-Leste agrees about the importance of such activities. "This training is very important to us as a young country, striving to sustainably manage our marine resources," he said.

Through training and group discussions, the ATSEA-2 Programme aims to develop a comprehensive regional EAFM plan for red snapper fisheries in the ATS region, making them as participatory as possible by involving relevant key stakeholders. Through the implementation and adoption of comprehensive and integrated ecosystem-based approaches to natural resource management and conservation at the national and regional levels, ATSEA-2 hopes to improve the management of fisheries and coastal resources for livelihoods, nutrition and ecosystem health.

*(Cassandra Tania)*



Dr. Mohammad Mukhlis Kamal, M.Sc., who is the Principal National EAFM trainer of EAFM ToT for Indonesia's Ministry of Marine Affairs and Fisheries (MMAF), giving feedback following a participant's presentation.



Reny Puspasari, a trainee from Research Centre for Fisheries of MMAF, presenting the EAFM plan for red snapper fisheries in Indonesia.



EAFM ToT participants from Papua New Guinea with their certificates



EAFM ToT participants from Timor-Leste with their certificates



## ATSEA-2 Animation Contest – Winners Announced!

Kina is a little girl with a magnetic attraction to the sea. All her life, the ocean and its creatures have been a source of endless fascination, providing her with sanctuary and solace. But when Kina realises that the marine environment is threatened by pollution, she decides to take matters into her own hands, calling on others to join her cause.

Combining beautiful imagery with a powerful message, “Kina the Ocean Girl” took home first place in the ATSEA-2 Animation Contest, winning its creators – Aisha Alsakina, Firmansyah CU, Megan Nandia and Puguh Rohmanu – the top prize of US\$1,000 for their stunning short film. The story encourages viewers to think about the relationship between humans and marine ecosystems in the Arafura and Timor Seas (ATS) region.

In September 2011, the GEF/UNDP/PEMSEA ATSEA-2 Programme called on people from anywhere in the world to submit animated videos that convey the urgency of protecting the ocean, under the theme: “Uniting the Arafura and Timor Seas”. Anyone over the age of 18 was eligible to enter an animated video to the #ATSEACHallenge, while the online judging process involved two specialised panels and a general jury.

“I hope through this contest, we can make an impact,” explained Ronny Gani, one of the



The character Kina in the “[Kina the Ocean Girl](#)”, which conveyed a strong message of saving the ocean from pollution.

expert judges and a senior animator who has worked on film and TV projects such Space Jam: A New Legacy, The Mandalorian, Avengers: End Game, Ready Player One, Ant-Man and Pacific Rim. “Although we are artists and non-environmental activists, we can still do our part to contribute and deliver the message to save the ocean,” he added.

Other judges included notable experts from the world of visual storytelling, such as Indra AD, the creator of the webtoon series Dracko Diary and maker of the *Amsterdamned* music video for Yellow Claw, who was also one of the key animators for the *Battle of Surabaya* movie. He was joined on the panel by Astiti Sukatrilaksana, a gender champion and the Head of Human Resources at UNDP Indonesia. “Each of us can contribute to raise the awareness of protecting the ocean among our community,” explained Astiti, addressing the participants, “and using your talent to help people to understand the importance of saving our ocean,” she added.

Together, this panel of expert judges awarded second place and a prize of US\$500 to Elanda Fikri for his video “Marine Life is in Our Hands”, while third place and a prize of US\$250 was given to Jessica Clara for her video “How to Reduce Marine Pollution”. Honourable Mention was also awarded to Indira NT and Jean M, for their video “Small Impacts”.

The ATS region is unique in its ecology, geography and socio-political structure. Home to a vast array of natural wonders, this area provides the peoples of many nations with essential resources, while also stocking the world’s oceans with biodiversity. With the participation of dozens of amazing animators, the ATSEA-2 Animation Contest helped share these wonders with a wider audience, telling conservation stories through fresh media and encouraging the public to make a difference in their lives by showcasing creativity and highlighting the intrinsic links between the ocean and human lives.

(Dwi Aryo T)

This article was published on the [UNDP Indonesia website](#)



“Marine Life is in Our Hands” by Elanda Fikri, which won second place in the ATSEA Animation Contest.



“How to Reduce Marine Pollution” by Jessica Clara, highlighting people’s contribution to protecting the ocean.



“Small Impacts” by Indira NT and Jean M, which beautifully demonstrated how small actions can add up to big impacts.



Watch the [online judging](#) of ATSEA Animation Contest on YouTube.



***“In the past we could live only on seaweed. We could provide schooling for the children until they graduated and finding food to eat was no problem; now it is difficult.”***

***- Mama Metri***



## The Life of a Woman Seaweed Farmer on the Shores of Oeseli Village, Rote Ndao

The sun was just about to emerge from its slumber when the women from Oeseli Village, in the Southwest Rote District of East Nusa Tenggara set off towards their seaweed plantations. From a distance, you could see them carrying a roll of rope, a net or a knife, used as a tool for tidying and cutting seaweed. The beach is located about 1-2 km from their houses, along a steep and rocky road. If their family members can't give them a lift, they will usually walk. However, that morning Mama Metri arrived with the rising sun and was escorted by her son, Mengki, on a motorbike.

The water had already receded by the time Mama Metri arrived. As far as the eye could see, there was a stretch of rope and buoys floating. Mama Metri rushed to the fields, afraid that the water would soon rise again. At that time, even though it was in retreat, the water was still as high as an adult's chest. The position of the field where Mama Metri was located was right in the middle of someone else's buoy stretch, so she had to walk further to the centre. Arriving there, she immediately took out her tools to tidy up the now-almost-detached seaweed, while also harvesting some of it. In front of her, other



women were joking while harvesting seaweed, or picking up broken seaweed that was carried by the waves to the shore to dry.

The sun continued to rise, and the bucket Mama Metri had brought steadily began to fill with seaweed. She decided to immediately take her harvest to the beach, pulling the bucket along using a rope. Arriving at the high waterline, with the help of Mengki, Mama Metri began to arrange the seaweed on wooden beds for drying in the sun.

"The seaweed is now *su No'e* (meaning 'mushy')," explains Mam Metri. "It's not like it used to be, when you could get 2 tonnes of seaweed at once," she said, wiping away the saltwater that dripped down her face. "It's because there is a lot of mud that settles in the seaweed, which means the seaweed can't grow anymore." According to her, in the early 2000s, women used to plant seaweed out at sea using canoes. However, an oil spill incident made some locations unsuitable for planting. This is because there is too much mud and black water that stops seaweed from growing. Since then, farmers have moved their fields to less polluted coastal areas. However, in these new locations



they have to wait for the tide to recede before they can plant their seaweed.

The flagship seaweed species for Rote Ndao farmers is *Eucheuma cottonii*, which can grow in intertidal and subtidal areas. This species is highly suited to planting in the sea conditions of Rote, because the temperature and tides are very reliable, which means drought is uncommon. Based on the results of a 2005 research project conducted by the Kupang branch of Bank Indonesia, before the oil spill tragedy the average production of seaweed from 48 villages spread across Rote Ndao Regency was around 5,086 tonnes. However, the oil spill was not the only problem. Now, seaweed farmers have to face

another threat: "I don't understand, from 2017 to 2021, storms have been coming more and more often and destroying my crops," says another local woman, named Mama Ice, when we met on another occasion.

Furthermore, the seaweed cultivation techniques used by Rote Ndao farmers are the floating raft technique and the long line technique, because these methods are relatively cheap and simple compared to other options. However, the floating and long line methods are especially vulnerable to waves and high winds, so when a storm hits, these ropes are easily broken. In October alone, Mama Ice's seaweed was racked by two storms that devastated her crop. "Fifteen ropes attached, only nine left. All broke up in the storm," she explains.

The best time for planting seaweed occurs from March to September, because during this season there are not so many rains and storms. The seaweed planting period for the export market is about 45 days, while the seedling process only takes 15 days. Later, before being sold, this seaweed will be dried in the sun for approximately two to three days. However, if the rainy season arrives the seaweed takes longer to dry. People often experience crop failure because seaweed is exposed to rain.

If this is the case, the seaweed becomes unfit for sale. "In the past we could live only on seaweed," said Mama Metri, while looking at the sea in the distance. "We could provide schooling for the children until they graduated, and finding food to eat was no problem; now it is difficult," she added.

Rote Ndao is one of the areas where marine pollution is the main threat, including oil, gas, ghost nets and other fishing activities. This reduces water quality and sedimentation, thus affecting the surrounding habitat and the community's economy.

In response, the ATSEA-2 Programme has conducted field surveys to identify core locations of marine pollution and areas of vulnerability to climate change. Going forward, the ATSEA-2 Programme, working through Integrated Coastal Management (ICM), will focus on ecosystem-based adaptation. Meanwhile, the flagship programmes that will be implemented include planning, adaptation to climate change, adaptation of alternative livelihoods and local coastal and marine conservation. Women will be included in every decision-making process, in relation to increasing market potential and improving access to raise the quality of seaweed.

*(Vivekananda Gitandjali)*





Illustration of a fishing boat capable of sailing as far as Malaysia, Indonesia and even Papua New Guinea in search of fish stocks. Image credit: Gerry Popplestone licensed under CC BY-NC-ND 2

## New Coordination Forum Established to Tackle Violations of Fisheries Law in Papua

A local fisherman from a village on the Southern coast of Merauke is casting a net from his boat, looking to catch some fish for his family’s dinner. Several large vessels appear on the horizon, heading towards the area where he’s fishing. They’re clearly not from Merauke, so are not permitted to fish in these waters. In recent years, this has become an increasingly common sight for the fishermen of Merauke.

The productivity of fisheries in the Arafura and Timor Seas (ATS) region is essential to food security for the region’s inhabitants. However, fisheries and marine resources in the ATS are under increasing pressure from illegal, unregulated and unreported (IUU) fishing activities. Recent data and information collected from the field indicate that illegal fishing and other criminal activities are still taking place in the fisheries sector. This includes evidence of blast fishing, cyanide fishing, transshipment, the use of unregulated fishing gear and unregistered vessels, and the capture of protected species.

According to Destructive Fishing Watch (DFW) Indonesia’s coordinator, M. Abdi Suhufan, “The current issue is that there are numerous vessels that are unregistered, or those with expired registration licenses, as well as those registered

only to fish in the Maluku province, are conducting fisheries operations in the waters of Papua and West Papua<sup>1</sup>.” DFW also stated that “the presence of illegal fisheries ports such as those found in Aru and Merauke are suspected to enable vessels to avoid fisheries regulations related to permits, fisheries data collection and fuels, as well as worker rights<sup>1</sup>.” In addition, the Ministry of Marine Affairs and Fisheries (MMAF) have stated that foreign vessels from neighbouring countries can still be encountered illegally entering and fishing in these waters<sup>2</sup>.

As part of efforts to address these issues, the Papua provincial government issued a decree in 2020 (Papua Governor’s Decree No. 188.4/228/2020) that set a mandate for the establishment of the Papua Fisheries Law Enforcement Coordination Forum. Since then, and with support from the ATSEA-2 Programme, the Papua provincial government has joined forces with local fisheries stakeholders to combat these problems. On 30 July 2021, the Papua Fisheries Law Enforcement Coordination Forum was officially established.

Tasked with coordinating investigation processes against criminal activities related to fisheries, this forum will liaise between different law enforcement agencies, thereby facilitating more widespread and coordinated action in response to threats. Members of this forum include key provincial and local-level stakeholders, including, among others, the Fisheries Agency, Environment and Forestry Agency, Transportation Agency, Police and Navy. Part of the forum’s remit will be to help manage the flow of information and data between these various stakeholders, synergising their understanding in relation to fisheries law enforcement and ensuring that policies are put into practice.

By supporting the Papua Fisheries Law Enforcement Coordination Forum, the GEF/UNDP/PEMSEA ATSEA -2 Programme is helping to increase the effectiveness of law enforcement activities against fisheries crime in the waters of Papua province, especially in

Lampiran : Keputusan Gubernur Papua  
 Nomor : 188.4/228/Tahun 2020  
 Tanggal : 30 Juni 2020

SUSUNAN KEANGGOTAAN FORUM KOORDINASI PENANGANAN TINDAK PIDANA PERIKANAN DI PROVINSI PAPUA TAHUN 2020

NO.	JABATAN DALAM INSTANSI	KEDUDUKAN DALAM FORUM
1	2	3
1.	Gubernur Papua	Pembina
2.	Sekretaris Daerah Provinsi Papua	Pembina
3.	Asisten Sekretaris Daerah Provinsi Papua Bidang Perekonomian dan Kesejahteraan Rakyat	Pengarah
4.	Kepala Kepolisian Daerah Papua	Pengarah
5.	Kepala Kejaksaan Tinggi Papua	Pengarah
6.	Ketua Pengadilan Negeri Papua	Pengarah
7.	Kepala Kantor Wilayah Kementerian Hukum dan HAM Provinsi Papua	Pengarah
8.	Komandan LANTAMAL X Jayapura	Pengarah
9.	Kepala SPKPL BAKAMLA Papua	Pengarah
10.	Komandan LANTAMAL XI Merauke	Pengarah
11.	Kepala Dinas Kelautan dan Perikanan Provinsi Papua	Ketua
12.	Kepala Biro Hukum SETDA Provinsi Papua	Wakil Ketua
13.	Kepala Dinas Kehutanan dan Lingkungan Hidup Provinsi Papua	Anggota
14.	Kepala Dinas Perhubungan Provinsi Papua	Anggota
15.	Direktur Reserse Kriminal Khusus POLDA Papua	Anggota
16.	Asisten Staf Operasional DANLANTAMAL X Jayapura	Anggota
17.	Asisten Staf Operasional DANLANTAMAL XI Merauke	Anggota
18.	Asisten Tindak Pidana Khusus Kejaksaan Tinggi Papua	Anggota
19.	Direktur Pol Air POLDA Papua	Anggota
20.	Kepala Kantor Imigrasi Kelas I Jayapura	Anggota
21.	Kepala Kantor Pengawasan Bea Cukai Jayapura	Anggota
22.	Kepala Administrasi Perhubungan Jayapura	Anggota
23.	Kepala Kantor Perbendaharaan Lelang Barang Negara Jayapura	Anggota
24.	Kepala Divisi Keimigrasian Kanwil Hukum dan HAM Jayapura	Anggota
25.	Kepala Rumah Penyimpanan Rampasan Kanwil Hukum dan HAM	Anggota

The Papua Fisheries Law Enforcement Coordination Forum was officially established, according to the mandate of the Papua Governor’s Decree No. 188.4/228/2020, on 30 July 2021.

Fisheries Management Area (FMA) 718. The ATSEA-2 Programme will continue to assist and engage with the forum, through facilitation of discussions and capacity building for the forum’s members. With support from the ATSEA-2 Programme and in collaboration with local communities, the Forum would work to address issues related to IUU fishing and other fisheries-related crimes, with the aim to improve the management of fisheries stocks in the waters of Papua within the ATS region.

(Nara Wisesa)

<sup>1</sup> <https://dfw.or.id/tingkatkan-pengawasan-di-laut-arafura/>

<sup>2</sup> <https://investor.id/business/masih-ada-4-wilayah-rawan-illegal-fishing>



'It's in our hands'. Fishers in Merauke are joining forces with local government and NGOs to eradicate illegal, unreported and unregulated fishing from their waters. Image credit: Chris Alexander for the ATSEA-2 Programme

## Tackling Illegal, Unreported and Unregulated Fishing in Merauke, Papua



At the PSDKP headquarters in Merauke, catches are weighed and measured to ensure full compliance with laws and regulations. Those who break the rules are punished to the fullest extent of the law. Image credit: Chris Alexander for the ATSEA-2 Programme

Illegal, unreported and unregulated (IUU) fishing endangers marine biodiversity in the Arafura and Timor Seas (ATS) region, while also threatening the livelihoods of fishers in littoral nations. Last year, a report by the ATSEA-2 Programme highlighted the need for improved surveillance, to ensure fisheries legislation is implemented effectively<sup>3</sup>. Today, authorities in Merauke, Papua are leading the way; educating communities, prosecuting those who break the law and sparking a concerted response to the problem of IUU fishing.

In Merauke, as with elsewhere, surveillance can be challenging, due to the number of vessels and the vastness of marine areas. This is further exacerbated by financial/technical constraints experienced by the authorities. However, in spite of these obstacles, the Marine Fisheries Resources Surveillance Unit (PSDKP) in Merauke

<sup>3</sup> Arie Afriansyah, Akhmad Solihin, Amira Bilqis, Jeremia Humolong Prasetya (2021). Collaborative Surveillance Best Practices and Lessons Learned Against IUU Fishing. Report to the Arafura and Timor Seas Ecosystem Action Project Phase 2 (ATSEA-2). Centre for Sustainable Ocean Policy, Faculty of Law Universitas Indonesia, Indonesia. 25pp

is making significant progress in the fight against IUU. One of the agencies under the directorate general of fisheries resources supervision of the Indonesian Ministry of Marine Affairs and Fisheries (MMAF), the PSDKP office oversees fishing operations in the region, to ensure laws and regulations are obeyed in the field of fisheries and marine affairs.

“We take action,” says Fajar Suryo Pratama, supervisor and coordinator of the PSDKP in Merauke. His team takes a three-pronged approach in carrying out surveillance: “first, we provide education to the public; second, we conduct joint patrols alongside other agencies that have authority in the maritime sector; and third, if we discover violations, [we ensure] punitive action is taken to the fullest extent of the law.”

Under the watchful eye of Pratama and the PSDKP, all vessels passing through Merauke have their cargo measured to assess the number and types of fish captured, along with the fishing gear that was used, how many days were spent at sea, the syndicates involved and whether they have the proper documentation in place. Various other details are logged into the PSDKP system to ensure all fishers operating in Merauke’s waters are in full compliance with MMAF laws and regulations.

And these sanctions are having an impact. In March 2021, a vessel set off from Merauke without the proper documentation, reportedly to engage in IUU fishing. Following a criminal investigation that involved cooperation between multiple agencies, the case resulted in a conviction for the ship’s captain. According to Pratama, prosecutions are “an effective form of deterrent, [demonstrating] that all ships must be equipped with the appropriate legal documentation,” thereby setting an example for others to follow and demonstrating the severity of consequences for those who break the law.

The biggest challenge facing the PSDKP is coordination between the various littoral nations and authorities responsible for eradicating IUU from the ATS region. That’s why the new coordination forum, established to tackle violations of fisheries law in Papua, represents such a positive step forward; by



“We take action.” Fajar Suryo Pratama, supervisor and coordinator of the PSDKP in Merauke, is working to combat IUU fishing through a combination of education, enforcement and collaboration between authorities. Image credit: Chris Alexander for the ATSEA-2 Programme

collaborating with a wider network of agencies, authorities and local stakeholders, authorities have more surveillance capacity, can wield greater power and ultimately offer a wider scope of influence in the ATS region.

Looking to the future, Pratama believes collaboration holds the key to stopping IUU. “The more we coordinate, the more institutions will have authority to act in the marine and fisheries sector,” he explains. “This means all of us – from governments to NGOs, fishing communities and the PSDKP itself – must work together to have a positive impact,” he added.

Through socialisation, collaboration and enforcement, PSDKP is working to ensure the sustainability of fish stocks and livelihoods in Merauke and beyond. The ATSEA-2 Programme is committed to supporting these efforts; since its inception in 2019, the Programme has been working alongside national authorities and local stakeholders to promote sustainable development; by facilitating cooperation at the international level, ATSEA-2 is having a positive impact on local communities and helping to stamp out IUU in the ATS region.

(Chris Alexander)

# Overcoming Gender Disparities in the Marine and Fisheries Sector, Aru District



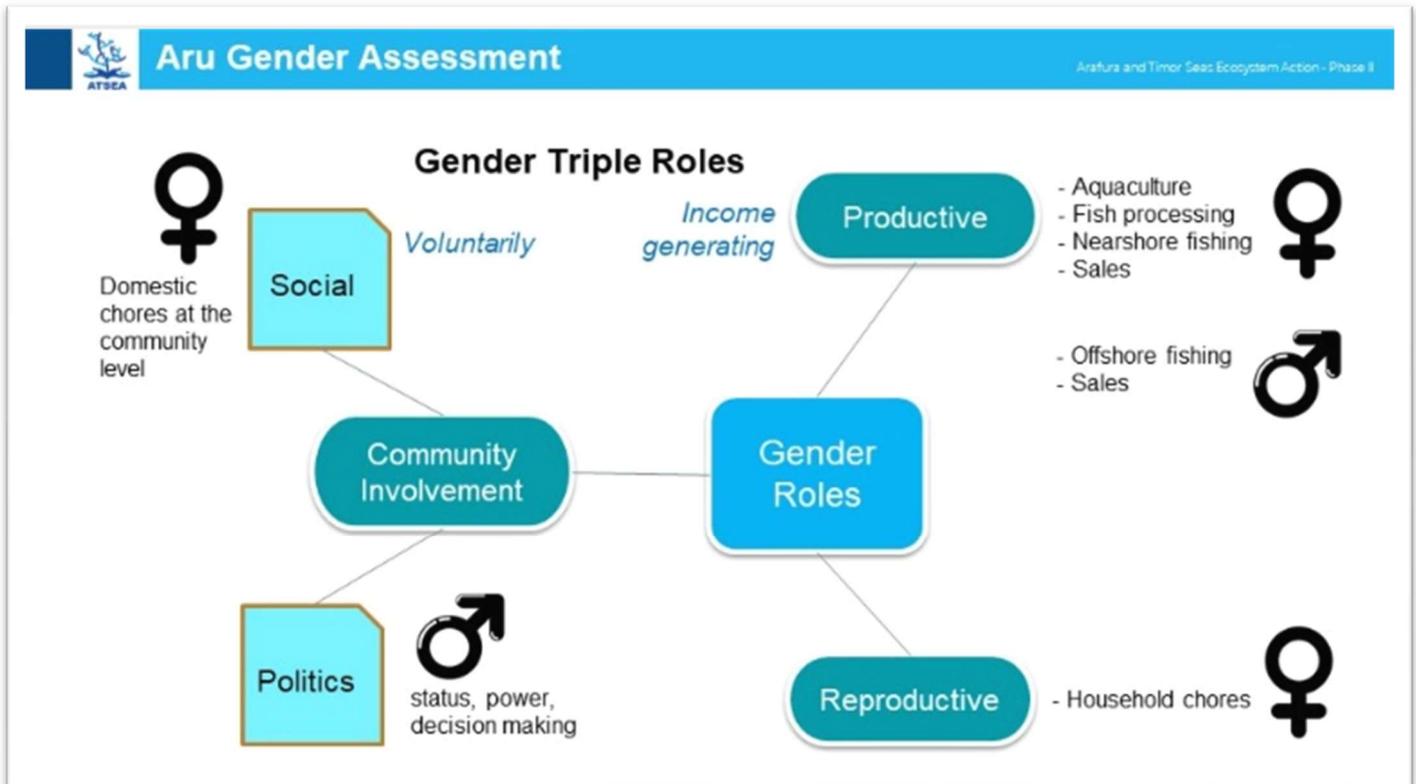
Women dominate the local market, where they sell fish to meet local demand. Image credit: UNDP Indonesia for the ATSEA-2 Programme



A woman helping her spouse to make a wooden boat in Aru Islands Regency. Image credit: UNDP Indonesia for the ATSEA-2 Programme

Women play an essential role in pre- and post-harvesting processes in the marine and fisheries sector. However, their contributions are often overlooked and undervalued, especially when it comes to making decisions. The ATSEA-2 Programme hosted a discussion involving a range of national- and local-level stakeholders, which encouraged women to voice their opinions and exercise their rights in marine and fisheries resource management.

The marine and fisheries sector is not immune to gender inequality, as men and women utilise marine and coastal resources in different ways. According to recent gender studies conducted in Aru district, there are many disparities between men and women. This includes their entitlement to capacity-building activities, their access to harvesting areas and, most importantly, their cultural expectations in relation to productive, reproductive and public roles. This has resulted in an imbalance of power relations; although women play a vital role in fishing activities, they are usually left out of the decision-making process. When it comes to marine and coastal resources management, in the customary management system, women's voices are seldom heard.



As part of the ATSEA-2 Programme’s mission to promote gender equality in marine and coastal management, a gender study was conducted during April 2021 in five villages in Aru Island Regency. The study employed qualitative methods in the form of Key Informant Interviews (KIIs) and Focus Group Discussion (FGD) involving 71 women and 63 men who were relevant actors, stakeholders and authorities. The aim was to identify gender-related issues at the grassroots level and local social attitudes that contributed to these inequalities. Through this study, the ATSEA-2 Programme aimed to identify factors that contribute to the perpetuation of gender inequalities in the marine and fisheries sector in Aru and examine such factors through a gender perspective approach.

The analysis found that there was capacity segregation between men and women in several dimensions, including access to capacity building and different entitlement based on local practices or culture. More importantly, gender segregation was also evident in productive, reproductive and public roles, resulting in imbalanced power relations

between women and men in accessing marine and fisheries resources, which also limited the ability of women to overcome discursive inequalities caused by climate change and environmental degradation. The study also discovered that gender issues in the fishing sector have been neglected and perpetuated for several reasons, including the perception of fisheries as a masculine domain, gender stereotyping of women’s physical condition as unsuited to fishing and voyaging at sea, and the belief that women are



Women drying sea cucumbers while watching over their children. Image credit: UNDP Indonesia for the ATSEA-2 Programme



Remarks by Marthen Putnarubun, S.IPEM, Head of the Women Empowerment and Child Protection Office of Aru Islands Regency. Image credit: UNDP Indonesia for the ATSEA-2 Programme

not technically astute in terms of the knowledge aspect of fisheries.

Following the results of the gender assessment in the Aru archipelago, in collaboration with the Ministry of Marine Affairs and Fisheries (MMAF), the ATSEA-2 Programme disseminated assessment results on 14 October 2021 at Eora Hotel Dobo in Aru Islands Regency. The discussion was attended by 15 representatives from the regional government of Aru Islands Regency, Maluku provincial government, the Ministry of Women Empowerment and Child Protection, the MMAF, the National Marine Conservation Area Agency of Kupang, Yayasan Sitakena, Yayasan TAKA and Destructive Fishing Watch (DFW) Indonesia. In addition, eight participants from

the Centre for Fisheries Research and the Directorate General of Marine Spatial Management joined the discussion virtually.

“The Covid-19 pandemic has exacerbated gender disparity, as domestic chores are increasing and women become more vulnerable to this situation,” said Marthen Putnarubun, S.IPEM, Head of Women Empowerment and Child Protection Office of Aru Islands Regency. “This calls for all levels of society to work together to minimise the disparity,” he added. By involving relevant stakeholders at the national and local level to build linkages, the programme hopes to create a concrete action plan for future activities related to gender issues for marine and coastal programmes in Aru.

The ATSEA-2 Programme carried out gender assessment prior to programme commencement, in order to identify gender gaps and to better understand the situation in coastal fishing communities. This is considered an essential step, which should be replicated by other similar programmes. Another important point was raised with regards to synergising national and local officials in conducting complementary programmes. Furthermore, an emphasis was also placed on the importance of monitoring and evaluation to measure the relevance of the programme and its impact for key beneficiaries. Discussions also noted that implementation of a gender mainstreaming programme is not solely the responsibility of the women empowerment service office, but rather relies on the involvement of officials



A focus group discussion with women groups in Aru. Image credit: UNDP Indonesia for the ATSEA-2 Programme



A facilitator in a gender workshop. Image credit: UNDP Indonesia for the ATSEA-2 Programme

from all strategic sectors, because gender issues need to be approached through a coordinated and concerted effort among all related actors.

The discussion with key stakeholders also recommended extending and re-establishing the forum for women in the region, thereby helping them make their voices heard. The forum will provide women with access to civil society organizations and governmental authorities in the Aru district. Moreover, as an overarching goal, this activity also seeks to unite various customary groups, facilitating greater interaction and synergy between women's groups from various other regions, so they can learn from each other.

As a follow-up action, the ATSEA-2 Programme plans to facilitate further discussions involving the MMAF and women empowerment officials at the national, provincial and local level in Aru, to tailor gender mainstreaming within each programme, including identification of shared roles and responsibilities. Through collaboration among these stakeholders, women in Aru will be encouraged to play a more prominent role in decision-making processes related to marine

and coastal management, in line with the Minister of Marine Affairs and Fisheries Regulation No. 28/Permen-KP/2016.

Located in Indonesia's Maluku Province, the Aru archipelago is home to more than 500 small islands. The ATSEA-2 Programme provides assistance in empowering women and improving the livelihoods of coastal communities in the southeast area of Aru (Aru Tenggara), where the region has been appointed as a Marine Protected Area (MPA) through the Minister of Marine Affairs and Fisheries' Decree No.63/MEN/ 2009, dated 3 September 2009. Aru Tenggara MPA is under the management of Kupang National Marine Conservation Area Agency, with its work unit based in Aru.

(Laeli Sukmahayani)

This article was published on the [IW:Learn website](#).



A group of women selling fish at the local market in Aru Islands Regency. Image credit: UNDP Indonesia for the ATSEA-2 Programme

## Gender and Inclusion Survey Reveals Impact of Pandemic on Women, Informs Effective Response

Rote Ndao, on Indonesia's East Nusa Tenggara province's southern coast is home to close to 150,000 people, many of whom earn their livelihoods as fishers. The twin-disasters of the ongoing COVID-19 pandemic and the April 2021 Seroja cyclone has impacted the community, with women facing the brunt of the impact. A recent survey conducted by the United Nations Development Programme has revealed the complete picture and plans are currently being developed to improve the lives of the women in the community.

The Gender and Social Inclusion (GESI) survey, conducted by UNDP's Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Programme with funding from the Global Environment Facility (GEF), is aimed to gather information on the challenges faced by the communities of Rote Ndao, Merauke and the Aru Islands.

Approximately 1.3 million people in Indonesia are expected to be pushed into poverty due to the Covid-19 pandemic (Suryahadi et al, 2020). At the local level, the survey also revealed the effects of the Covid-19 pandemic on households in the region. One respondent, who works as a fisher noted that their daily income had decreased

significantly over 50 percent, from IDR 100,000 (USD 7) to IDR 40,000. In addition, because of the pandemic, fewer people have been able to catch and sell fish. The respondent also commented that, because they had to care for a relative who had fallen ill, their ability to work was also limited.

According to the results of the survey, all respondents' incomes had been affected, to some degree, by the Covid-19 pandemic in Rote Ndao. Participants noted that their earnings suffered a drop of around 50 percent to 70 percent since the pandemic began. Loss of livelihood has impacted incomes and invariably caused respondents to feel less economically secure. However, respondents in Rote Ndao noted that they were assisted by their husbands and/or other household members. This is mainly because of the kinship system in rural areas. However, the burden still falls on women, who may experience higher rates of stress and anxiety.

Such disruption caused by the Covid-19 crisis makes it imperative for the ATSEA-2 Programme to navigate a rapidly shifting and increasingly challenging situation. With the

decrease of income-generating activities, farmers and fishers need a comprehensive and diverse set of skills to reduce post-harvest losses. Activities should place an emphasis on training for home-based small businesses run by women, along with capacity building for gender empowerment and community welfare in the district through seaweed. This includes improved market access for seaweed farmers, particularly for seaweed growing and/or processing enterprises run by women.

ATSEA-2 is committed to safeguarding the livelihoods and prosperity of coastal people, particularly in transboundary areas, through the implementation of sustainable integrated concepts. Since its inception in 2019, the programme has been working to promote sustainable development in the ATS region and improve the quality of life of its inhabitants through a combination of restoration, conservation and sustainable management of marine-coastal ecosystems.

*(Nathazha Bostanova Eunike Sipasulta)*

*This article was published on UNDP Indonesia and [IW:Learn website](#).*



A facilitator in a gender workshop. Image credit: UNDP Indonesia for the ATSEA-2 Programme



A group of women trains on processing fish into salted fish, fish jerky and fish floss. Image credit: UNDP Timor-Leste for ATSEA-2 Programme

## Improving Seafood Processing Skills for Women in Manufahi

On any typical day in the coastal communities of Manufahi Municipality in Timor-Leste, more fish may be harvested than can be consumed or sold. At other times, there is a need to preserve seafood so that it can be stored over long periods when the supply chain is unpredictable, such as during the pandemic. Covid-19 restrictions, and the resulting economic uncertainty in the industry, have persisted throughout 2020 and into 2021. As a result, many in these communities are struggling to make ends meet.

The Rapid Food Security Assessment by the Ministry of Agriculture and Fisheries (MAF) of Timor-Leste in 2020 found that households had 10% less fish than the previous year due to the pandemic. The amount of food stored in households was also found to be low, with 64% of households having two or fewer months' worth of food on hand and 58% reporting that their food storage levels are less compared to last year.

To weather the crisis, in collaboration with the Ministry of Agriculture and Fisheries (MAF) of Timor-Leste, the GEF/UNDP/PEMSEA ATSEA-2 Programme initiated training on seafood processing to prolong the shelf life of seafood, keeping it in good condition for later consumption or sale. From 15 to 17 September 2021, ten representatives of women's groups from Betanu, Uma-Berloi and Clacuc village were trained in sanitation and hygiene related to seafood processing, so they could properly store fish to prevent spoilage, and process it into salted fish, fish jerky and fish floss. In Manufahi, the fish



In collaboration with the Ministry of Agriculture and Fisheries (MAF) of Timor-Leste, the ATSEA-2 Programme initiated training on seafood processing to prolong the shelf life of seafood. Image credit: UNDP Timor-Leste for ATSEA-2 Programme



The training was attended by National Director for Fisheries and Aquatic Resources Management, Celestino da Cunha Barreto; and Director General of Fisheries, Aquaculture and Marine Resources, Acacio Gutteres. Image credit: UNDP Timor-Leste

commonly processed are mackerel, frigate tuna, moonfish, and red snapper.

“We need equipment, product diversification and fish processing (techniques) distributed to each group so the women can use them,” said Zumira Da Costa, a participant in the training held at Betano Village in Manufahi. Those who attended were able to develop their existing skills, while also gaining a clearer idea of work that remains to be done. “Participants still need (additional) training for different fish product diversification,” said Saras Fernandez, another trainee from Desa Betano. “So they [can] produce their own product to be commercialised or [gain] access to local and national markets,” she added.

The training was also attended by National Director for Fisheries and Aquatic Resources Management, Celestino da Cunha Barreto; and Director General of Fisheries, Aquaculture and Marine Resources, Acacio Gutteres. In the opening remarks, Mr. Gutteres highlighted that this training is one of the programmes that have been mutually agreed upon between MAF, especially the State Secretariat of Fisheries and ATSEA-2.

In Manufahi Municipality, ATSEA-2 Programme focuses primarily on designing and supporting the designation of the Betano to Claluc Marine Protected Area (MPA), while also developing Integrated Coastal Management (ICM) plans. This will incorporate climate change adaptation by promoting alternative livelihoods and capacity building, along with the development of an Ecosystem Approach Fisheries to Management (EAFM) for sustainable fish feed production.

By improving the management of fisheries and other coastal resources in Timor-Leste, ATSEA-2 is committed to safeguarding the livelihoods and prosperity of coastal people, particularly in transboundary areas, through the implementation of sustainable integrated concepts.

(Dwi Aryo)

This article was published on the [IW:Learn website](#)

# Improving Catches and Reducing Post-Harvest Losses for Fishing Communities in Lautem



A small-scale fishing boat commonly used by fishers in Lautem. Image credit: UNDP Timor-Leste for ATSEA-2 Programme

Comprising mostly non-motorised boats, the fisheries sector in Timor-Leste is almost exclusively small scale (subsistence and artisanal). Here, the fishing fleet uses low-technology gear (such as gill nets and hook and line) to capture reef and surface-dwelling fish species (such as sardines, mackerel and flying fish) in shallow waters within 2 km of the coast, occasionally venturing offshore.

Lautem is one of the districts in the southern part of Timor-Leste. It has an area of 2,100 km<sup>2</sup>, a population of 16,876 and a coastline spanning 132 km. In 2017, the district had a total catch of an estimated 15 tonnes (FAO 2017). Located in Lautem, Lore I and Beaço are coastal towns where the majority of inhabitants work as fishermen. However, these fishers' catch normally falls short of providing a sufficient income for their families.

The decline in numbers of fish caught by small-scale fishers is believed to have been caused by the rise of illegal fishing, which exploits demersal and pelagic fish species offshore. Another problem faced by the many people dependent on fishing as a source of income in Lautem is the lack of capacity for preserving their catch and

adequately using available fisheries resources for their economic benefit.

“We want to be successful and have more income, however this has proven to be difficult,” explains Jose Monteiro, who is one of the Conservation chiefs for Nino Konis Santana National Park (NKSNP). “We lack the equipment and we need novel techniques and skills to boost our catch and manage the storage of these fish so they can be sold in the market without them getting rotten,” he added.

Efforts to address these challenges have been underway for a while, but must be intensified to ensure sustainability for this sector going forward. On 30 September 2021, Timor-Leste’s Government, through the Ministry of Agriculture and Fishery (MAF), teamed up with UNDP Timor-Leste through the ATSEA-2 Programme to conduct a capacity-building training session on Fishermen Group Management in Lore I, Lautem Municipality. These capacity building activities went on for three consecutive days, while similar training was also provided to the communities of coastal part of Beaço, located in Viqueque municipality in the months that followed.



Group discussion during the training. Image credit: UNDP Timor-Leste for ATSEA-2 Programme

The sessions were attended by local authorities including head of villages, women’s groups, villages’ agricultural interns, fishermen and representatives from the MAF in both municipalities; a total of 37 fishers (25 men and 12 women) came from Viqueque municipality, while 28 fishers from Lore I (26 men and 2 women) also attended. Participants studied a range of topics, including general history and the art of fishing, classification, fishing grounds, structuring fishing groups, financial analysis for fishery groups, fishery law, meteorology and sea safety.

The main objective of the capacity building was to share and increase fishermen’s skills and knowledge on how they are able to manage their group activities in terms of harvesting and marketing fish. The ultimate goal was to ensure sustainable practices of fishing and to strive toward achieving global objectives adopted by the United Nations in 2015, namely to end poverty and protect the planet.

Mr. Amaro Pinto, a local authority explained that, considering the extended periods of time spent at sea, these fishermen needed the proper tools. He also stated that they need additional training on business management, marketing and tool repair. Eugenio, a member of a fishermen’s group in Lore I noted that they had previously started a small-scale business as a group, but unfortunately some



Training participants pose for a group photo. Image credit: UNDP Timor-Leste for ATSEA-2 Programme

of their tools were destroyed by an act of vandalism. He argued that training on conflict resolution was also needed, considering these petty crimes occur regularly.

The introduction of sustainable fishing practices can improve catches and reduce post-harvest losses. The ATSEA-2 Programme is committed to implementing integrated capacity building activities for fishing communities in coastal areas to revitalise the fisheries sector and educate people on the importance of responsible fishing for increased and sustainable production. Additionally, ATSEA-2 is also working in collaboration with the MAF to encourage fishermen to conduct their business in a way that safeguards coastal areas, to yield higher economic benefits for them and the country.

(Vitalina Dos Santos)



Opening ceremony of the tree planting programme on the shores of Lake We'e Lada, Manufahi. In attendance were DG Fisheries Director MAP of Manufahi Municipality, Chief of the fisheries Municipality Manufahi, NPC of the ATSEA-2 Programme, the Fatuberliu Sub-district Head and Clacuc Village Head, among many other volunteers. Image credit: UNDP Timor-Leste for ATSEA-2 Programme

## Tree Planting to Tackle the Climate Crisis in Timor-Leste

As the world's water sources dry up due to climate change, tree planting offers a solution that can help mitigate the damage; trees absorb the greenhouse gases that are a leading cause of climate change, by taking in carbon dioxide and transforming it into oxygen. They also absorb water and store it in their roots, thereby increase the amount of water in the earth.

Conserving the vegetation around natural springs can support the ecosystem and improve the livelihoods of people who depend on the associated resources for survival. Consequently, the Ministry of Agriculture and Fisheries (MAF) and the United Nations Development Programme (UNDP) of Timor-Leste recently planted 2,000 trees in We'e Lada Lake and We'e Tatarade Lake in Manatuto and Manufahi Municipality, Timor-Leste, to provide soil cover and aid water retention in the landscape.

The people of Timor-Leste are heavily dependent on water resources for their livelihoods, and yet both surface and groundwater are sensitive to climate change. The country is also highly susceptible to fluctuations in weather around the onset of the rainy season, which can lead to land erosion following heavy rainfall; this all amounts to a reduction in crop yields, due to a 'perfect storm' of weather instability, fluctuating temperatures, floods and drought.

The ATSEA-2 Programme recently conducted assessments of the vulnerability of the Arafura and Timor Seas (ATS) region to climate change. This study found that, by 2070, annual average air temperatures for Indonesia and Timor-Leste are expected to increase by up to 3.6-3.8oC for most archipelagic islands in the ATS region, while average annual rainfall is projected to increase by up to 1.1 metres by 2070 – an increase of 20-30%. A slight decrease is projected for southern Timor-Leste.

In response to this looming climate catastrophe, the GEF/UNDP/PEMSEA ATSEA-2 Programme teamed up with the Ministry of Agriculture and Fisheries (MAF) and local communities in Manufahi and Manatuto Municipality, where they planted 2,000 trees of jambu mente, bora, sukun jawa and teak wood. The activity was conducted



Tree planting in We'e Tanenti (Uma-Boku, Barique, Manatuto) springs by representatives of the local police force in Barique sub-district. Image credit: UNDP Timor-Leste for ATSEA-2

on 18-19 November 2021 in We'e Lada Lake and We'e Tatarade Lake, where 140 volunteers comprised students from a senior high school in Posto Administrativo Fatuberliu and Barique, along with the local community from the villages of Clacuc, Uma Boku and Aubeon.

Representatives from the Ministry of Agriculture of Posto Administrativo Fatuberliu and Barique, the Director of MAP Manufahi and the Chief of the Department of Fisheries were also present, in order to convey the importance of conserving and sustainably managing the water resources. During the activity, announcement boards and fences were placed around the lakes as a reminder of this significance.

Manuel Sarmento, village head of Clacuc (Manatuto), added that they are also cooperating with UNDP through the ATSEA-2 Programme to protect and develop the We'e Lada and We'e Tatarade lakes as tourism sites, because these lakes have huge potential to be developed as natural attractions. The village head of Uma Boku (Manatuto), Feliciano Baptista, also confirmed that the We'e Tanenti spring water has great potential for agricultural activities, as many local residents have been using this spring for farming.

As documented in the ATS transboundary diagnostic analysis (TDA) completed in 2012, coastal and marine ecosystems and communities in the ATS are especially vulnerable to climate change. Therefore, to conserve ecosystems and support communities amid the increasing impacts of climate change, the GEF/UNDP/PEMSEA ATSEA-2 Programme integrates nature-based mitigation activities and community-level knowledge sharing into coastal management.

ATSEA-2 is the second phase of the Arafura & Timor Seas Ecosystem Action (ATSEA) Programme; a regional partnership involving the governments of Indonesia, Timor-Leste and Papua New Guinea, with support from the Australian government. Since its inception in 2019, the Programme has been working to improve the quality of life of people in the ATS region through a combination of restoration, conservation and sustainable management of marine-coastal ecosystems. ATSEA-2 is committed to safeguarding the livelihoods and prosperity of coastal people, particularly in its transboundary areas, through the implementation of sustainable integrated concepts.

*(Bernardo De Jesus Pereira Belo)*



Fishermen in Papua New Guinea" by ILO in Asia and the Pacific licensed under CC BY-NC-ND 2.0

# Taking Action to Improve Stakeholder Engagement in Papua New Guinea

Coordinating and a wide range of agencies and stakeholders can be challenging. For the ATSEA-2 Programme to be effective, all stakeholders in PNG must be synergised towards programme implementation. The availability of agency representatives has been an issue that resulted in a lack of representation for several stakeholders at previous project meetings, and it is this issue that needs to be addressed if the programme is to be successful.

All stakeholders of Phase 2 of the Arafura and Timor Seas Ecosystem Action Programme in Papua New Guinea (ATSEA-2 PNG), who range

from the relevant state agencies to NGO and development partners, have welcomed the programme and individually expressed their support for it. Engaging all stakeholders separately is less challenging than getting them to attend a meeting such as the National Inter-Ministerial Committee (NIMC) or the Stakeholder Partnership Forum (SPF) event.

In 2021, relevant state agencies were invited to the NIMC to provide policy advice and technical insights, while key private sector agencies forming the SPF provided additional technical advice and collaborated on projects. The implementing agency and senior beneficiaries form the National Project Board (NPB), which makes important decisions for the project, including work plans and budgets.

The main issues identified by stakeholders as reasons for not being able to attend meetings in 2021 were lack of internet (or poor-quality connection), short notice, not knowing or fully understanding the programme, or contact person(s) not being available. The project has improved meeting attendance by providing internet data to those with internet problems and giving sufficient notice of at least a week prior to a meeting. The National Coordinating Unit (NCU) of



NCU PNG meeting with the representatives from Conservation & Environment Protection Authority, and Climate Change & Development Authority. Image credit: ATSEA-2 Programme

PNG has continued its engagement with stakeholders, so they can fully understand the project. Although these steps have helped to improve the attendance at stakeholder meetings, some representatives were still unable to attend.

Upon further investigation, it was discovered that there is often only one contact person at a stakeholder agency, and that person does not necessarily delegate responsibilities during their absence. When there is only one focal point at an agency with no alternative, it is hard to engage with that agency, because other officers are not familiar with the ATSEA-2 Programme. The lack of effective involvement in the project was echoed by the Managing Director of the Climate Change and Development Authority (CCDA), when he said in a meeting: “I don’t need to be involved in the implementation of the project, my manager or her delegate should be involved.”

Moving forward, ATSEA-2 PNG will try to engage with more than one representative of each stakeholder agency, to ensure coverage when the primary contact person is not available. ATSEA-2

PNG currently engages with stakeholder contacts from the manager level and up. The alternative contacts will also be at manager level or higher, although lower-level alternatives will also be considered. The challenge now is to keep stakeholders engaged with the project through individual engagements and the NIMC and SPF meetings. The NCU should continue to provide project updates and invite stakeholders to project meetings and workshops to keep them involved and interested, so they can continue to engage with the project.

(Kenneth Yuanje)

# Gone, but not Forgotten



## In Memoriam

Dr. Wijoprino (16 June 1960 – 8 November 2021)

Dr. Wijopriono was a senior researcher at the Centre for Fisheries Research (CFR) in the Indonesian Ministry of Marine Affairs and Fisheries (MMAF). He had both a Master’s in aquatic resource management and a doctoral degree in applied remote sensing from the University of Putra Malaysia. As a researcher with extensive research experience, he conducted and led many studies on fisheries resources – including stock assessments – into small pelagic, demersal fish, squid and prawns.

Dr. Wijopriono was a strong supporter of ATSEA-2. He was the CFR focal point for fisheries-related project activities and the Indonesian Head of Delegation for the last Intersessional Meeting. Together with the Indonesian Institute of Sciences, he coordinated the bioeconomic study for prawns in Fisheries Management Area (FMA) 718 in the Arafura Sea and was the main proponent of fisheries enumeration to better understand the red snapper population status in the region.

From February 2020, his recommendation led to the deployment of fisheries enumerators in two major landing sites in Indonesia, namely Probolinggo in East Java and Merauke in Papua. This was followed by several trips to conduct biological sampling to understand the relation between total length, weight and gonad maturity stages of red snapper. All of these initiatives continue to this day.

In addition to his technical expertise, Dr. Wijopriono was a highly dedicated individual. Despite his struggles with illness during his final months, he still managed to spare time to advise the project, steadfastly encouraging his colleagues to do better and ensuring all activities on the ground were carried out smoothly. Due to his kindness and down-to-earth personality, Dr. Wijopriono was highly respected and will be sorely missed.

Everyone at ATSEA-2 will endeavour to continue his legacy and honour his memory.

Terima kasih banyak, Pak Wijo.

# ATSEA-2 Key Targets for 2022

## Regional



### COMPONENT 1

- Fourth RSC Meeting
- SPF Meetings
- Final Regional Governance model
- Final SPF TOR and Guidelines
- Final Financial Landscape Assessment Report and Guidance Document
- Roll out of GESI Action Plan
- Regional trainings on Climate Change Adaptation
- Final Updated TDA
- Workshops and reports related to updating of TDA and SAP



### COMPONENT 2

- Final Red Snapper Regional EAFM Plan
- Webinar and/or Exchange Visit on Rights-Based Management on Fisheries
- Updated Regional Baseline Assessment Reports for TDA updating
- Training on MCS
- Coordination with RPOA-IUU Secretariat
- Workshop on Sea Turtle Experts
- Webinar and Regional Exchange on Marine Pollution



### COMPONENT 3

- ATS SAP Monitoring System and Workshop
- Various ATSEA-2 publications, regular website update, quarterly newsletter, annual report, IW:Learn articles, media engagement, etc.
- Strengthened data management system



### PROJECT MANAGEMENT

- Mid-Term Review of ATSEA-2 Project
- Project Audit
- GEF and UNDP requirements on Project Monitoring and Evaluation
- Procurement and Travel Plan

2

## Indonesia



### COMPONENT 1

- Follow-up the legal draft of SPF & NIMCs
- Piloting the implementation of NIMCs refer to NAP ATSEA
- Support the implementation on fisheries management body in Fisheries management area 718
- Facilitate the policy harmonization on EAFM recommendation in Maluku province



### COMPONENT 2

- Follow up Fisheries company engagement implementation for FIP red snapper, shrimp and barramundi
- Strengthening the fisheries monitoring and surveillance in Aru and Merauke
- Support action plan of marine pollution task force
- Revitalization and strengthening of women customary law in Dobo
- Follow up the process of establishment of Kolepom MPA

# ATSEA-2 Key Targets for 2022

## Papua New Guinea



### COMPONENT 1

- Use the thematic reports to feed into the updating of the new RGM and SPF, TDA, SAP and develop the National Action Program
- Identify the relevant stakeholders for South Fly artisanal fishery and form a stakeholder committee to oversee the implementation of the South Fly Artisanal Fishery Management Plan
- Have an annual meeting with the stakeholder committee to review the implementation of the plan
- Disseminate the capacity assessment report and capacity building program/plan for review and additional inputs
- Link up with other relevant agencies to support the identified training activities in the capacity building program/plan
- Develop training package for fishery data collection and management
- Conduct training on fisheries data collection in South Fly
- Develop database for artisanal fisheries data
- Facilitate MOUs between the national and the local fisheries authorities and key development partner for improved management of fisheries and capacity development
- Implement the capacity building aspects of the MOU between NFA, Western Province, South Fly and key development partners
- Facilitate the Training of Trainer related to EAFM/fisheries data collection and management
- Support the regional updating of the TDA and SAP using the baseline data on biophysical and socioeconomic characteristics, legal and institutional frameworks and stakeholder capacity assessment
- Engage a consultant to develop the NAP for PNG
- Develop work plan and outline for the development of the NAP
- Conduct initial stakeholder consultation workshop for the NAP



### COMPONENT 2

- Complete the artisanal fisheries management plan
- Conduct a stakeholder consultation of the completed plan
- Facilitate Western Province and South Fly governments to endorse the plan
- Facilitate NFA to approve the plan
- Facilitate awareness campaign in the Treaty Villages with the involvement of South Fly Fisheries and Bata
- Facilitate collaboration between village and district level stakeholders to establish rights-based resource management measures and appropriate enforcement and justice system in the villages
- Review fishing practices and IUU fishing from baseline reports
- Facilitate the development a community-based monitoring, control, surveillance and reporting plan
- Conduct training on community-based monitoring, control, surveillance and reporting plan
- Integrate the plan into the existing MCS system of NFA and other stakeholders

# ATSEA-2 Key Targets for 2022

## Timor-Leste



### COMPONENT 1

- Working with RPMU to undertake a series of working meeting and workshops with governments, private sector and universities to identify and agree on the national SPF representation
- Carry out stocktaking of existing NIMC, undertake an analysis, and consolidate information on how the NIMC relate to another existing regional program
- Develop options for the establishment of NIMC and develop TOR outlining the NIMC objective, operational plan, and roles and responsibilities of its members
- Present the initial and final assessment result to DG Fishery and UNDP and possible present in RSC meeting in 2021
- Facilitate quarterly meetings of the NIMC in conjunction with national project board meeting
- Engage in regular consultation and communication with other projects and initiatives at the national level, such as: CTI-CFF, RPoA-IUU, PEMSEA
- Undertake a series of working meeting and stakeholder workshop with other projects and initiatives at the national level
- Initiate and carry out expert discussion by engaging national and regional expert on integrating enabling policies and incentives into national regulatory and development frameworks to advance the priority actions of NAP
- Capacity building programme and activities developed and integrated into capacity building programme of the key governmental agencies (MAF, SEA, and MAE) and relevant local NGOs
- Update and validate TL NAP
- Undertake a series of working meeting/seminars and workshops with key planning institution at national and project target municipality level



### COMPONENT 2

- Support capacity building activities to improve the sustainability and economic viability of fishers targeting mackerel/Red Snapper
- Establish the Fisheries Advisory Committee (FAC) at general directorate of fishery
- Training on EAFM plan conducted for fisheries resources centre in Viqueque, Manatuto, Lautem & Manufahi
- Facilitate the implementation of NPoA for IUU fishing
- Conduct study to estimate level of IUU fishing with results feeding into Activity 2.1.3-2 (regional study)
- Conduct training on Independent Monitoring System for enumerators and analysts to be involved in fishing expeditions on private fishing vessels operating along the south coast
- Conduct survey, legal framework development, and sustainable financing plan development
- Organize workshops, possibly in conjunction with the annual RCC/SPF meeting, with the purpose of securing financing from private sector, the donor community, or other interested stakeholders
- Carry out feasibility study with local communities in NKS using COM as case study to address and reducing direct illegal harvesting of turtles and dugongs
- Carry out community consultation for prioritization and agreed on priority activity to implement
- Support the establishment of a women led cooperative for the sale of local fish
- Carry out community consultation including coordinating with ICM sub task team to identify potential and priority actions to implement as per their ICM action plan
- Develop and implement at least 2 alternative livelihood activities relevant to mangrove restoration and riverbank stabilization implemented in PA Barique



**ATSEA-2 Regional Project Management Unit**

Jl. Mertasari No.140 Sidakarya,  
Denpasar 80224, Bali, Indonesia

P: +62 361 448 4147

E: [infoatsea2@pemsea.org](mailto:infoatsea2@pemsea.org)

W: [www.atsea-program.com](http://www.atsea-program.com)