



MAJOR REPORT

Empowering Women, Peace and Security in the Coral Triangle: Bridging Civil-Military and State Boundaries to Tackle Maritime Environmental Crimes

Cover image: ArtRachen01

Report Authors

Lily Schlieman

Analyst
The Center for Advanced Defense Studies
United States

Charity Borg

WPS Fellow
Pacific Forum
United States

Tevvi Bullock

Gender in Health and Climate Security Co-Lead
Pacific Forum International

Project Contributors

Dedi Supriadi Adhuri

Senior Researcher
Research Center for Society and Culture, National Research and
Innovation Agency, Indonesia
Indonesia

Sara Afonso

Trainer and Focal point Gender
NGO Belun
Timor-Leste

Yolarnie Amepou

Director
Piku Biodiversity Network Inc
Papua New Guinea

Gou Fiona Ava

Director and Public Officer
Sea Women of Melanesia Inc.
Papua New Guinea

Grace Gabriella Binowo

Senior Advisor for Maritime Security and Sustainable Ocean
Economy
Indonesia Ocean Justice Initiative (IOJI)
Indonesia

Jemeih Bonilla

Previous APAL Participant
Pacific Forum
United States

Elena Braghieri

WPS Fellow
Pacific Forum
United States

Maryruth Belsey Priebe

Gender in Health and Climate Security Co-Lead
Director for WPS Programs and Senior Fellow
Pacific Forum International

Anny Barlow

Regional Maritime Security & Policy Assessment
Specialist
Maritime Security Consultants
United States

Valeria Bruyere

WPS Project Manager
Pacific Forum

Hanung Cahyono

Deputy Executive Director for Corporate Services
CTI-CFF Regional Secretariat
Indonesia

Nélson Carvalho Belo

Executive Director
Fundasaun Mahein
Timor-Leste

Astha Chadha

WPS Fellow
Pacific Forum
Japan

Arsenia Luisa da Costa Pinto de Araújo

Head of Department
Ministry of Defense
Timor-Leste

Bernardete Da Fonseca

Country Director
Blue Ventures Conservation
Timor-Leste

Crismonia Da Silva

Associaçao Chega Ba Ita
Timor-Leste

Leonesia Tecla Da Silva

Gender, Peace and Security Advisor to the Government
UN Women
Timor-Leste

Leilani Gallardo

Regional Communications Coordinator
Coral Triangle Center
Indonesia

Gabriella Gianova

Program Officer
Indonesia Ocean Justice Initiative
Indonesia

Amalia Hilliard

WPS Security Cooperation Administrator
US Indo-Pacom Office of WPS
United States

Ruth Kissam

Director of CSO
Advancing PNG Women Leaders Network
Papua New Guinea

Linus Krewanty

Lt.Colonel
Papua New Guinea Defense Force
Papua New Guinea

Allison Lee

APAL Scholar
Pacific Forum
United States

Maria Manuela Leong Pereira

Asiasaun Chega! Ba Ita
Timor Leste

Suzi Paula Lobato dos Santos

Gender Equality Advisor
Ministry of Defense Timor-Leste
Timor-Leste

Anna Mathew

Major
Papua New Guinea Defense Force
Papua New Guinea

Joyce Maveria

Field Manager
Piku Biodiversity Network Inc
Papua New Guinea

Catherine Mongeon

Political Officer
US State Department
Timor-Leste

Anthony Mota

Major
Papua New Guinea Defence Force
Papua New Guinea

Siti Sarah (Moja) Nurkalam

Program Specialist
US Embassy - Jakarta
Indonesia

Jeff Otto

Young Leaders Program Coordinator
Pacific Forum
United States

Elfih Gonçalves Pereira

Assistant Inspector
National Police of Timor-Leste
Timor-Leste

Corzzierrah Posala

Technical Program Manager
CTI-CFF Regional Secretariat
Indonesia

Crystal Pryor

Senior Advisor
Pacific Forum International
United States

Pedro Rodrigues

Senior Profesional
General Directorate of Fisheries, Aquaculture and Marine
Resources
Timor-Leste

Andreas Aditya Salim

Senior Advisor
Indonesia Ocean Justice Initiative
Indonesia

Maria Sarmento Tae

Communication Officer
National Directorate of Inspection of Fisheries and Aquatic
Resources
Timor-Leste

Delaina (Dee) Sawyers, Ph.D.

Senior Gender Analyst
US Indo-Pacom Office of WPS
United States

Heryati Setyaningsih

Coordinator, KKP, Directorate General of Surveillance on Marine
and Fisheries Resources
Indonesia

Jeanny Sirait

National Fishers Center Director
Destructive Fishing Watch Indonesia
Indonesia

Rayne Sullivan

Founder and Managing Partner
SEASTORIA
United States

Handoko Susanto

Regional Project Manager
ATSEA
Indonesia

Michael Tampongangoy

NCCs/Partner/Private Sector Officer
CTI-CFF Regional Secretariat
Indonesia

Casandra Tania

Regional Biodiversity Specialist
ATSEA
Indonesia

LCDR/Major/O-4

Badan Keamanan Laut Republik Indonesia
Indonesia

Hesti Widodo

Senior Program Manager
Coral Triangle Center
Indonesia

Nancy Wii

Lieutenant Colonel
PNG Defense Forces
Papua New Guinea

Luis Ximenes

Director
NGO Belun
Timor Leste

Ayu Bulan Tisna

Disclaimer: This report reflects the views and opinions of the authors, as well as those who are directly quoted, and should not be construed as a consensus document. Neither the U.S. Indo-Pacific Command nor the Pacific Forum take an institutional position on the issues discussed herein.

KEY TERMS

Blue Economy: An economic framework that seeks to protect and prioritize sustainability in marine and freshwater environments while also pursuing economic growth.

Civil-Military Partnerships: Collaborative efforts between civilian and military sectors to address maritime environmental crimes. These partnerships can enhance enforcement, surveillance, and response capabilities, and integrating a gender perspective can further strengthen these efforts.

Civil Society Organization (CSO): Organizations that operate independently of the government and commercial sectors, such as charities, advocacy groups, community organizations, and grassroots movements.

The Coral Triangle: A marine area in the western Pacific Ocean encompassing the waters of Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands, and Timor Leste. It is home to a staggering amount of biodiversity and provides food for over 130 million individuals. However, its immense resources make it highly susceptible to marine crime and other illegal activities.

Crime of Convergence: Crimes that occur alongside IUU fishing, such as money laundering, tax crimes, document fraud, food fraud, identity fraud, bribery, corruption, and wildlife trafficking. These are often linked to organized transnational criminal networks.

Cross-border Cooperation: Collaborative efforts between neighboring countries to tackle transboundary maritime environmental crimes. This cooperation is essential for effective monitoring, control, surveillance, enforcement, and prosecution of such crimes.

Customary Law: Traditional legal systems and practices that govern the use and management of marine resources within certain communities. Recognizing and integrating these customary laws into modern governance frameworks can enhance the effectiveness of conservation and enforcement efforts.

Gender Perspective: An approach that considers the different impacts of policies, programs, and actions on people based on their gender, aiming to promote gender equality and address gender-specific needs and vulnerabilities.

Gender-Transformative: Approaches that seek to address and alter the underlying power structures and social norms that perpetuate gender inequalities, promoting gender equity and the empowerment of all genders, particularly women and girls.

Illegal, Unreported, and Unregulated (IUU) Fishing: A multifaceted issue involving unauthorized fishing activities that violate national laws or international agreements. This includes using illegal gear, exceeding quotas, and fishing in unmanaged areas, all of which impact global marine environments and fish stocks.

Marine Pollution: Contamination of marine environments by pollutants such as plastics, chemicals, and waste, which adversely affect marine life, ecosystems, and human health. This issue is exacerbated by human activities and inadequate waste management practices.

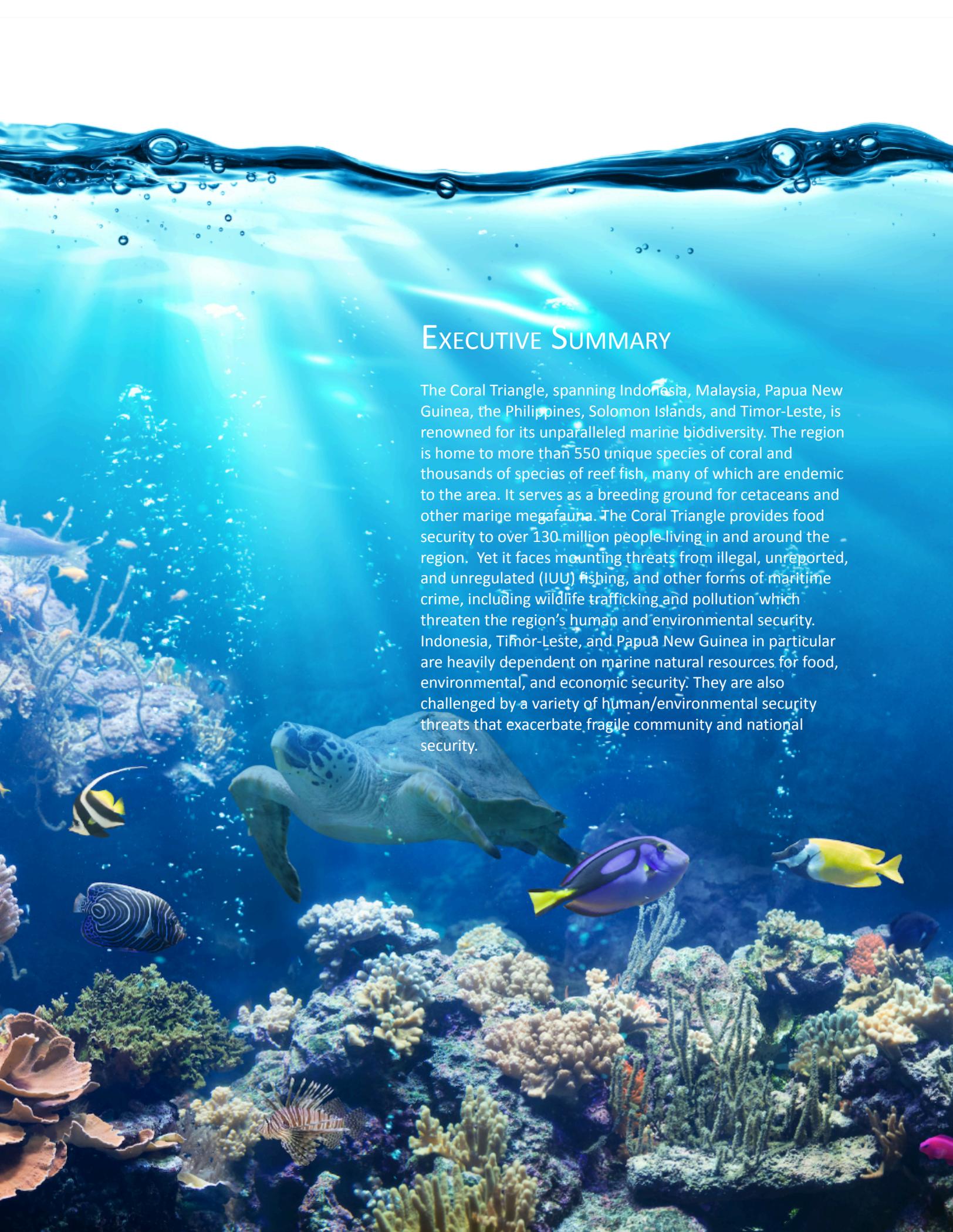
Maritime Security Environment: The overall security landscape of marine areas encompassing threats like IUU fishing, piracy, trafficking, and environmental degradation. Effective management of this environment requires comprehensive strategies involving multiple stakeholders.

Regional Architecture: The framework of regional governance structures and agreements aimed at addressing maritime environmental crimes. This includes multilateral partnerships like the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) that work towards sustainable development and conservation.

Sexual and Gender-Based Violence (SGBV): Harmful acts perpetrated against a person based on socially ascribed gender differences, including acts of causing physical, sexual, or mental harm or suffering, or threats of such acts, and other deprivations of liberty.

Wildlife Trafficking: The illegal trade of wildlife and their products for various uses like food, medicine, pets, and apparel. This crime is often associated with other illicit activities, including poaching, human trafficking, and drug smuggling, particularly in diversity-rich regions like the Coral Triangle.

The Women, Peace and Security (WPS) Agenda (UN Security Council Resolution 1325): An international policy framework that recognizes the critical role of women in conflict prevention, resolution, and peacebuilding, and seeks to promote their participation and protection in these processes. In the context of maritime environmental crimes, it highlights the importance of integrating gender perspectives into strategies for combating these crimes.

An underwater photograph of a vibrant coral reef. A large sea turtle is swimming in the center, surrounded by various colorful fish, including a purple and yellow tang and a yellow and black striped fish. The water is clear blue with sunlight filtering through from the surface, creating a bright and lively atmosphere.

EXECUTIVE SUMMARY

The Coral Triangle, spanning Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands, and Timor-Leste, is renowned for its unparalleled marine biodiversity. The region is home to more than 550 unique species of coral and thousands of species of reef fish, many of which are endemic to the area. It serves as a breeding ground for cetaceans and other marine megafauna. The Coral Triangle provides food security to over 130 million people living in and around the region. Yet it faces mounting threats from illegal, unreported, and unregulated (IUU) fishing, and other forms of maritime crime, including wildlife trafficking and pollution which threaten the region's human and environmental security. Indonesia, Timor-Leste, and Papua New Guinea in particular are heavily dependent on marine natural resources for food, environmental, and economic security. They are also challenged by a variety of human/environmental security threats that exacerbate fragile community and national security.

Maritime environmental crimes undermine the delicate balance of marine ecosystems, jeopardize the livelihoods of coastal communities, and can exacerbate tensions among neighboring states. In recent years, the links between the health of the maritime environment and national security have come to the fore. Marine degradation exacerbates instability both at sea and on land. Crucially, women play pivotal roles in fisheries management, marine conservation, and community resilience building, and they hold significant traditional ecological knowledge, yet their contributions often go unrecognized and marginalized. In coastal communities in the Coral Triangle, more than 50 percent of fishery workers are women; IUU fishing reduces the available stocks for women to catch, harming their economic and social security. Building the capacity of partner maritime law enforcement agencies to identify and tackle maritime environmental crimes is critical to the region's security. By incorporating Women, Peace, and Security (WPS) principles, this event series seeks to highlight the importance of women in the maritime environment and the role WPS can play in advancing women's economic and social empowerment.

This report distills the essential findings and recommendations from the *Cross-Border Cooperation on WPS & Maritime Environmental Crimes in the Coral Triangle* project workshops, investigating the complex dynamics of illegal fishing, maritime crime, and their adverse effects on the marine environment and human security within this biologically diverse and important region. It emphasizes the pressing need for a comprehensive strategy that integrates the principles of the WPS Agenda into strategic frameworks, emphasizing collaboration across state boundaries and between civil and military organizations to combat maritime environmental crimes more effectively.

Of central importance is the necessity of mainstreaming gender perspectives into strategies aimed at combating maritime environmental crimes. By adopting a WPS lens, policymakers and practitioners can leverage the expertise and agency of women to enhance enforcement efforts, promote sustainable resource management, and foster inclusive governance mechanisms that elevate and economically develop these coastal communities. Civil-military (civ-mil) collaboration is important in addressing maritime environmental crimes. The WPS agenda offers a framework for designing and implementing civ-mil partnerships. Through collaborations between civilian agencies, law enforcement bodies, and the military, stakeholders can strengthen surveillance, enforcement, and regulatory frameworks while promoting trust-building measures between security forces and local communities.

In addition to enhancing national security efforts, a gender-responsive civ-mil approach to combating maritime environmental crimes can also enhance regional cooperation and coordination in addressing transboundary maritime environmental crimes in the Coral Triangle. The maritime domain is fluid, with criminal networks operating across multiple jurisdictions, exploiting regulatory gaps and weak enforcement capacities. By fostering cross-border collaboration among neighboring states and integrating a WPS lens, it is possible to develop more effective, sustainable maritime domain awareness, deter illicit activities, and facilitate swift responses to marine environmental emergencies.

Combating maritime environmental crimes in the Coral Triangle requires a paradigm shift toward a more holistic and inclusive approach that fosters civ-mil collaboration and regional cooperation measures that integrate gender perspectives. Developing approaches to maritime security that address the root causes of environmental degradation, strengthen maritime security, and promote sustainable development in the region become more effective and sustainable when the principles of the WPS agenda are applied.

At the conclusion of the Project (see Page 9), a new Community of Practice was established, composed of workshop participants who are committed to reconvening virtually to discuss next steps in mid-2024. In the interim, Community members plan to implement recommendations for information gathering to move forward. These recommendations include: reporting workshop outcomes to respective organizations, assessing interest and allocating resources, sharing tools and resources on gender and maritime environmental security, actively participating in discussions, maintaining connections between civil society and defense/security personnel, inviting members to participate in relevant meetings, collecting ground-sourced data on gender and maritime environmental security, preparing recommendations for best practices, and sharing key findings and final reports with relevant stakeholders. Future meetings aim to determine the feasibility of formalizing the Community, develop an action plan, consider expansion, and develop practical recommendations tailored to the diverse contexts within the Coral Triangle. Ultimately, these efforts aim to enhance cross-border cooperation and gender-responsive approaches to more effectively combat maritime environmental crimes.



Image Credit: Flickr/Erik Sales

TABLE OF CONTENTS

Key Terms	5
Executive Summary	7
About the Cross-Border Cooperation on WPS and Maritime Environmental Crimes in the Coral Triangle Project	11
How to Use This Major Report	12
Project Partners and Defense Agencies	13
Organizing Partners	13
Implementing Partners	15
Participating Defense / Security Branches & Government Agencies	15
Participating Civil Society Organizations	15
Introduction to Maritime Environmental Crimes	16
Illegal, Unreported, and Unregulated (IUU) Fishing and Converging Fisheries Crime	17
IUU Fishing and Converging Fisheries Crimes in the Coral Triangle	18
Wildlife Trafficking in the Coral Triangle	19
Marine Pollution in the Coral Triangle	20
Gender Dynamics in Maritime Environmental Security	23
Women and the Marine Environment	24
The Gendered Impacts of Maritime Environmental Crimes	25
WPS and Maritime Environmental Crimes Implementation	28
Introduction to the WPS Agenda	29
Indonesia's WPS Implementation	30
Papua New Guinea WPS Implementation	31
Timor-Leste WPS Implementation	33
Applying the WPS Agenda to Maritime Environmental Security	34
The WPS Participation Pillar and Maritime Environmental Security	34
The WPS Protection Pillar and Maritime Environmental Security	35
The WPS Prevention Pillar and Maritime Environmental Security	37
The WPS Relief and Recovery Pillar and Maritime Environmental Security	38
Civil-Military Partnerships for Managing Maritime Environmental Crimes in the Coral Triangle: Advantages of Working with Women's Organizations	40
Civ-Mil Partnerships for this Workshop Series	42
Limitations and Challenges for Civ-Mil Relations	43
Case Studies in Civ-Mil Partnerships with a Gender Perspective	45
Room for Growth in Civ-Mil Partnerships for Better Maritime Environmental Security	46
Gender in Regional Architecture and Cross-border Cooperation	47
Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF)	48
Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing (RPOA-IUU)	48
ASEAN Sectoral Working Group on Fisheries (ASWGF)	49
Partnership in Environmental Management for the Seas of Asia (PEMSEA)	49
Women, Customary Law, and the Maritime Security Environment	51
Action Items and Recommendations to Advance Integration of Gender-Responsive Cross-Border Civ-Mil Cooperation towards Combating Maritime Environmental Crimes	55
Conclusion	57
References	57

ABOUT THE CROSS-BORDER COOPERATION ON WPS AND MARITIME ENVIRONMENTAL CRIMES IN THE CORAL TRIANGLE PROJECT

This Major Report provides a detailed overview of the Cross-Border Cooperation on Women, Peace, and Security (WPS) and Maritime Environmental Crimes in the Coral Triangle Workshop Series Project (‘the Project’) produced by Pacific Forum International, a Honolulu-based think tank, in partnership with the Office of Women, Peace & Security (WPS) at the U.S. Indo-Pacific Command (USINDOPACOM).

In building on United Nations Security Council Resolution 1325 and the Women, Peace and Security Agenda,¹ and in recognition of the critical need to advance gender equality and human security across all domains of maritime security in the Coral Triangle region, the Indo-Pacific, and globally, the Project’s objectives were:

1. To promote a cooperative effort between the maritime law enforcement agencies of Indonesia, Timor-Leste, and Papua New Guinea (PNG);
2. To integrate Women, Peace, and Security (WPS) and promote cross-border cooperation in tackling maritime environmental crime in the Coral Triangle and beyond;
3. To make space for engaging with Indonesian, Timorese, and Papua New Guinean maritime law enforcement on incorporating a gender perspective; and
4. To promote dialogue between participants from local women's civil society organizations (CSOs) and maritime law enforcement that work toward protecting the region’s maritime environment.

The Project featured a research project and a series of virtual and hybrid/in-person workshops held in 2024. The workshop series brought together representatives from CSOs, militaries, governments, and law enforcement agencies from Indonesia, Papua New Guinea, and Timor-Leste to explore the intersections of gender and maritime environmental crimes. The workshops aimed to develop an understanding of how maritime environmental crimes and insecurity uniquely impact women and girls in the Coral Triangle, and to identify best practices for a gender-responsive approach when responding to maritime environmental crimes. Additionally, the workshops sought to foster civil-military collaboration within each country, and connections between civil society organizations and military organizations across State boundaries. A list of participating organizations, government agencies, and security and defense forces can be found on page 13.

Two workshops were held in 2024: an introductory two-day virtual workshop, followed by a two-day hybrid/in-person workshop. The first workshop was held 6-7 February with 33 participants joining. The objective of this first workshop was to create a shared understanding of the principles of WPS, human security, and how women and girls are uniquely impacted by maritime environmental crimes. The second workshop was held on 24-25 April at the Coral Triangle Center in Bali, Indonesia. Thirty-four participants joined, with thirty-two joining in-person and two participating virtually. The workshop included eight sessions, which featured a combination of presentations by representatives from CSOs, government, and the security forces; small group discussions; and interactive exercises. The second workshop culminated in a small-group policy exercise, where participants broke out into groups and co-developed potential solutions to obstacles when integrating WPS into responses to maritime environmental crimes. The findings were then presented to the wider group for discussion and refinement. The outcome of this exercise can be found on page 53.

¹ United Nations Security Council, “Landmark Resolution on Women, Peace and Security,” United Nations, October 31, 2000, <https://www.un.org/womenwatch/osagi/wps/>.

HOW TO USE THIS MAJOR REPORT

We have developed the *Empowering Women, Peace and Security in the Coral Triangle: Bridging Civil-Military and State Boundaries to Tackle Maritime Environmental Crimes Major Report* as a guide for institutions and organizations navigating the complexities of applying a gender perspective to address maritime environmental crimes in the Coral Triangle within civilian-military contexts. This ‘how-to’ section provides a quick overview for leveraging this *Major Report*. This Major Report was developed to provide a detailed understanding of the complex interplay between intersectional gender insecurities, maritime environmental insecurities, and security risks, and thereby to aid CSOs, defense and security forces, and government policymakers in co-creating more collaborative and inclusive maritime environmental security responses. Recognising the importance of readily accessible gender equality programming tools, a separate [Report In-Brief](#) represents a more succinct version of the Major Report.

Chapter 1: Introduction to Maritime Environmental Crimes: Maritime environmental insecurities significant threats to coastal communities and the blue economy, particularly in the Indo-Pacific region. This section notes that as environmental degradation -- such as illegal fishing, wildlife trade, and pollution, among other threats -- intensifies in marine contexts, there is an increasing need for thoughtful, gender-responsive approaches to tackling the challenges..

Chapter 2: Gender Dynamics in Maritime Environmental Security: Understanding the intersection of gender, maritime environmental health, and national and international security is crucial for addressing human security concerns. Moreover, human insecurities are frequently tied to and can escalate into national and international security issues. This section explores these issues.

Chapter 3: WPS and Maritime Environmental Crimes Implementation: The WPS agenda provides a framework for understanding a variety of gendered insecurities. This chapter explores how to apply the WPS agenda to the challenges faced within the maritime environment.

Chapter 4: Civil-Military Partnerships for Managing Maritime Environmental Crimes in the Coral Triangle: Advantages of Working with Women’s Organizations: An effective, if underexplored pathway for integrating an intersectional gender perspective into disaster management planning is through civil-military cooperation which elevates the knowledge and leadership of women and women’s CSOs. This chapter explores the vital need for ensuring inclusive, effective, and human security focused maritime security strategies, and offers suggestions for best practices.

Chapter 5: Gender in Regional Architecture and Cross-border Cooperation: This chapter provides an overview of existing regional maritime environmental security frameworks, and discusses which currently contain gender perspectives and which require revision to take gendered considerations into account.

Chapter 6: Women, Customary Law, and the Maritime Security Environment: This section draws on international laws and frameworks in underscoring policy avenues for integrating a gender perspective into maritime security planning.

Chapter 7: Action Items and Recommendations to Advance Integration of Gender-Responsive Cross-Border Civ-Mil Cooperation towards Combating Maritime Environmental Crimes: The report concludes with a list of action items and recommendations developed over the course of the project and committed to by the new Community of Practice established by the participants.

PROJECT PARTNERS AND DEFENSE AGENCIES

ORGANIZING PARTNERS

PACIFIC FORUM INTERNATIONAL

Pacific Forum's mission is to promote peace and stability across the Indo-Pacific. Our work therefore dynamically addresses both longstanding and emerging security issues in the region. Currently, we characterize our programs under seven umbrella "Focus Areas."



While not inclusive of all our activities, these Focus Areas allow us to showcase the exciting initiatives underway at Pacific Forum. From timely publications and research resources to public events and key findings from our dialogues, the Focus Areas offer greater insight into the cross-cutting programs that distinguish us as a leading Indo-Pacific foreign policy research institute.

- Nonproliferation
- Strategic Relations
- Maritime Security
- Cybersecurity and Critical Technologies
- Women, Peace & Security
- Public Engagement
- The Council for Security Cooperation in the Asia Pacific (CSCAP)

The Pacific Forum Project Team

Maryruth Belsey Priebe

Gender in Health and Climate Security Co-Lead
Director for WPS Programs and Senior Fellow
Pacific Forum International

Crystal Pryor, Ph.D.

Senior Advisor
Pacific Forum International

Valeria Villasenor-Bruyere

Program Manager, WPS Programs
Pacific Forum International

Astha Chadha, Ph.D.

WPS Fellow
Pacific Forum International

Luke McFadden

Intern
Pacific Forum International

Charity Borg

WPS Fellow
Pacific Forum International

Jeff Otto

Director for Young Leaders Programs
Pacific Forum International

Allison Lee

APAL Scholar
Pacific Forum International

Miah Bonilla

APAL Scholar
Pacific Forum International

Office of Women, Peace & Security (WPS), U.S. Indo-Pacific Command

The U.S. Indo-Pacific Command (USINDOPACOM) Office of WPS advances human security through a whole-of-government, whole-of-society approach. The development of knowledge and understanding of the significant role gender plays in the operational environment requires an institutional delivery of WPS concepts through training and education. Delivery of core principles of gender perspectives include audiences of DoD personnel, interagency professionals, and allies and partners. The origins of WPS began with the United Nations Security Resolution (UNSCR) 1325 in 2000 drawing international awareness to the gendered impact of crisis and conflict on populations with significant negative impacts on women and girls. Moving beyond the naming convention of Women, Peace and Security allows for the defense and security sector to operationalize gender in a way which expands understanding of the human terrain landscape allowing for more nuanced planning, engagement and resourcing.

A gender perspective expresses understanding of what it means to be a man, woman, boy, or girl and how people come in harm's way differently and are impacted by and recover from disaster and crisis due to how their gender is perceived in a given culture or social structure context. In other words, maritime environmental crimes, climate change, and natural disasters by themselves are not gendered, but their impacts are. Meaningful implementation of WPS starts with supportive in-depth analysis at tactical, operational, and strategic planning levels. Performance at these levels provides the framework for more targeted investments focusing on drivers of instability. Application of this type of analysis enables sustainable outcomes and expands our knowledge and understanding of human security and what capabilities are required.

USINDOPACOM began institutionalizing WPS through a command instruction in 2017, followed by the establishment of an Office of Women, Peace & Security in 2019. This new capability oversees command-wide implementation of WPS that includes gender mainstreaming throughout the command's policies, plans, programs, exercises, and assessments; tailored education and training; partner nation engagement; research innovation and application; and guiding a growing network of trained Gender Advisors and Gender Focal Points. The Office of WPS employs a Command Gender Advisor, Senior Analyst, Security Cooperation Integrator, Security Cooperation Administrator, Planner, Policy and Partnerships Advisor, and Operations Management. Through institutional authority and wide operational application, WPS provides unique insights expanding security cooperation opportunities and strengthening collaboration with allies and partners to better mitigate the impacts of emerging global threats and complex security challenges.

Mission Statement:

The Office of Women, Peace & Security (WPS) implements the DoD WPS Strategic Framework and Implementation Plan by mainstreaming a gender perspective into theater plans, programs, and policies in order to enable the USINDOPACOM enterprise to develop inclusive security strategies that advance a Free and Open Indo-Pacific.

The U.S. Indo-Pacific Command Project Team

Delaina Sawyers, Ph.D.

Senior Women, Peace & Security Analyst
U.S. Indo-Pacific Command

Amalia Hilliard

Women, Peace, and Security Cooperation Administrator
U.S. Indo-Pacific Command

IMPLEMENTING PARTNERS

Coral Triangle Center

The Pacific Forum thanks the Coral Triangle Center (CTC) for providing their engaging and inspiring meeting space and for their logistical support. We are also grateful for their partnership in developing topical content and identifying subject matter experts to explore these important topics. The CTC is an independent, non-profit foundation whose goal is to promote the conservation of marine biodiversity and the sustainable management of marine and coastal resources across the Coral Triangle.



PARTICIPATING DEFENSE / SECURITY BRANCHES & GOVERNMENT AGENCIES

Indonesia

Bakamla, Directorate of Cooperation

Bakamla, Directorate of Law

Fisheries Products Processing Surveillance, Directorate of Management Fisheries Resources Surveillance Directorate

General of Marine and Fisheries Resources Surveillance

Human Resources of Law Enforcement Officer and Cooperation in Law Enforcement, Directorate of Law Enforcement,

Directorate General of Marine and Fisheries Resources Surveillance

Timor-Leste

General Directorate of Fisheries, Aquaculture and Marine Resources

Ministry of Agriculture, Livestock, Fisheries and Forestry

Ministry of Defense

National Police of Timor-Leste

Papua New Guinea

Papua New Guinea Defence Force

PARTICIPATING CIVIL SOCIETY ORGANIZATIONS

Indonesia

Coral Triangle Center (CTC)

Coral Triangle Initiative - Coral Reefs, Fisheries, and Food Security (CTI-CFF)

Destructive Fishing Watch (DFW)

Indonesia Ocean Justice Initiative (IOJI)

Research Center for Society and Culture, National Research and Innovation Agency

Timor-Leste

Belun

Fundasaun Mahein

Papua New Guinea

Advancing PNG Women Leaders Network

Piku Biodiversity Network Inc.

Sea Women of Melanesia Inc.

INTRODUCTION TO MARITIME ENVIRONMENTAL CRIMES



Image credit: Picryl



The fisheries and marine ecosystems of the Coral Triangle directly support the food security and livelihoods of over 120 million people in the region,² and indirectly support an additional 350 million people.³ Maritime environmental crimes such as illegal, unreported, and unregulated (IUU) fishing, fisheries convergence crimes, plastic pollution, habitat destruction, and wildlife trafficking jeopardize the health of fish stocks, marine habitats, and biodiversity in the Coral Triangle. These crimes undermine the livelihoods of communities reliant on these resources and diminish their resilience to climate change-induced shocks. The following is a brief overview of some of the most egregious and common marine crimes taking place within the Coral Triangle.

ILLEGAL, UNREPORTED, AND UNREGULATED (IUU) FISHING AND CONVERGING FISHERIES CRIME

Illegal, unreported, and unregulated (IUU) fishing is an umbrella term that encompasses a diverse range of fishing practices, both legal and illegal, that impact marine environments. IUU fishing occurs globally in both coastal and international waters, known as the high seas. It affects both small-scale and industrial fisheries. As defined by the Food and Agriculture Organization of the United Nations (FAO), "illegal" fishing refers to activities carried out by national or foreign vessels within a country's jurisdictional waters without authorization or in violation of its laws and regulations. It also includes fishing by vessels from States that are members of a regional fisheries management organization (RFMO) but are operating in violation of that organization's conservation and management measures or relevant international laws. Additionally, it covers fishing activities that breach national laws or international commitments, including those agreed upon by States cooperating with a regional fisheries management organization. "Unreported" refers to fishing activities that either have not been reported or have been inaccurately reported to the relevant national authorities, thereby violating national laws and regulations, or fishing within the jurisdiction of a RFMO that has not been disclosed or has been falsely reported, contrary to the organization's reporting requirements. Unreported fishing is not only fraudulent, but it also undermines fisheries management by skewing the accuracy of fish stock assessments upon which regulations are based. "Unregulated" fishing refers to fishing activities in areas without any fisheries management or conservation measures, including on the high seas and areas not managed by an RFMO.⁴ IUU fishing can include practices such as fishing with poisons, noxious chemicals or explosives, using illegal gear, harvesting over allowable quotas, and poaching.⁵

Fisheries crime encompasses a wide range of criminal activity connected to the fishing sector including money laundering, tax crimes, document fraud, food fraud, identity fraud, bribery and corruption, and wildlife trafficking.⁶ The hidden nature of IUU fishing and fisheries crimes often allures additional crimes, such as piracy, human and labor rights abuses, trafficking in persons, smuggling drugs and/or small arms. These fishery crimes are often referred to as "crimes

² "Coral Triangle | Facts," World Wildlife Fund (WWF), accessed June 6, 2024, <https://www.worldwildlife.org/places/coral-triangle>.

³ UN Department of Economic and Social Affairs, "The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)," United Nations, accessed June 10, 2024, <https://sdgs.un.org/partnerships/coral-triangle-initiative-coral-reefs-fisheries-and-food-security-cti-cff>.

⁴ Food and Agriculture Organization of the United Nations, "What Is IUU Fishing? | Illegal, Unreported and Unregulated (IUU) Fishing," accessed June 7, 2024, <https://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/i>

⁵ Gohar A. Petrossian, "Preventing Illegal, Unreported and Unregulated (IUU) Fishing: A Situational Approach" 189 (September 2015): 39–48.

⁶ United Nations Office on Drugs and Crime, "Fisheries Crime: Transnational Organized Criminal Activities in the Context of the Fisheries Sector" (Vienna, Austria: UNODC), accessed June 26, 2023, https://www.unodc.org/documents/about-unodc/Campaigns/Fisheries/focus_sheet_PRINT.pdf.

of convergence”⁷ and are frequently perpetuated by highly organized transnational criminal networks, according to the United Nations Office of Drugs and Crimes (UNODC).⁸ In all of its forms, IUU fishing and related fisheries crimes harm the food, economic, and environmental security of coastal communities.⁹ These activities undermine national and regional efforts to conserve and manage fish stocks and the marine environment, threaten the rule of law, and reduce fishers' trust in authorities. Moreover, they greatly disadvantage fishers that act responsibly and honestly. The FAO estimates that each year global economic losses from IUU fishing are estimated to be US\$10-23 billion, with 11-26 million metric tons of fish harvested by IUU fishing, or roughly one in five fish, worldwide.¹⁰

IUU FISHING AND CONVERGING FISHERIES CRIMES IN THE CORAL TRIANGLE

“The IUU fishing in the Kikori Delta negatively impacts the Delta’s biodiversity, community livelihoods, and community dynamics, as there is a constant movement of people in and out of the communities.”

-Joyce Mavera, Piku Biodiversity Network, PNG

Indonesia, Papua New Guinea (PNG) and Timor-Leste together comprise approximately half of the Coral Triangle region.¹¹ IUU fishing and converging fishery crimes in their waters harm the food, economic, and ecological security of each country. Destructive fishing practices such as fishing with poison, explosives, and illegal gear damage the region’s critical marine habitats, such as coral reefs, seagrass beds, and mangroves, that serve as spawning grounds and migratory stopovers for commercially important fish stocks, charismatic megafauna, and keystone species.¹² Exact figures on each country's economic losses from IUU fishing and fisheries crime are difficult to find due to the clandestine nature of the industry. Research by the Arafura and Timor Seas Ecosystem Action Phase 2 (ATSEA-2) Project estimated that economic losses from IUU fishing cost Indonesia approximately US\$70,260,000 from 2015-2019; PNG US\$8,840,000 in 2016 and 2018-2019; and Timor-Leste US\$30,000,000 in 2018.¹³

The governments of Indonesia, PNG and Timor-Leste have varying degrees of political will and monitoring, control, and surveillance (MCS) and enforcement capacity to combat IUU fishing and associated fisheries crimes to successfully apprehend and prosecute violators. Under Indonesia’s former Minister of Maritime Affairs and Fisheries, Susi Pudijastuti (2015-2019), Indonesia held a public and successful campaign to deter foreign fishing vessels from encroaching on Indonesian waters. Under her tenure, reported IUU fishing by foreign vessels dropped by 90 percent, and the Indonesian enforcement authorities sank 556 illegal

⁷ Lily Schlieman, “Illegal, Unreported, and Unregulated Fishing in Southeast Asia: Trends and Actors,” *Asia Policy* 18, no. 4 (October 26, 2023), <https://www.nbr.org/publication/illegal-unreported-and-unregulated-fishing-in-southeast-asia-trends-and-actors/>.

⁸ United Nations Office on Drugs and Crime, “Fisheries Crime: Transnational Organized Criminal Activities in the Context of the Fisheries Sector.”

⁹ United Nations Office on Drugs and Crime, “Fisheries Crime: Transnational Organized Criminal Activities in the Context of the Fisheries Sector.”

¹⁰ United Nations, “International Day for the Fight against Illegal, Unreported and Unregulated Fishing: The Toll of Illegal, Unreported and Unregulated Fishing,” United Nations (United Nations), accessed June 7, 2024, <https://www.un.org/en/observances/end-illegal-fishing-day>.

¹¹ Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security, “The Coral Triangle Atlas,” accessed June 8, 2024, <http://ctatlas.coraltriangleinitiative.org/About>.

¹² Sukanan Darunee, “Illegal Fishing Endangers Both Ecosystems and Food Security,” July 18, 2019, <https://www.sustainability-times.com/environmental-protection/illegal-fishing-wreaks-havoc-with-marine-ecosystems/>.

¹³ Arie Afriansyah et al., “Baseline Estimates Of RPOA-IUU Participating Countries” (Indonesia: Faculty of Law Universitas Indonesia, March 2021), https://atsea-program.com/wp-content/uploads/2023/01/Final-Report_Baseline-Estimates-RPOA-IUU_FIN__organised_2.pdf.

foreign fishing vessels.¹⁴ PNG and Timor-Leste, however, are challenged by a lack of capacity with regard to MCS and enforcement.¹⁵ Recognizing this, foreign fishing companies from the People's Republic of China (PRC), with extensive histories of previous IUU fishing violations, have begun to set up operations in PNG and Timor-Leste, where their vessels can operate with reduced political and law-enforcement scrutiny.¹⁶

IUU fishing and fisheries crimes are committed by a variety of domestic, regional, and foreign vessels. Across the three countries, common offenses committed by artisanal and small-scale vessels include fishing in marine protected areas (MPA), underreporting or failing to report catch, using illegal gear, harvesting undersized or out-of-season species, and encroaching on the waters of neighboring States.¹⁷ Commercial vessels from Indonesia, PNG and Timor-Leste fish illegally in the waters of neighboring States using illegal gear, underreporting catch, and encroaching on waters reserved for artisanal and small-scale fishers. Foreign industrial vessels flagged to the Philippines, the PRC and Vietnam - some with connections to transnational organized crime - are also known to encroach and fish illegally in Indonesia, PNG, and Timor-Leste's waters. A workshop participant from PNG noted that PRC vessels run an illegal fish maw fishery in the Kikori Delta in southern PNG, while PRC vessels have been caught running industrial shark finning operations in Timor-Leste in contravention of national and international law.

WILDLIFE TRAFFICKING IN THE CORAL TRIANGLE

Wildlife trafficking is one of the most profitable maritime environmental crimes, and encompasses the harvesting and selling of wildlife and wildlife products for use as food, medicine, pets, and apparel. Wildlife trafficking is often closely connected to poaching, the illegal harvest of protected species in contravention of official conservation and management measures. Criminal networks involved in poaching and wildlife trafficking may also be involved in other forms of illicit activity, such as IUU fishing, trafficking in persons, drug and small arms, and tax crimes and document forgery.¹⁸ Wildlife trafficking can have significant impacts on environmental and human health.¹⁹

The Coral Triangle's high levels of marine biodiversity, coupled with porous maritime borders, make the region a hotspot for poaching and wildlife trafficking. Wildlife trafficking in the region is closely connected to IUU fishing due to the maritime nature of the region. For example, sharks, rays, giant clams, turtles, sea horses, and other marine species are often harvested through illegal means or sold on illicit markets. Legal harvests are often underreported or not reported at all. Maritime transport is crucial for wildlife trafficking operations in the Coral Triangle and operations are conducted by actors operating on a variety of scales, from familial and artisanal trade to large-scale organized criminal networks.²⁰

The Coral Triangle's rich marine biodiversity, which supports endangered, threatened, and protected (ETP) species and charismatic megafauna, coupled with its porous maritime borders, makes it a hotspot for poaching and wildlife

¹⁴ Center for Strategic and International Studies (CSIS), "Legacies, Lessons and Lobsters: Indonesia's Maritime Policy in a Post-Susi World," January 15, 2020, <https://www.csis.org/analysis/legacies-lessons-and-lobsters-indonesias-maritime-policy-post-susi-world>.

¹⁵ ATSEA, "Wave of Collaborations: Joint Actions in Enhancing Coastal Communities Livelihoods," Newsletter, ATSEA Newsletter (ATSEA, March 2023),

https://www.undp.org/sites/g/files/zskgke326/files/2023-04/2023-Q1_E-newsletter_draft_Final.docx_compressed.pdf.

¹⁶ David Brewster, "Chinese Fishing Fleet a Security Issue for Australia," *The Interpreter*, November 7, 2018,

<https://www.lowyinstitute.org/the-interpreter/chinese-fishing-fleet-security-issue-australia>.

¹⁷ Schlieman, "Illegal, Unreported, and Unregulated Fishing in Southeast Asia: Trends and Actors."

¹⁸ United Nations Office on Drugs and Crime, "Fisheries Crime: Transnational Organized Criminal Activities in the Context of the Fisheries Sector."

¹⁹ U.S. Customs and Border Protection, "Wildlife Trafficking," August 1, 2023,

<https://www.cbp.gov/trade/programs-administration/natural-resources-protection/wildlife-trafficking>.

²⁰ The Asia Foundation, "Trade in the Sulu Archipelago: Informal Economies Amidst Maritime Security Challenges" (San Francisco: The Asia Foundation, October 2019),

<https://asiafoundation.org/wp-content/uploads/2019/10/Trade-in-the-Sulu-Archipelago-Informal-Economies-Amidst-Maritime-Security-Challenges.pdf>.

trafficking.²¹ Wildlife trafficking in the region ranges from small-scale family and artisanal operations to large organized criminal networks, and often involves other illicit activities such as IUU fishing and trafficking in persons due to the fluid nature of maritime logistics.

Specifically, Indonesia, PNG and Timor-Leste are source markets for highly coveted fish maw, sea cucumbers, giant clams, sea turtles, sharks and rays, rare birds, reptiles and terrestrial mammals, as well as keystone species that have significant impact on their environment relative to their abundance. Where management efforts have not yet caught up with demand, like PNG's fish maw fishery, many legal catches remain underreported and threaten the delicate balance of the marine ecosystem.²² There is a lack of data on wildlife trafficking in the border areas between Indonesia, PNG and Timor-Leste, suggesting a need for further research. Anecdotal evidence suggests that the PNG-Indonesia border is a conduit for the illicit wildlife trade.²³ Poaching and wildlife trafficking in Timor-Leste target sea turtles and bush meat for sale and consumption in the domestic market, although there have been documented instances of large-scale illegal shark finning operations by PRC fishing operators.²⁴ Additional research conducted by the non-governmental organization (NGO) TRAFFIC in the Sulu-Celebes Sea in the northern Coral Triangle found that the region has an extensive illicit transnational wildlife trade in terrestrial and marine species between Indonesia, Malaysia, and the Philippines. Of 452 recorded seizures in the region from 2003-2021, marine and freshwater turtles (128), songbirds (40), parrots (39), pangolins (36), and giant clams (35) comprised the greatest number of seizure incidents.²⁵

The capacity of enforcement authorities to identify, enforce, and prosecute actors for wildlife trafficking and poaching is limited. Indonesia, PNG and Timor-Leste have long coastlines and limited resources to patrol them. PNG's security forces are not present in many provinces, while the Timorese security forces have been waiting to obtain a patrol boat from Australia to broaden their patrol range. Unfortunately, as of June 6, 2024, Fundasaun Mahein reports that Australia has suspended the delivery of this patrol boat.²⁶ Indonesia's extensive wildlife trade often conceals significant levels of wildlife trafficking, much of which is still orchestrated by criminal networks.²⁷

MARINE POLLUTION IN THE CORAL TRIANGLE

²¹ T.R. Sobha, C.P. Vibija, and P. Fahima, "Coral Reef: A Hot Spot of Marine Biodiversity," *Conservation and Sustainable Utilization of Bioresources*, Sustainable Development and Biodiversity, 30 (January 6, 2023): 171–94.

²² Yolarnie Amepou et al., "Maw Money, Maw Problems: A Lucrative Fish Maw Fishery in Papua New Guinea Highlights a Global Conservation Issue Driven by Chinese Cultural Demand," *Conservation Letters*, accessed June 8, 2024, <https://doi.org/10.1111/conl.13006>.

²³ Conservation and Environment Protection Authority, "Rapid Assessment: Criminal Justice Response to Wildlife and Forest Crime in Papua New Guinea" (United Nations Office on Drugs and Crime (UNODC), December 2022), https://www.unodc.org/res/environment-climate/asia-pacific_html/PNG_Assessment.pdf.

²⁴ Stop Illegal Fishing, "Chinese Fishing Boats Found with Piles of Dead Sharks Linked to Company Accused of Forced Labour, Torture," Stop Illegal Fishing, November 7, 2017, <https://stopillegalfishing.com/press-links/chinese-fishing-boats-found-piles-dead-sharks-linked-company-accused-forced-labour-torture/>.

²⁵ Olivia H. Armstrong et al., "Illegal Wildlife Trade: Baseline for Monitoring and Law Enforcement In The Sulu-Celebes Seas" (TRAFFIC, May 2023), https://www.traffic.org/site/assets/files/21879/illegal_wildlife_trade_baseline_for_monitoring_and_law_enforcement_in_the_sulu-celebes_seas_2023.pdf.

²⁶ Fundasaun Mahein, "Suspension of Patrol Boat Delivery from Australia Harms National Security," June 6, 2024, <https://www.fundasaunmahein.org/2024/06/06/suspension-of-patrol-boat-delivery-from-australia-harms-national-security/>.

²⁷ Basten Gokkon, "Indonesia Ranks High on Legal Wildlife Trade, but Experts Warn It Masks Illegal Trade," Mongabay Environmental News, December 3, 2021, <https://news.mongabay.com/2021/12/indonesia-ranks-high-on-legal-wildlife-trade-but-experts-warn-it-masks-illegal-trade/>.

Marine pollution in the Coral Triangle region is derived from a variety of human-created chemical and physical sources, including plastic pollution, domestic and industrial waste, sewage, oil spills, agricultural chemicals, aquaculture and mariculture operations, mine tailings, and sediment and runoff from unmanaged coastal development.²⁸ Pollutants can flow from inland areas to the ocean via wind and rivers, particularly during rainy seasons. Inland logging, mining, farming, and development can create upstream chemical pollutants and sediment, which can damage critical marine ecosystems such as coral reefs and seagrass beds.²⁹ Fertilizer pollutants can increase phosphate and nitrate levels,

"In the local context, we have problems with explosive fishing and using noxious chemicals. Another environmental crime in the Java Sea is maritime pollution. Plastic pollution is everywhere [in Indonesia] from the west to the east. The other is coral destruction, unfortunately happening in the tourist area. Anchors hit the coral, people go diving and the fins destroy the coral."

*- Andreas Aditya Salim, Indonesia
Ocean Justice Initiative*

leading to algae blooms that can be toxic to marine life and people. Invasive species can be introduced through the aquarium trade and aquaculture and mariculture operations with insufficient biosecurity.³⁰

Plastic pollution damages marine habitats and threatens the wildlife who may ingest, suffocate, or become entangled in it. Its presence also detracts from marine and coastal tourism and negatively impacts human health and wellbeing.³¹ Marine pollution is one of the greatest threats to the health of ecosystems and coastal communities in the Coral Triangle.³²

While survey data indicates that Indonesia's coral reefs are largely healthy, the country's marine environment is threatened by pollution from oil transportation, both licit and illicit, originating from Singapore, the Philippines, and Timor-Leste, as well as runoff from agriculture and construction, mine tailings,³³ and household waste.³⁴ Indonesia is also one of the largest contributors to marine plastic waste pollution in the world, as the country produces 3.2 million metric tons of unmanaged plastic waste annually, of which approximately 1.3 million metric tons ends up in the ocean.³⁵

PNG and Timor-Leste have limited data on the effects of pollution on coral reefs and the marine habitat in their territorial waters and exclusive economic zones (EEZ). Survey data that does exist in PNG indicates that coral reefs are largely healthy and able to recover from disturbances. However, studies conducted along PNG's coastline show that improperly disposed mine tailings cause sedimentation and water toxicity in nearshore reefs, leading to reduced coral growth and species richness.³⁶ Both PNG and Timor-Leste

²⁸ Asian Development Bank, "State Of The Coral Triangle: Indonesia" (Mandaluyong City, Philippines: ADB, 2014), <https://www.adb.org/sites/default/files/publication/42409/state-coral-triangle-indonesia.pdf>.

²⁹ National Geographic Society, "Marine Pollution," National Geographic, February 22, 2024, <https://education.nationalgeographic.org/resource/marine-pollution>.

³⁰ Asian Development Bank, "State Of The Coral Triangle: Indonesia."

³¹ International Union for Conservation of Nature (IUCN), "Plastic Pollution," *IUNC Issues Brief* (blog), May 2024, <https://www.iucn.org/resources/issues-brief/plastic-pollution>.

³² CTI-CFF Regional Secretariat, "Marine Plastic Pollution and Its Sources in the Coral Triangle" (Indonesia: Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, 2023), <https://www.coraltriangleinitiative.org/sites/default/files/resources/WWF-CTI%20Stocktake%20report%20v4%20-%20lowres.pdf>.

³³ Mine tailings are the waste leftover after the processing of iron ore. Tailings can be composed of organic matter, finely ground rock, water, and chemicals from the ore extraction process.

³⁴ ATSEA, "Wave of Collaborations: Joint Actions in Enhancing Coastal Communities Livelihoods."

³⁵ CTI-CFF Regional Secretariat, "Marine Plastic Pollution and Its Sources in the Coral Triangle."

³⁶ M.D.E Haywood et al., "Mine Waste Disposal Leads to Lower Coral Cover, Reduced Species Richness and a Predominance of Simple Coral Growth Forms on a Fringing Coral Reef in Papua New Guinea," *Marine Environment Research* 115 (April 2016): 36–48.

create significantly less plastic waste and marine plastic pollution than Indonesia, and Timor-Leste has pledged to become the first plastic neutral country in the world by 2030.³⁷



Image Credit: Flickr/Bo Eide

³⁷ Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security, “Regional State Of The Coral Triangle Coral Triangle Marine Resources: Their Status, Economies, and Management” (Asian Development Bank, 2014), <https://www.adb.org/sites/default/files/publication/42393/regional-state-coral-triangle.pdf>.

GENDER DYNAMICS IN MARITIME ENVIRONMENTAL SECURITY



Image Credit: Flickr/WorldFish

Women serve as the often unseen yet essential backbone of fisheries operations in the Coral Triangle, playing pivotal roles in every aspect from resource management to post-harvest processes. Women's extensive, albeit frequently overlooked, contributions span various sectors, including wild-caught fisheries and aquaculture, sales and marketing, conservation, and tourism, significantly bolstering the region's sustainable blue economy. Despite their integral involvement, policies and interventions in maritime security seldom recognize or address the unique challenges and critical input of women, underscoring the need for a more inclusive approach to maritime governance.

WOMEN AND THE MARINE ENVIRONMENT

Women play a significant role in the stewardship, management, and use of marine resources in the Coral Triangle, and women occupy important roles in the Coral Triangle's sustainable blue economy, providing paid and unpaid labor in capture fisheries, aquaculture, conservation, and the tourism sector. However, women's contributions are routinely overlooked in policy research, design, and implementation, law enforcement operations, and development interventions.³⁸

"Most of the decision-makers are men; that is a problem. It is always decided by a leader who is a man so we don't have the other perspective."

**-Jeanny Sariat,
Destructive Fishing Watch,
Indonesia**

Women are involved in every part of the fishing industry and fisheries value chain, although their roles are often devalued and ignored due to perceptions that fisheries are a masculine industry. Worldwide, approximately half of fishery workers are women.³⁹ While men dominate offshore and foreign distant-water fishing industries, women are heavily involved in nearshore and coastal fishing, gleaning⁴⁰ (coastal and nearshore resource harvesting with basic or no gear), and aquaculture and mariculture operations. In the post-harvest sector, women work as processors, mongers, business marketers, and buyers. Women manufacture and repair gear and provide financing and loans to others in the fisheries sector, and are overwhelmingly responsible for unpaid care and domestic work within the home, including raising children and managing finances.

Crucially, women in the fisheries and aquaculture sector contribute significantly to household and community food security. For example, research conducted in coastal villages in Timor-Leste demonstrates that women gleaners have a higher catch rate (100 percent) than men (84 percent). Gleaning provides critical sources of protein for family consumption in a country where approximately 75 percent of the population is food insecure.⁴¹

Women are highly involved in the management and stewardship of marine resources and habitats and therefore may have specialized knowledge that men do not. Women fishers and gleaners interact with the environment every day,⁴² and notice species' size and abundance, reproduction, and distribution, as well as habitat health, which may inform their

³⁸ U.S. Agency for International Development Sustainable Fish Asia Technical Support Activity, "Gender and Inclusive Development Action Plan (GIDAP)" (USAID, August 2022), https://pdf.usaid.gov/pdf_docs/PA00ZJZG.pdf.

³⁹ U.S. Agency for International Development Sustainable Fish Asia Technical Support Activity, "GIDAP."

⁴⁰ According to *Gender in Fishing*, gleaning is a fishing method used in shallow coastal, estuarine and freshwaters or in habitats exposed during low tide.

⁴¹ Jenny House et al., "Women's Experiences of Participatory Small-Scale Fisheries Monitoring in Timor-Leste," *Maritime Studies* 23, no. 9 (February 5, 2024), <https://link.springer.com/article/10.1007/s40152-024-00352-6>.

⁴² Nireka Weeratunge, Katherine A. Snyder, and Choo Poh Sze, "Gleaner, Fisher, Trader, Processor: Understanding Gendered Employment in Fisheries and Aquaculture," *Fish and Fisheries* 11, no. 4 (October 29, 2010): 405–20.

harvesting processes.⁴³ As harvesters, mongers, marketers, and purchasers, women may also be aware of maritime environmental crimes based on their engagement with fishers, middlemen, and other mongers. As a specialized form of security intelligence, such knowledge would be incredibly valuable if passed on to authorities. Women processors and mongers can also use their purchasing power to enforce conservation and management measures. For example, women processors in Indonesia's blue swimming crab fishery have been known to only purchase crabs over the allowed take size and do not purchase breeding females in accordance with the fishery's catch regulations.⁴⁴

THE GENDERED IMPACTS OF MARITIME ENVIRONMENTAL CRIMES

Maritime environmental crimes threaten the food security of coastal communities and the women and girls who live in them in a variety of ways. In terms of family health, IUU fishing, fisheries crime, and habitat destruction directly and indirectly lead to a reduction in protein sources for household consumption and sale. Women may choose to skip meals

"In the [Indonesian] ministry, there is no specific mention of differences of men and women. In the field, the job of fishers is for men; only the men will get insurance. Fisherwomen do not get insurance and are segregated from the industry."

-Dr. Hesti Widodo, Coral Triangle Center, Indonesia

to give protein to their children, putting these women at risk of malnutrition. Economically, marine crimes may result in the loss of commercially important fisheries and marine resources, and subsequently the elimination of women's jobs or significant reduction of their revenue. As household income and resources dwindle, women may struggle to have enough funds for their children's education, medical care for family members, or household savings. Reduced household income and resources can also lead to increased mental and economic stress in the household, which may contribute to increased sexual and gender-based violence (SGBV).⁴⁵

Women also play a critical role in supporting household economic activities through work within the maritime economy, such as weaving and repairing nets, cleaning, processing, marketing, and selling fish, gleaning, and supporting aquaculture and mariculture operations.⁴⁶ Much of this work is unpaid and can be dangerous. In Indonesia for instance, women who make and mend nets may suffer injuries, such as cuts or burns to their hands or bodies, from unmanaged plastic waste.

Maritime environmental crimes leading to the decrease of fish stocks also increases fishing effort, like traveling further distances to find fish and staying away from their families longer, with diminishing returns. As a consequence, the unpaid labor undertaken by women that supports this fishing effort also increases. This adds additional time and workload burden on top of housework,

⁴³ Weeratunge, Snyder, and Sze, "Gleaner, Fisher, Trader, Processor: Understanding Gendered Employment in Fisheries and Aquaculture."

⁴⁴ United Nations Development Programme, "Women Spearheading Sustainable Production of Blue Swimming Crab in Indonesia," UNDP, June 7, 2019, <https://www.undp.org/indonesia/news/women-spearheading-sustainable-production-blue-swimming-crab-indonesia>.

⁴⁵ Kumara Anggita, "How the Fisherwomen of Java Rise above Climate Change and an Increase in Gender-Based Violence," Women's Resilience To Disasters Knowledge Hub, *Case Studies* (blog), October 31, 2021, <https://wrd.unwomen.org/explore/insights/how-fisherwomen-java-rise-above-climate-change-and-increase-gender-based-violence>.

⁴⁶ Arlene Nietes Satapornvanit, "The Importance of Gender in Fisheries: The USAID Oceans Experience," *Fish for the People* 16, no. 2 (2018), https://pdf.usaid.gov/pdf_docs/PA00WK6D.pdf.

childcare, family duties, and paid labor -- all which can negatively impact women's health and wellbeing through the addition of extra mental, physical, and emotional stressors.⁴⁷

Maritime environmental crimes also impact the livelihoods of men in the fisheries and marine resource sectors, disrupting family and community structure and stability.⁴⁸ In many communities in the Coral Triangle, gender norms dictate that men reach specific culturally ascribed milestones such as getting married, having a good job, owning a home, and having children. The impacts of maritime environmental crimes on fisheries, natural resources, and coastal tourism may reduce employment opportunities for men, thereby blocking them from achieving these masculine milestones. In such circumstances, men, young men in particular (and sometimes young women), may seek out other forms of employment, such as agriculture or mining, engage in criminal activity, or migrate to urban areas or abroad to reach these milestones, such as owning a home and start a family.⁴⁹

Under such circumstances, both women and men may become victims of trafficking in persons or forced labor.⁵⁰ Men who remain in the fisheries sector may be subject to unscrupulous recruitment practices and hired under false pretenses. Specifically, men may be trafficked on to foreign distant-water fishing vessels, where they may be forced to work at sea for years at a time in unsafe and inhumane working conditions, subject to slave-like circumstances and abuse without pay or legal redress.⁵¹ The 2015 Benjina Island case illustrates these challenges. Over 4,000 foreign fishermen were trafficked, stranded, and enslaved on Benjina Island. Some fishers had been trapped on Benjina Island for over 20 years and had families with local women. When Indonesian authorities rescued and repatriated the trapped fishermen, they removed men from their families. Separating families not only disrupted relationships and family structures, but it also left many families without their primary breadwinner.⁵²

Women may also seek employment in industrial fish processing operations, where they may also be subject to unscrupulous or fraudulent hiring practices, the withholding of wages and documents, physical and sexual abuse, and unsafe working conditions.⁵³ This notably occurs in Indonesia, which is home to a robust domestic fishing and fish

⁴⁷ UN WomenWatch, "Women, Gender Equality and Climate Change" (United Nations, 2009),

https://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf.

⁴⁸ Faith Ngum and Radha Barooah, "Impact of Biodiversity Loss and Environmental Crime on Women from Rural and Indigenous Communities Evidence from Ecuador, Mexico, Cameroon, and Indonesia" (Global Initiative Against Transnational Organized Crime, October 2023),

<https://globalinitiative.net/wp-content/uploads/2023/10/Faith-Ngum-Radha-Barooah-Impact-of-biodiversity-loss-and-environmental-crime-on-women-from-rural-and-indigenous-communities-GI-TOC-October-2023.v3.pdf>.

⁴⁹ Elizabeth Jones, "The Environmental and Socioeconomic Effects of Overfishing Due to the Globalization of the Seafood Industry" (Thomas Jefferson University | College of Science, Health, and the Liberal Arts), accessed June 10, 2024,

<http://www.philau.edu/collegestudies/Documents/Elizabeth%20Jones.pdf>.

⁵⁰ United States Department of Justice, "Task Force on Human Trafficking in Fishing in International Waters" (United States Department of Justice, January 2021),

<https://www.justice.gov/crt/page/file/1360366/dl?inline#:~:text=Beyond%20the%20significant%20human%20costs,13%20and%20the%20international%20community.>

⁵¹ Environmental Justice Foundation, "Blood and Water: Human Rights Abuse in the Global Seafood Industry" (London, United Kingdom: EJF, May 6, 2019), <https://ejfoundation.org/reports/blood-and-water-human-rights-abuse-in-the-global-seafood-industry>.

⁵² Associated Press, "4,000 Foreign Fishermen Stranded on Remote Indonesian Islands," *The Guardian*, March 28, 2015, <https://www.theguardian.com/world/2015/mar/28/4000-foreign-fishermen-stranded-on-remote-indonesian-islands>.

⁵³ National Oceanic and Atmospheric Administration, "Human Trafficking in the Seafood Supply Chain," Report to Congress, National Defense Authorization Act for Fiscal Year 2020, December 23, 2020,

https://media.fisheries.noaa.gov/2020-12/DOSNOAARepor_HumanTrafficking.pdf.

processing industry, and has over 2.3 million nationals working onboard foreign fishing vessels.⁵⁴ Women from inland provinces can be particularly vulnerable to labor and human rights abuses in the fish processing industry as they have migrated away from their social safety net.

“When enforcement authorities engage in counter-trafficking action, they historically have not integrated a gendered perspective.”

-Andreas Aditya Salim, Indonesia
Ocean Justice Initiative

Maritime environmental crimes reduce the resilience of marine habitats and species to climate change-induced shocks such as severe storm damage, coral bleaching, and fish stock collapse. These can further exacerbate the unique threats and vulnerabilities faced by women and girls to climate change and disasters such as increased SGBV, displacement, and limited access to health care. Climate shocks affect the economic viability of women-heavy maritime industries such as seaweed farming. In Indonesia, women are the primary contributors to the seaweed farming industry, which employs over one million Indonesians. However, warming ocean temperatures and erratic weather patterns are leading to disease and crop death, which are reducing individual and household profits from farms.⁵⁵

Discrimination experienced by women due to their other intersecting identity characteristics can also result in exacerbated insecurities.⁵⁶ Women who live in rural areas; are members of indigenous, stateless, or marginalized communities; have mental or physical disabilities; or are elderly are particularly vulnerable to the impacts of maritime environmental crimes on their livelihood and wellbeing as they are even further outside social and governmental safety nets.⁵⁷

Importantly, women are not only victims or intelligence sources of maritime environmental crimes, they are also perpetrators of such crimes. Like men, the reasons for women to engage in maritime environmental crimes are complex.⁵⁸ Women may engage in or finance maritime environmental crimes such as IUU fishing and wildlife trafficking to provide food for their families. Similar rationale may lead women to engage in smuggling activities or serve as recruiters or middlewomen for human traffickers. It is therefore important to balance robust enforcement and prosecution of maritime environmental crimes with a nuanced understanding of the socioeconomic factors that compel individuals, women, men, and non-binary individuals to partake in such activities.⁵⁹

⁵⁴ International Organization for Migration, “Report on Human Trafficking, Forced Labour and Fisheries Crime in the Indonesian Fishing Industry” (coventry university, 2016), <https://www.iom.int/sites/g/files/tmzbd1486/files/country/docs/indonesia/Human-Trafficking-Forced-Labour-and-Fisheries-Crime-in-the-Indonesian-Fishing-Industry-IOM.pdf>.

⁵⁵ UN Women, “How Gender Inequality and Climate Change Are Interconnected,” *Explainer* (blog), February 28, 2022, <https://www.unwomen.org/en/news-stories/explainer/2022/02/explainer-how-gender-inequality-and-climate-change-are-interconnected>.

⁵⁶ Coined by legal scholar Kimberlé Crenshaw in 1989, ‘intersectionality’ highlights how different forms of discrimination and oppression can intersect and overlap, resulting in unique experiences of marginalization based on individuals’ multiple identities, such as with regards to gender *and* race, class, sexuality, disability, nationality (and other dimensions of identity).

⁵⁷ United Nations Office on Drugs and Crime, “Tackling Crimes That Affect Our Ocean” (UNODC, May 30, 2024), https://www.unodc.org/documents/Maritime_crime/UNODC_Tackling_Crimes_that_Affect_our_Ocean.pdf.

⁵⁸ Jessica S. Kahler and Marisa A. Rinkus, “Women and Wildlife Crime: Hidden Offenders, Protectors and Victims,” *Oryx* 55, no. 6 (November 2021): 835–43, <https://doi.org/10.1017/S0030605321000193>.

⁵⁹ Kahler and Rinkus, “Women and Wildlife Crime: Hidden Offenders, Protectors and Victims.”

WPS AND MARITIME ENVIRONMENTAL CRIMES IMPLEMENTATION



Image credit: Flickr/UN Women

INTRODUCTION TO THE WPS AGENDA

The United Nations (UN) Security Council Resolution 1325 (UNSCR 1325) was adopted as the Women, Peace and Security agenda on October 31, 2000.⁶⁰ This resolution emphasizes the crucial role of women in the prevention and resolution of

"Maritime issues are observed to be a very masculine issue. When fishers' rights are infringed upon, it impacts the laborer's right. But the problem is, the decision-makers of all their rights are men, even though the problem also impacts the wife, daughter, or mother in their family. It is another problem when the solution is not based on the gender perspective,"

-Jeanny Sariat, Destructive Fishing Watch, Indonesia

conflicts, peace negotiations, peace-building, peacekeeping, humanitarian response, and in post-conflict reconstruction while stressing the importance of their equal participation and full involvement in all efforts for the maintenance and promotion of peace and security. UNSCR 1325 also urges all member states to increase the participation of women and incorporate gender perspectives in all UN peace and security efforts. Additionally, it calls on all member states to take increased measures to protect women and girls from SGBV during crises and conflicts.⁶¹

While this resolution issued a broad application of these principles mainly focused on post-conflict situations, the application has expanded significantly in the last 24 years. For example, the United Nations Office on Drugs and Crime (UNODC), which combats transnational organized crime at sea through its Global Maritime Crime Programme (GMCP) initiative, has sought to apply UNSCR 1325 to the planning and implementation of its operations.⁶² The WPS agenda has also grown to emphasize the need to consider the diverse ways in which gender influences security issues by integrating a gender perspective. More than including women equally at all leadership levels, a gender perspective enhances approaches to combating environmental crimes and related activities like human trafficking, drug trafficking, labor trafficking, and weapon smuggling in the maritime space. Recognizing gendered dynamics is crucial for effective intervention and policy development in the Coral Triangle region.

Many UN member states have sought to codify national policies for their own implementation of UNSCR 1325 by developing what is referred to as a WPS National Action Plan (NAP). WPS NAPs serve as strategic frameworks for governments to integrate the WPS Agenda into their domestic and international policies.⁶³ These plans detail objectives and actions aimed at securing the rights of women

When asked, participants noted that lack of funding, lack of staff training, and limited staff capacity (number of people or staff time available) are the greatest factors that limit the integration of women and gender perspectives into maritime environmental security work.

⁶⁰ United Nations Security Council, "Landmark Resolution on Women, Peace and Security."

⁶¹ United Nations Security Council, "The Four Pillars of United Nations Security Council Resolution 1325," United Nations, accessed June 12, 2024, <https://www.un.org/shestandsforpeace/content/four-pillars-united-nations-security-council-resolution-1325>.

⁶² United Nations, "Oceans and the Law of the Sea," United Nations (United Nations), accessed March 26, 2024, <https://www.un.org/en/global-issues/oceans-and-the-law-of-the-sea>.

⁶³ Women's International League For Peace & Freedom, "1325 National Action Plans," 1325 National Action Plans (NAPs), accessed June 12, 2024, <https://1325naps.peacewomen.org/>.

Gender-Transformative Approaches

Transformative approaches go beyond a focus on “gaps” and simply acknowledging gender differences or adding women to a process. “Structural change” is the keyword in gender-transformative programming. Evidence shows that gender transformation needs sustained investments over time to change individual agency; gender roles, norms, and structural power dynamics; as well as legislative and institutional structures. Empowering women and girls and promoting them in positions of social and political influence is intrinsic to transformative change. People of all genders, in particular men and boys, can and should be actively involved as gender equality allies and agents of transformative change. Combined action across scales from the individual level through communities to systems is imperative.

and girls in conflict situations, preventing violence and armed conflict, and ensuring the meaningful participation of women in peace and security efforts both domestically and globally.

As global awareness grows regarding the critical links between maritime environmental health and national security, attention has turned to the pressing challenges posed by resource competition. Marine degradation fuels instability, impacting both terrestrial and maritime communities, particularly in the Coral Triangle. Despite women constituting a significant portion of fishery workers, their distinct vulnerabilities to maritime environmental crimes remain underappreciated. Women's vital roles in maintaining maritime health and security are often overlooked. WPS NAPs can offer an instrument for addressing and rectifying this oversight.

Addressing the complexities of maritime environmental crimes becomes more effective when incorporating WPS principles. Integrating a gender perspective into security strategy and operational planning fosters inclusivity, resulting in more comprehensive solutions. Such an approach enhances community stability and security by recognizing the unique contributions and vulnerabilities of all society members. Gender-transformative strategies in tackling maritime crimes will not only improve national security but also bolster the safety and resilience of the Coral Triangle region.

INDONESIA'S WPS IMPLEMENTATION

Indonesia introduced its inaugural National Action Plan on Women, Peace, and Security in 2014, spanning the period from 2014 to 2019. Spearheaded by the Ministry of People's Welfare, this comprehensive strategy involved active engagement from civil society in both its development and subsequent implementation. The NAP prioritized a domestic approach, with a core objective centered on safeguarding and empowering women and children as pivotal agents of peace in times of crisis and conflict. Subsequently, in July 2021, Indonesia adopted its second iteration of the NAP (2020-2025), following a National Digital Consultation on Reviewing the National Action Plan on Women, Peace, and Security. This updated plan introduces key provisions aimed at regulating “the protection and empowerment of women and children in social conflicts.”⁶⁴

⁶⁴ SecurityWomen, “INDONESIA,” SecurityWomen, accessed June 12, 2024, <https://www.securitywomen.org/unsr-1325-and-national-action-plans-nap/indonesia>.

Indonesia experienced a turbulent era marked by the Aceh Conflict (1976-2005), experiencing significant human rights violations, including instances of sexual assault, rape, and violence against women. Recognizing the heightened vulnerability of women and children in conflict situations, the second national action plan underscores the imperative to safeguard women from SGBV. Emphasizing empowerment, the plan delineates strategies aimed at fortifying human rights and fostering the active participation of women and children in peacebuilding endeavors.⁶⁵ Furthermore, Indonesia's commitment to the WPS Agenda is evident in its National Report for Beijing+25, wherein the nation pledges to integrate WPS principles to mitigate violent extremism and bolster national capacities. Indonesia has also taken proactive measures by organizing regional training sessions, such as the empowerment of young female diplomats from the ASEAN region in WPS roles as peace negotiators and facilitators.⁶⁶

Indonesia's current WPS NAP emphasizes the integration of WPS principles to address security challenges such as violent extremism. However, it lacks explicit references to key frameworks and a designated budget, while also neglecting to address the roles of women in peacekeeping security forces like the police or defense forces.⁶⁷ Despite this emphasis, the WPS NAP overlooks gender dynamics in maritime security, reflecting a gap in understanding among policymakers.⁶⁸ Rectifying these shortcomings presents an opportunity to strengthen Indonesia's WPS efforts by incorporating international frameworks, recognizing women's roles in security forces, and integrating gender perspectives into maritime security strategies, ultimately enhancing security outcomes.

PAPUA NEW GUINEA WPS IMPLEMENTATION

PNG lacks a formal WPS NAP, yet the national government has launched numerous gender-related policies, programs, and bodies to address various aspects of the WPS agenda. Despite this, progress has been limited toward gender equality objectives outlined in major strategic documents such as Vision 2050, the Development Strategic Plan (DSP) 2010–2030, and the Medium-Term Development Plan (MTDP) 2011–2015.⁶⁹ While these documents express broad aspirations for gender equality, they lack concrete targets for mainstreaming gender issues across sectors and programs. International comparisons, notably the United Nations Development Programme (UNDP) Gender-related Development Index,⁷⁰ reveal a decline in PNG's ranking over the past decade. Out of 146 countries, PNG ranked 106th, 124th, and 140th in 2002, 2006, and 2011 respectively, indicating potential intensification of gender inequities or backsliding on implementation of established gender-related policies and programs.⁷¹

The pervasive threat of violence against women and girls (VAWG) in PNG stems from entrenched traditional gender norms, notably the persistence of harmful customs like bride price and polygamy.⁷² Particularly in the Highlands region, SGBV rates are alarmingly high, often linked to tribal conflicts and sorcery-related violence.⁷³ Escalating competition for land and dwindling resources have fueled an upsurge in witchcraft accusations targeting vulnerable women and girls,

⁶⁵ Women, Peace and Security Programme of the Women's International League for Peace and Freedom, "Indonesia," 1325 National Action Plans (NAPs), accessed June 12, 2024, <http://1325naps.peacewomen.org/index.php/indonesia/>.

⁶⁶ SecurityWomen, "INDONESIA."

⁶⁷ Women, Peace and Security Programme of the Women's International League for Peace and Freedom, "Indonesia."

⁶⁸ Women, Peace and Security Programme of the Women's International League for Peace and Freedom, "Indonesia."

⁶⁹ "Country WID Profile Papua New Guinea" (Japan International Cooperation Agency Planning and Evaluation Department, 2002), https://www.jica.go.jp/Resource/english/our_work/thematic_issues/gender/background/pdf/e02png.pdf.

⁷⁰ United Nations Development Programme, "Gender Development Index," Gender Development Index (GDI), accessed June 12, 2024, <https://hdr.undp.org/gender-development-index>.

⁷¹ Asian Development Bank, "Country Gender Assessment: Papua New Guinea 2011-2012," December 15, 2012, <https://www.adb.org/documents/country-gender-assessment-papua-new-guinea-2011-2012>.

⁷² Amnesty International, "Papua New Guinea Violence Against Women: Not Inevitable, Never Acceptable!," September 2006, <https://www.amnesty.org/en/wp-content/uploads/2021/08/asa340022006en.pdf>.

⁷³ "Papua New Guinea Vision 2050 | Papua New Guinea Environment Data Portal," accessed March 27, 2024, <https://png-data.sprep.org/dataset/papua-new-guinea-vision-2050>.

especially widows and those outside clan affiliations, as a means to manipulate resource ownership. Moreover, entrenched cultural and systemic barriers, prevalent in governmental, religious, and customary institutions, hinder women's participation in political processes and obstruct their access to decision-making roles.⁷⁴

Since 1975, the PNG national government has funded the programs of the National Council of Women (NCW).⁷⁵ However, much of this funding has been absorbed by administrative costs rather than effectively implementing programs. At the provincial level, women have faced challenges with the NCW due to limited outreach and community education. Additionally, the centralization of operations in Port Moresby has resulted in a disconnect between NCW initiatives and grassroots communities, with minimal resources reaching local levels. For instance, Morobe province received only 500 Kina (US\$129) in conditional NCW funding since 1975.⁷⁶ Despite the limited impact of WPS implementation on the security landscape thus far, there is hope for better outcomes should governing bodies receive more resources to support implementation using a localized approach.

The Department for Community Development is designated as the lead department for integrating the initiatives outlined in the National Policy for Women and Gender Equality (2011–2015). This policy is designed to enhance gender equality, participation, and women's empowerment. It articulates objectives aimed at empowering women and creating a policy framework that translates government pledges on gender equality into tangible outcomes through necessary



Image Credit: Luis Ximenes, Belun, Timor-Leste

⁷⁴ Teddy Winn, "Where Are the Women? The Challenge Facing the next PNG Parliament | Lowy Institute," *The Interpreter*, May 10, 2022, <https://www.lowyinstitute.org/the-interpreter/where-are-women-challenge-facing-next-png-parliament>.

⁷⁵ H.E. Robert Aisi, "52nd Session of the Commission on the Status of Women 'Financing for Gender Equality and the Empowerment of Women'" (Independent State of Papua New Guinea, 2008), https://www.un.org/womenwatch/daw/csw/csw52/statements_missions/papua.pdf.

⁷⁶ Fungke Samana, "Establishing a National Machinery for Women's Development in Papua New Guinea," *Victoria University of Wellington Library, Women, Development and Empowerment: A Pacific Feminist Perspective* (blog), accessed June 10, 2024, <https://nzetc.victoria.ac.nz/tm/scholarly/tei-GriWom2-c2-6.html>.

policies and mechanisms.⁷⁷ However, despite efforts to mainstream gender considerations across government sectors, there is a notable lack of budgetary allocation and effective implementation for many of these policies and strategies.⁷⁸

The PNG Defense Forces (PNGDF) have established a Permanent Parliamentary Committee on Gender Equality and Women's Empowerment (GEWE) to collect data on gender-based issues and provide policy recommendations to parliament.⁷⁹ In 2023, this committee presented preliminary study findings to the Papua New Guinea National Parliament, highlighting concerning levels of SGBV in a country not experiencing active conflict. The Committee Chairperson emphasized women's rights as a fundamental national value crucial for mitigating violence, enhancing societal stability, and fostering economic development. Concurrently, the PNGDF Gender Committee sought assistance from USINDOPACOM Office of WPS to train gender focal points in strategies to combat gender-based violence, integrate gender perspectives, and address gender-specific security needs.⁸⁰

TIMOR-LESTE WPS IMPLEMENTATION

In 2016, Timor-Leste adopted its inaugural National Action Plan 1325 (NAP 1325) spanning from 2016 to 2020. Developed by the Ministry of the Interior with support from UN Women, the NAP 1325 emerged from a collaborative, multi-stakeholder process initiated by the Secretary of State for Security in 2013. Aligned with the core pillars of the WPS Agenda, the NAP 1325 prioritizes participation, prevention, protection, and peacebuilding. Informed by the tragic occupation of Timor-Leste (1975 to 1999), the NAP 1325 underscores ongoing challenges women face post-occupation in accessing justice and equal rights.⁸¹ Consequently, it outlines concrete measures to review and enhance laws, policies, and programs, aiming to facilitate women's active and meaningful engagement in peace and state-building endeavors. Additionally, the NAP 1325 aligns with key recommendations from the Commission of Reception, Truth, and Reconciliation (CAVR) report,⁸² addressing systematic abuses and Sexual and Gender-Based Violence (SGBV) perpetrated by members of the Indonesian armed forces. Despite a comprehensive implementation matrix, the NAP 1325 lacks an allocated budget.

In its national report for Beijing+25, Timor-Leste highlighted the implementation of its NAP 1325 and commitments to WPS. The report underscores the transformative nature of the NAP 1325, aimed at fostering gender equality by addressing power dynamics, resource control, decision-making processes, social and political statutes, and access to justice and security. This policy framework outlines strategies and concrete actions to enhance the participation of Timorese women in "peace building, state building, conflict resolution, and the development process."⁸³ Additionally, in February 2024, Timor-Leste launched its second NAP 1325, spanning from 2024 to 2028.⁸⁴ This updated NAP 1325

⁷⁷ Department for Community Development, "National Policy For Women And Gender Equality 2011-2015" (Papua New Guinea), accessed June 10, 2024, <https://faolex.fao.org/docs/pdf/png205113.pdf>.

⁷⁸ UN Capital Development Fund, "Five Reasons Women in Solomon Islands and Papua New Guinea Are Financially Excluded -," UNCDF, June 4, 2020, <https://www.uncdf.org/article/5804/five-reasons-women-in-solomon-islands-and-papua-new-guinea-are-financially-excluded>.

⁷⁹ Samana, "Establishing a National Machinery for Women's Development in Papua New Guinea."

⁸⁰ "Counterpart Launches Capacity Building Program in Support of Women's Peace Building in PNG - Counterpart International," accessed March 12, 2024, <https://www.counterpart.org/counterpart-launches-capacity-building-program-in-support-of-womens-peace-b/>.

⁸¹ "Timor-Leste – 1325 National Action Plans," accessed March 12, 2024, <https://1325naps.peacewomen.org/index.php/timor-leste/>.

⁸² Commission for Reception, Truth, and Reconciliation Timor-Leste (CAVR), "The Report of the Commission for Reception, Truth, and Reconciliation Timor-Leste" (Timor Leste, 2005), <https://www.etan.org/etanpdf/2006/CAVR/Chega!-Report-Executive-Summary.pdf>.

⁸³ "Timor-Leste Launches 2nd Generation of Its National Action Plan 1325 on Women, Peace and Security (NAP 1325)," UN Women – Asia-Pacific, February 16, 2024, 14-15. <https://asiapacific.unwomen.org/en/stories/press-release/2024/02/timor-leste-launches-2nd-generation-of-its-national-action-plan-1325>.

⁸⁴ "Timor-Leste Launches 2nd Generation of Its National Action Plan 1325 on Women, Peace and Security (NAP 1325)."

represents a comprehensive, multi-stakeholder national strategy to ensure that gender equality and women's leadership are integrated into all facets of conflict prevention and resolution, peacebuilding efforts, post-conflict recovery, and humanitarian response in Timor-Leste.

Although the Timor-Leste NAP 1325 sets forth admirable objectives, it grapples with several shortcomings. First, like many states, insufficient resources and funding pose a significant obstacle to achieving the plan's goals, potentially impeding its efficacy. Moreover, ensuring meaningful participation of women in decision-making processes remains a challenge due to cultural and societal norms perpetuating gender inequality and discrimination. Finally, given the lingering effects of past conflicts, the NAP 1325 inadequately addresses relief and recovery efforts, highlighting a crucial area requiring greater attention and emphasis.⁸⁵

APPLYING THE WPS AGENDA TO MARITIME ENVIRONMENTAL SECURITY

Incorporating principles from the WPS agenda is vital for addressing maritime environmental crimes in the Coral Triangle, as it promotes inclusive participation, strengthens protection for vulnerable groups, advances sustainable development, and supports gender equality and community resilience. The WPS agenda's four pillars -- Participation, Protection, Prevention, and Relief and Recovery -- provide a comprehensive framework for addressing these challenges inclusively, and more effectively, with a gender-transformative approach.⁸⁶

THE WPS PARTICIPATION PILLAR AND MARITIME ENVIRONMENTAL SECURITY

By integrating WPS strategies, the Participation Pillar of the WPS Agenda can significantly enhance efforts to tackle maritime environmental crimes in the Coral Triangle, ensuring that women's contributions are recognized and valued in the pursuit of sustainable and equitable development.

Empowering Women in Law Enforcement and Conservation: To effectively address maritime environmental crimes such as illegal, unreported, and unregulated (IUU) fishing and wildlife trafficking in the Coral Triangle, it is essential to incorporate more gender perspectives into maritime law enforcement and conservation programs. Initiatives should prioritize the active recruitment of women into maritime law enforcement and conservation roles and provide tailored training programs to equip them with the necessary skills for effective monitoring and enforcement. Promoting women to leadership positions within maritime agencies and environmental organizations can enhance decision-making processes, allowing them to champion gender-responsive approaches and highlight issues that may otherwise be overlooked.⁸⁷ Additionally, employing women as community rangers to monitor local waters and report illegal activities not only aids in law enforcement but also empowers women economically and socially within their communities. Establishing mentorship programs, where experienced women in law enforcement and conservation efforts mentor younger women entering these fields, can help build a strong, knowledgeable, and empowered workforce committed to tackling environmental crimes.⁸⁸

Women in Decision-Making: Including women in the development of policies related to marine conservation and environmental protection encourages policies that are comprehensive and inclusive. Women bring unique insights into

⁸⁵ Elizabeth Griffiths, Sara Jarman, and Eric Talbot Jensen, "World Peace and Gender Equality: Addressing UN Security Council Resolution 1325's Weaknesses," *Michigan Journal of Gender & Law* 27, no. 2 (2021), <https://doi.org/10.36641/mjgl.27.2.world>.

⁸⁶ United States Institute of Peace, "What Is UNSCR 1325? An Explanation of the Landmark Resolution on Women, Peace and Security," accessed June 11, 2024, https://www.usip.org/gender_peacebuilding/about_UNSCR_1325.

⁸⁷ E.J. Braithwaite and L.G. Lim, "Women in the Armed Forces," *Research on Women in the Armed Forces (2000 - Present)* (NATO Science & Technology Organization, April 2021), <https://bit.ly/32RjJbX>.

⁸⁸ Linna Tam-Seto and Bibi Imre-Millei, "Scoping Review of Mentorship Programs for Women in the Military," *Journal of Military, Veteran and Family Health* 8, no. s1 (April 2022): 15–25, <https://doi.org/10.3138/jmvfh-2021-0075>.

the socio-economic impacts of environmental crimes on coastal communities. Incorporating these insights can lead to more effective and sustainable solutions for combating these issues.⁸⁹ Ensuring women's participation in stakeholder consultations and public forums about maritime policies helps lead to solutions where diverse perspectives have been considered. Supporting women to represent their countries or organizations at international forums, such as the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF), can amplify women's voices on a global stage, leading to the incorporation of gender perspectives in international agreements and cooperation efforts.⁹⁰ This inclusion helps create more robust and effective strategies for marine conservation, law enforcement, and the prevention of environmental crimes.

Women-Led Marine Protection and Conservation Initiatives: Providing supportive funding for women-led initiatives in marine protection, conservation, and anti-trafficking efforts can significantly strengthen grassroots movements that are inclusive of a gender perspective.⁹¹ This support can include providing grants, technical assistance, and networking opportunities. Encouraging women to develop and lead innovative projects that address environmental crimes, promote sustainable fishing practices, or develop eco-tourism initiatives helps mitigate the impact of crimes while also promoting economic development. Forming networks and alliances between women in maritime sectors across the Coral Triangle can facilitate the sharing of best practices and strategies, leading to more effective enforcement and conservation outcomes.⁹² Collaborative efforts among women in these fields can enhance the overall effectiveness of marine protection and conservation initiatives.

Public Awareness and Advocacy: Women can play a critical role in leading public awareness campaigns that educate communities about the importance of protecting marine environments and the significant roles that women play in these efforts. Highlighting successful women role models can inspire more women to get involved in maritime conservation and enforcement.⁹³ Advocating for gender equality in all aspects of maritime policy and enforcement is essential for breaking down barriers such as gender-based violence and discrimination that prevent women from fully participating in these fields. Fostering an inclusive and supportive atmosphere allows women to contribute meaningfully to the effective safeguarding of marine environments in the fight against maritime environmental crimes.⁹⁴

THE WPS PROTECTION PILLAR AND MARITIME ENVIRONMENTAL SECURITY

The WPS Protection Pillar integrates a gender perspective to enhance protective measures for women affected by maritime environmental crimes, addressing vulnerabilities through tailored social support systems. These systems offer financial aid, legal aid, healthcare access, and educational opportunities to bolster resilience. Implementing this pillar safeguards women's rights as maritime workers and consumers, necessitating robust legal frameworks for

⁸⁹ Olivia Dakeyne, "International Women's Day: The Disproportionate Impact of Environmental Crime on Women," THEMIS, March 8, 2024, <https://www.wearethemis.com/uk/about/blog/international-women-s-day-the-disproportionate-impact-of-environmental-crime-on-women/>.

⁹⁰ One Earth Future, "Angling for Equality: Why Women Are Vital to Maritime Security," *Secure Fisheries* (blog), May 23, 2018, <https://oneearthfuture.org/en/secure-fisheries/news/angling-equality-why-women-are-vital-maritime-security>.

⁹¹ Dimitri Selibas, "Funding for Women-Led Conservation Remains Tiny, but That's Changing Fast," *Mongabay Environmental News*, April 20, 2022, <https://news.mongabay.com/2022/04/funding-for-women-led-conservation-remains-tiny-but-thats-changing-fast/>.

⁹² Stephen Knouse and Schuyler Webb, "Networks Among Women and Minorities in the Military" (Defense Equal Opportunity Management Institute, January 1, 1999), https://www.researchgate.net/publication/235045853_Networks_Among_Women_and_Minorities_in_the_Military.

⁹³ Maj. Lindsay Roman, "Pioneering Women: Redefining Military Leadership and Inspiring Generations," U.S. Army, March 15, 2024, https://www.army.mil/article/274569/pioneering_women_redefining_military_leadership_and_inspiring_generations.

⁹⁴ Braithwaite and Lim, "Women in the Armed Forces."

gender-responsive enforcement and policy development, particularly in coastal communities vulnerable to exploitation in industries like fishing.

Livelihoods and Food Security: Maritime environmental crimes such as IUU fishing and pollution directly threaten the livelihoods of women in coastal communities. Women in coastal communities in the Coral Triangle often depend on small-scale fisheries for their income and nutrition.⁹⁵ The depletion of fish stocks due to overfishing and climate change, coupled with the contamination of marine environments due to pollution, can lead to reduced catches and increased competition for resources, exacerbating poverty and food insecurity among women and their families in these coastal communities. Programs focusing on education and training in sustainable practices offer women the capacity to mitigate the adverse impacts of environmental crimes and help build sustainable programs to be able to rely on seafood in the future.⁹⁶ In parallel, alternative livelihood development programs can equip women with knowledge and skills for alternative livelihoods, reducing their reliance on diminishing marine resources while contributing to their overall well-being and ability to source food from other places.⁹⁷

Health Impacts: Pollution from oil spills and waste from tourism can lead to deteriorating water quality, posing significant health risks.⁹⁸ Women, who are often responsible for collecting water and preparing food, face increased exposure to contaminants.⁹⁹ This can result in higher rates of waterborne diseases and other health issues, especially during pregnancy, and may further burden women with additional caregiving responsibilities.¹⁰⁰ Ensuring that women in affected areas have access to clean water and adequate healthcare services is vital. This includes providing maternal and child health services, mental health support, and medical treatment for illnesses caused by pollution and other environmental factors.

Sexual- and Gender-Based Violence: Environmental crises and resource scarcity can increase rates of SGBV.¹⁰¹ SGBV can take place in the context of working in the blue economy or as a result of environmental impacts on the blue economy, negatively affecting and stressing communities. Implementing measures to protect women from SGBV, such as establishing reporting mechanisms, providing legal aid, and supporting survivors,¹⁰² is crucial for women's protection and well-being. S

Unsafe Working Environments: Improving safety measures in workplaces, including fisheries and coastal tourism industries, is paramount. This includes enforcing regulations to prevent exploitation and abuse while ensuring women have access to safe and hygienic working environments. Additionally, it entails promoting women into leadership roles within fishworker organizations and labor unions to ensure senior leadership represents and advocates for women's

⁹⁵ Kim Bricker, "Women in Small-Scale Fisheries," Ocean Wise, March 7, 2024, <https://ocean.org/blog/women-in-small-scale-fisheries/>.

⁹⁶ International Union for Conservation of Nature, "Women Fishers Learn Sustainable Practices and Give Back to the Ocean," IUCN, June 1, 2024, <https://iucn.org/story/202405/women-fishers-learn-sustainable-practices-and-give-back-ocean>.

⁹⁷ UNFCCC, "Promoting Indigenous Women Alternative Livelihood and Reducing Climate Change - India," UN Climate Change, accessed June 11, 2024, <https://unfccc.int/climate-action/momentum-for-change/activity-database/promoting-indigenous-women-alternative-livelihood-and-reducing-climate-change>.

⁹⁸ CTI-CFF Regional Secretariat, "Marine Plastic Pollution and Its Sources in the Coral Triangle."

⁹⁹ UNICEF-WHO, "Women and Girls Bear Brunt of Water and Sanitation Crisis," World Health Organization (WHO), July 6, 2023, <https://www.who.int/news/item/06-07-2023-women-and-girls-bear-brunt-of-water-and-sanitation-crisis---new-unicef-who-report>.

¹⁰⁰ UNICEF-WHO, "Women and Girls Bear Brunt of Water and Sanitation Crisis."

¹⁰¹ Zonibel Woods and Micaela P. Agoncillo, "How to Confront Gender-Based Violence in a Warming World," Asian Development Blog, May 4, 2024, <https://blogs.adb.org/blog/how-confront-gender-based-violence-warming-world#>.

¹⁰² International Rescue Committee, "10 Ways to Help End Violence against Women and Girls," IRC, March 6, 2024, <https://www.rescue.org/article/10-ways-help-end-violence-against-women-and-girls>.

perspectives.¹⁰³ Women-focused educational programs can also play a crucial role in educating women workers about the specific threats and hazards they may encounter in the workplace, empowering them to navigate these challenges effectively.¹⁰⁴

THE WPS PREVENTION PILLAR AND MARITIME ENVIRONMENTAL SECURITY

The Prevention Pillar of the WPS Agenda emphasizes leveraging women's perspectives to bolster measures aimed at preventing maritime environmental crimes in the Coral Triangle. Through the integration of gender-responsive strategies for prevention, the WPS Agenda plays a vital role in mitigating such crimes, safeguarding marine ecosystems, and amplifying women's involvement in environmental governance, thereby fostering empowerment and gender equality.

Direct Prevention through Engagement and Education: Women can lead educational campaigns in their communities to raise awareness about the detrimental effects of maritime environmental crimes. By educating community members on sustainable fishing practices and the importance of marine conservation, women can help reduce IUU fishing and other harmful activities.¹⁰⁵ Similarly, women can lead training programs specifically designed for women in coastal communities to equip them with knowledge and skills in sustainable marine resource management. Programs can also include information on how to detect and report illegal activities, empowering women to be proactive stewards of their environment. Additionally, involving women and men in teaching younger generations about marine conservation aids the potential long-term sustainability of these efforts.¹⁰⁶ Schools and community centers can host workshops where women share their knowledge and experiences, fostering a culture of environmental stewardship while inspiring and motivating leadership of both women and men.

Direct Prevention through Enforcement: By enhancing the capacity of women's groups and cooperatives in marine conservation and sustainable practices, women can take a more active role in protecting marine ecosystems and promoting sustainable livelihoods by promptly identifying and addressing issues as they arise. Increasing women's representation in maritime law enforcement agencies is important as women officers can offer unique perspectives and approaches to enforcement,¹⁰⁷ potentially leading to more effective monitoring and control of maritime activities.¹⁰⁸

Gender-Responsive Legal Frameworks and Enforcement: The WPS Prevention Pillar encourages the strengthening and enforcement of laws and policies that explicitly include gender perspectives.¹⁰⁹ This can involve consulting women in a meaningful way during the policy-making process by ensuring their concerns and needs are addressed. Establishing community-based watch programs where women are actively involved in surveillance and reporting of illegal activities is

¹⁰³ Mariette Correa, "Women Play a Crucial Role in Marine Environments and Fisheries Economies," UN Women, *Asian and the Pacific* (blog), September 18, 2015, <https://asiapacific.unwomen.org/en/news-and-events/stories/2015/09/women-play-a-crucial-role-in-marine-environments-and-fisheries-economies>.

¹⁰⁴ UN Women, "Training for Gender Equality and Women's Empowerment," accessed June 11, 2024, <https://www.unwomen.org/en/how-we-work/capacity-development-and-training>.

¹⁰⁵ Ariani Soejoeti, Chelsea Lanzoni, and Jasmin Mohd. Saad, "Bringing Women and Youth in the Regional Efforts to Address Illegal, Unreported and Unregulated Fishing (IUU) in the Indo-Pacific Region" (USAID, February 27, 2024).

¹⁰⁶ International Union for Conservation of Nature, "Women Fishers Learn Sustainable Practices and Give Back to the Ocean."

¹⁰⁷ Erik Fritsvold, "Why We Need More Women Working in Law Enforcement," University of San Diego Online Degrees, January 6, 2017, <https://onlinedegrees.sandiego.edu/women-in-law-enforcement/>.

¹⁰⁸ Office on Drugs and Crime, "UNODC Empowers Female Officers in Maritime Law Enforcement Across Eastern Africa," United Nations, December 18, 2020, <https://www.unodc.org/unodc/frontpage/2020/December/unodc-empowers-female-officers-in-maritime-law-enforcement-across-eastern-africa.html>.

¹⁰⁹ United States Institute of Peace, "What Is UNSCR 1325? An Explanation of the Landmark Resolution on Women, Peace and Security."

another effective strategy to prevent marine environment crimes.¹¹⁰ These programs can provide women with tools and training to help monitor their local environments and collaborate with authorities. Encouraging collaboration between government agencies, NGOs, and the private sector to create comprehensive strategies for preventing maritime environmental crimes should include women to ensure that their insights and needs are considered.¹¹¹ Women's organizations and networks can play a crucial role in these efforts, promoting shared strategies and best practices for marine conservation.

Technology and Innovation: In many cases, women may require technology support to be active participants in preventing marine environment crimes. This can include providing women with access to technologies that can aid in monitoring and protecting marine environments such as mobile phones and apps for reporting illegal activities, GPS systems for tracking fishing patterns, and drones for coastal surveillance. In many cases, support may begin with supplying stable internet connectivity to the community. Women may also offer novel and highly effective methods for marine conservation.¹¹² Including women in innovation hubs that encourage the development and implementation of new technologies and methods is therefore important.¹¹³ These hubs can provide resources, mentorship, and networking opportunities to support women in becoming leaders in environmental innovation.

Preventing Erosion of Women's Resilience: Preventing the erosion of women's empowerment is also important to human security in the face of future environmental crises. For instance, by promoting alternative livelihood programs for women who are affected by the depletion of marine resources, such as ecotourism, aquaculture, and handicrafts, women can find new sources of income that do not rely on overexploitation of marine resources.¹¹⁴

THE WPS RELIEF AND RECOVERY PILLAR AND MARITIME ENVIRONMENTAL SECURITY

In the Relief and Recovery Pillar of the WPS Agenda, women's perspectives and needs are emphasized in any post-crisis program planning and implementation. By acknowledging the impacts of maritime environmental crimes on women, we can enhance social safety nets to aid in their recovery. This involves implementing targeted support, inclusive planning, training, and resilient livelihood development, thereby enabling the WPS Agenda to more effectively address the diverse repercussions on women of these crimes and ensuring their active participation and benefits in recovery efforts.

Women Leadership in Recovery Efforts: Women's involvement in designing and implementing recovery plans ensures that their unique needs and perspectives are addressed. Their participation can lead to more comprehensive and sustainable recovery efforts, as women often have deep knowledge of local ecosystems and community dynamics.¹¹⁵ Providing women with training in disaster recovery, environmental restoration, and sustainable livelihood practices

¹¹⁰ Tim Ha, "Coastal Communities Take the Lead: How Plans to Safeguard Southeast Asia's Biodiverse Waters Are Evolving," *Eco-Business*, June 23, 2021, <https://www.eco-business.com/news/coastal-communities-take-the-lead-how-plans-to-safeguard-southeast-asias-biodiverse-waters-are-evolving/>.

¹¹¹ Office on Drugs and Crime, "Breaking Waves: Women Pioneers in Maritime Law Enforcement," United Nations, accessed June 11, 2024, https://www.unodc.org/unodc/en/frontpage/2024/May/breaking-waves_-women-pioneers-in-maritime-law-enforcement.html.

¹¹² Christina Roll, "Inclusive Protection," *AXA XL*, March 7, 2022, <https://axaxl.com/fast-fast-forward/articles/inclusive-protection-women-in-ehs>.

¹¹³ Innovation Support Network Hubs, "Promoting Gender Diversity through Innovation Hubs," *ISNHubs*, March 27, 2023, <https://isnhubs.org.ng/2023/03/27/promoting-gender-diversity-through-innovation-hubs/>.

¹¹⁴ UNFCCC, "Promoting Indigenous Women Alternative Livelihood and Reducing Climate Change - India."

¹¹⁵ Salanieta Kitolelei et al., "Fisherwomen's Indigenous and Local Knowledge - the Hidden Gems for the Management of Marine and Freshwater Resources in Fiji," *Frontiers in Marine Science* 9 (December 5, 2022), <https://doi.org/10.3389/fmars.2022.991253>.

equips them to take active roles in recovery efforts.¹¹⁶ Training can include marine conservation techniques, disaster response strategies, and small-scale entrepreneurship to diversify income sources.

Targeted Human Security Relief and Support: In the wake of environmental incidents such as oil spills or major pollution events, it is crucial to provide direct economic support to women and their families who are often hit hardest due to their reliance on marine resources for income.¹¹⁷ Such support can include emergency funds, food aid, and subsidies for alternative livelihoods to bridge the gap during recovery periods. Ensuring that women have access to necessary healthcare services during recovery is also essential. Pollution and environmental degradation can lead to health issues such as respiratory problems and waterborne diseases.¹¹⁸ Providing medical care, mental health support, and reproductive health services is vital for the well-being of women and children in affected areas.

Addressing Long-Term Resilience: If not addressed pre-disaster, developing and promoting alternative, climate-resilient livelihood options for women post-disaster can help communities recover more effectively.¹¹⁹ This includes, but is not limited to, supporting women in aquaculture, ecotourism, or sustainable agriculture practices that are less vulnerable to environmental shocks. Enhancing social protection mechanisms such as insurance schemes, savings groups, and community support networks can provide a buffer against future shocks.¹²⁰ These systems help ensure that women have the necessary resources and support to rebuild and maintain their livelihoods, and homes in the long term.

Applying the WPS Agenda's four pillars when addressing maritime environmental crimes in the Coral Triangle ensures that the protection of marine ecosystems and the well-being of women in these communities are prioritized. Women's participation in law enforcement and conservation, coupled with targeted protection, prevention, relief and recovery strategies, can significantly enhance the effectiveness of these efforts, while promoting gender equality and sustainable development.

¹¹⁶ Soejoeti, Lanzoni, and Saad, "Bringing Women and Youth in the Regional Efforts to Address Illegal, Unreported and Unregulated Fishing (IUU) in the Indo-Pacific Region."

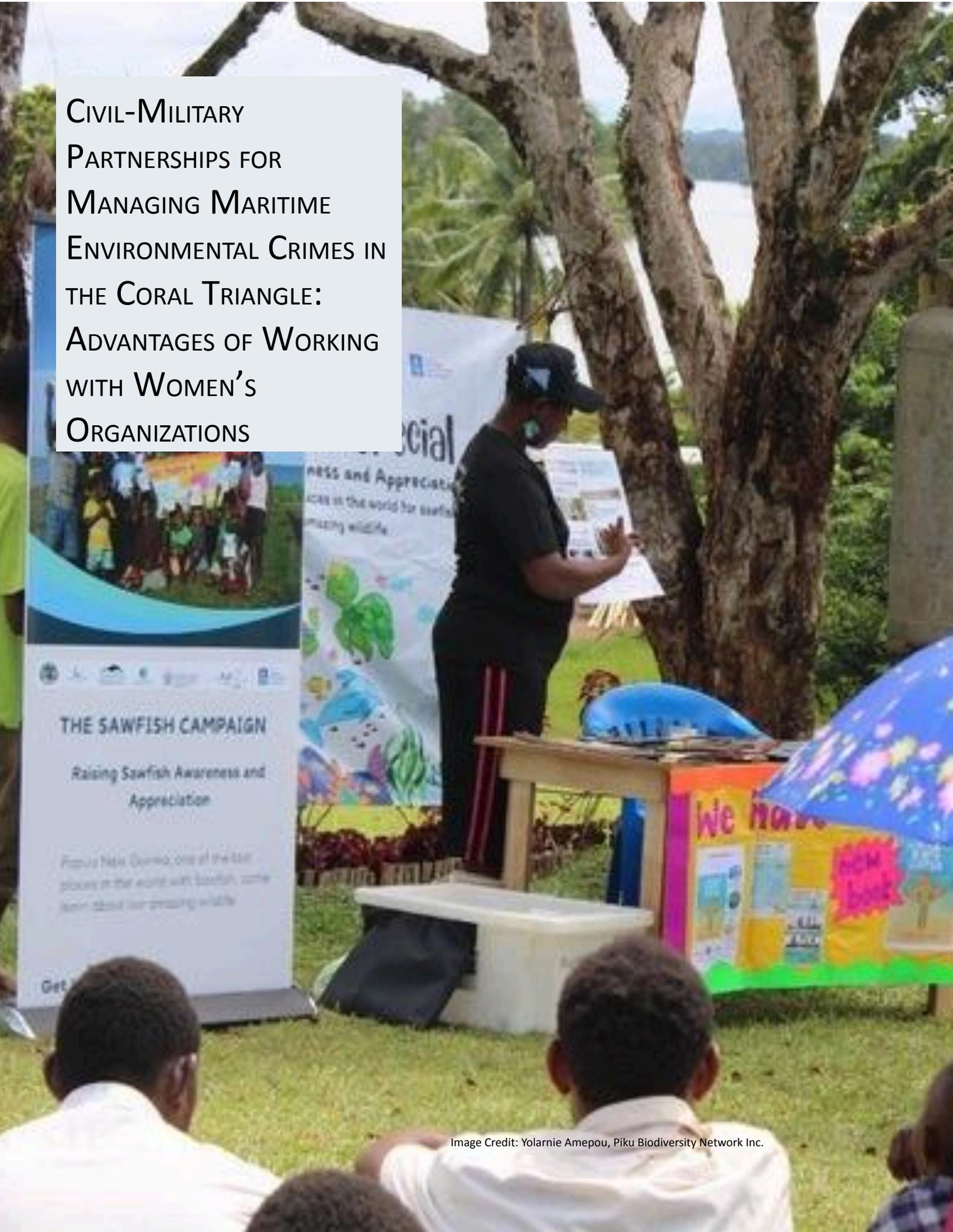
¹¹⁷ Bricker, "Women in Small-Scale Fisheries."

¹¹⁸ UNICEF-WHO, "Women and Girls Bear Brunt of Water and Sanitation Crisis."

¹¹⁹ Blair Morrison et al., "Women of the Water: Enhancing Equity and Inclusion in Aquaculture," *Oceanography* 36, no. 4 (2023): 162–63, <https://doi.org/10.5670/oceanog.2024.112>.

¹²⁰ International Growth Centre, "Sustainable Fishing and Women's Labour in the Blue Economy," IGC, *Gender Equality* (blog), March 15, 2023, <https://www.theigc.org/blogs/gender-equality/sustainable-fishing-and-womens-labour-blue-economy>.

CIVIL-MILITARY
PARTNERSHIPS FOR
MANAGING MARITIME
ENVIRONMENTAL CRIMES IN
THE CORAL TRIANGLE:
ADVANTAGES OF WORKING
WITH WOMEN'S
ORGANIZATIONS



Addressing maritime environmental crimes that transcend borders requires collaboration and partnerships across civil society, government, and defense sectors. Recognizing the gender-blind nature of many regional maritime environmental frameworks and policy bodies, civil-military (civ-mil) partnerships present a valuable opportunity to integrate a gender perspective into states' strategies for combating maritime environmental crimes, as well as humanitarian assistance and disaster response (HA/DR) initiatives. Leveraging civil-military partnerships enhances prevention, mitigation, and empowerment efforts crucial for an effective response, and employing a gender perspective bolsters these efforts.¹²¹ Collaboration between civilian organizations (such as CSOs, governmental agencies, and local communities) and military forces offers opportunities to address complex challenges using a whole-of-society approach, which is especially important for maritime environmental criminal activity and related border-fluid conflicts. These partnerships leverage the unique strengths and resources of both sectors to enhance the effectiveness of response efforts and promote sustainable solutions. Civilian organizations often provide expertise in areas such as community engagement, humanitarian aid delivery, and long-term development, while military forces contribute logistical support, security, and specialized capabilities for rapid response and crisis management.¹²²



Image Credit: Bernardete Da Fonseca, Blue Ventures Conservation, Timor-Leste

¹²¹ Allard-Jan tan Berge, “Best & Bad Practices on Civil-Military Interaction” (The Netherlands: Civil-Military Cooperation Centre of Excellence, June 2014), <https://nllp.jallc.nato.int/IKS/Sharing%20Public/Civil-Military%20Interaction%20Best%20and%20Bad%20Practices%20Handbook.pdf>.

¹²² US Department of Defense, Joint Force Development, “Civil-Military Operations,” Joint Publication 3-57, July 9, 2018, https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_57.pdf?ver=2018-09-13-134111-460.

CIV-MIL PARTNERSHIPS FOR THIS WORKSHOP SERIES

The preceding sections have highlighted the innate connections between human – community – society – national – international (in)security in the context of maritime environmental crimes. As maritime environmental crimes continue to grow in seriousness and frequency, reinforcing gendered insecurities around the world, there is a growing imperative to adopt a gender perspective, pursue intersectional gender equality within policymaking and law enforcement, and promote the leadership, engagement, decision-making, and meaningful participation of diverse women and women’s CSOs. Given the gender-blind nature of many maritime law enforcement policies and plans, civil-military partnerships offer an important and unique vehicle for enhancing women’s participation and leadership in climate and disaster planning and governance, and incorporating a gender perspective into states’ approaches to addressing maritime environmental security issues.

Civil-military relations broadly refers to “the interaction between militaries and a wide range of civilian actors such as INGOs, governments, legal practitioners, security agencies, human rights advocates, and development actors, and can be practiced for a wide range of purposes.”¹²³ As a United Nations system framework, Humanitarian Civil-Military Coordination (UN-CMCoord) specifically refers to “the essential dialogue and interaction between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles, avoid competition, minimize inconsistency, and when appropriate, pursue common goals. Basic strategies range from coexistence to cooperation. Coordination is a shared responsibility facilitated by liaison and common training.”¹²⁴

Collaboration between civilian organizations (such as CSOs), governmental agencies, and local communities) and military forces offers opportunities to address complex challenges using a whole-of-society approach, which is especially important for humanitarian emergency response to natural disasters. At the fundamental level, civil-military (civ-mil)

A Case Study in Successful Collaboration

The Indonesian Ocean Justice Initiative’s (IOJI) involvement in strategic government meetings and the inclusion of civilians in Task Force 115 illustrate effective civil society-government collaboration. This partnership integrates diverse perspectives into policy-making, enhancing the development and implementation of maritime security policies. Civilian participation in Task Force 115 bridges the gap between governmental enforcement and community needs, fostering trust and accountability. IOJI’s expertise supports resource sharing and capacity building, promoting robust solutions and informed decision-making. Their role also ensures representation of marginalized voices, advocating for gender and social equity in maritime governance. Collaboration enhances monitoring efforts, providing crucial intelligence for addressing illegal fishing. This joint effort promotes innovative and adaptive management, allowing policies to quickly respond to new challenges. Overall, this model exemplifies how traditional knowledge and modern governance can be integrated to empower communities and ensure sustainable marine resource management.

¹²³ Alistair D.B. Cook and Sangeetha Yogendran, “Conceptualising Humanitarian Civil-Military Partnerships in the Asia-Pacific: (Re-)Ordering Cooperation,” Australian Institute of International Affairs, February 17, 2020, <https://www.internationalaffairs.org.au/australianoutlook/conceptualising-humanitarian-civil-military-partnerships-in-the-asia-pacific-re-ordering-cooperation/>.

¹²⁴ United Nations Office for the Coordination of Humanitarian Affairs, “Humanitarian Civil Military Coordination,” February 27, 2023, <https://reliefweb.int/topic/humanitarian-civil-military-coordination>.

partnerships can leverage the unique strengths and resources of multiple sectors to enhance the effectiveness of disaster response efforts and promote sustainable solutions. Civilian organizations often provide expertise in areas such as community engagement, humanitarian aid delivery, and long-term development, while military forces contribute logistical support, security, and specialized capabilities for rapid response and crisis management. Civilian organizations are particularly valuable for incorporating a gender perspective into civ-mil partnerships, including recognizing and addressing the specific needs, vulnerabilities, and capacities of women, men, girls, boys, and non-binary people in crisis-affected contexts. In civ-mil partnerships, it is therefore essential to encourage the participation of women and marginalized gender groups in decision-making processes, mainstream gender considerations into program design and implementation, fund CSOs who incorporate a gender perspective, and address sexual and gender-based violence and discrimination. By integrating a gender perspective, civ-mil partnerships can enhance the effectiveness, inclusivity, and sustainability of response efforts, ultimately contributing to more equitable outcomes for all affected populations.¹²⁵

LIMITATIONS AND CHALLENGES FOR CIV-MIL RELATIONS

While civ-mil partnership engagements offer significant benefits, they also face complex challenges rooted in historical contexts and contemporary dynamics. One pressing issue is the neutrality of civilian organizations and individuals in such collaborations. Maintaining impartiality is often crucial to upholding CSO integrity and ensuring they serve the broader public interest above all else, including political and geopolitical goals. Problematically, humanitarian actors (including militaries) often have access to affected populations but may be challenged to localize HA/DR strategies to address the needs of those actually affected by the crisis.¹²⁶ Therefore, to promote effective, non-harmful maritime and environmental law enforcement, sustained dialogue and interaction among civil-military actors are crucial.¹²⁷ Strained civ-mil relationships arising from past tensions or violence may present obstacles to collaboration and meaningful partnerships. This challenge is particularly elevated in states across the Indo-Pacific with a history of military intervention in governance. Additional obstacles to civ-mil cooperation include that civilian and military actors often “adopt different goals and principles, they compete over domains of responsibility, and they have incongruent ideas about the need for militarized approaches in emergencies and disasters.”¹²⁸

Drawing on a feminist perspective of peace and security, civ-mil partnerships might risk embedding hierarchical relationships of power, resulting in the exploitation of the knowledge, time, labor, and/or wellbeing of women and women’s CSOs. Indeed, it has been argued that “the militarization of crisis response is not in the interest of armed forces, nor in that of civilian crisis organizations or society at large.”¹²⁹ Overcoming these challenges requires a delicate balance of transparency, accountability, and a commitment to upholding democratic principles and addressing diverse human security needs to begin bridging gaps between the military and civilian spheres.

BEST PRACTICES FOR CIV-MIL COOPERATION

Over the course of the Project, participants engaged in dialogue about how to foster open and productive civ-mil partnerships based on their own experiences. The following is a list of best practices developed by the participants for civ-mil cooperation which focuses on building trust:¹³⁰

¹²⁵ NATO, “Deep Dive Recap: Cooperative Security and the Gender Perspective,” NATO, May 14, 2022, https://www.nato.int/cps/en/natohq/news_195146.htm.

¹²⁶ Cook & Yogendran, “Conceptualising Humanitarian Civil-Military”

¹²⁷ Cook & Yogendran, “Conceptualising Humanitarian Civil-Military”

¹²⁸ Myriame Bollen and Jori Pascal Kalkman, “Civil-Military Cooperation in Disaster and Emergency Response Practices, Challenges, and Opportunities,” *Journal of Advanced Military Studies* 13, no. 1 (2022): 79–91.

¹²⁹ Bollen and Kalkman, “Civil-Military Cooperation in Disaster and Emergency Response Practices, Challenges, and Opportunities.”

¹³⁰ Berge, “Best & Bad Practices on Civil-Military Interaction.”

- Foster an inclusive environment in which women, men, and non-binary people, as well as other vulnerable populations, can freely communicate their needs and concerns.
- Establish clear and easy communication channels and coordination mechanisms to facilitate information sharing and decision-making processes.
- Respect each other's mandates, roles, and expertise, while recognizing the importance of collaboration and complementarity.
- Conduct joint training and exercises to enhance interoperability and mutual understanding of respective capabilities and limitations.
- Establish clear, and safe from retaliation, reporting mechanisms for labor abuse and sexual and gender based violence in the military, law enforcement agencies, and within civil society.
- Prioritize the protection and welfare of affected populations, especially with regard to humanitarian assistance and disaster response planning, ensuring that response efforts are conducted in accordance with humanitarian principles and international law, while integrating a gender perspective.
- Promote transparency, accountability, and inclusivity in partnership activities, and engaging with local communities and stakeholders to ensure their meaningful participation and ownership of response efforts.
- Establish sufficient and sustainable budgets to support civ-mil cooperation over the long-term.

By integrating a gender perspective, civ-mil partnerships can enhance the effectiveness, inclusivity, and sustainability of their response efforts, ultimately contributing to more equitable outcomes for all affected populations. Incorporating a gender perspective into civ-mil partnerships involves recognizing and addressing the specific needs, vulnerabilities, and capacities of people of all genders in crisis-affected contexts. Such incorporation can include ensuring the participation of women and marginalized gender groups in decision-making processes, mainstreaming gender considerations into program design and implementation, and addressing gender-based violence and discrimination. Significantly, civ-mil partnerships adopting gender-transformative approaches can maximize the potential for gradual disruptions and structural changes in harmful gender norms as they manifest in and inform institutions and systems.

Challenges and Potential of Civ-Mil Relationships

When polled, participants identified the following challenges as those that most limit interaction between defense / security and women's civil society organizations: Lack of access to opportunities for collaboration / engagement, lack of leadership support for women to participate in maritime environmental security initiatives, and general challenges in civ-mil cooperation (not related to gender). However, participants also noted the following as the greatest benefits to considering gender perspectives or WPS in addressing maritime environmental crimes: it helps ensure women are included at the local and regional decision-making levels, helps protect women from gender-based violence committed by security personnel, and ensures the specialized knowledge women have is utilized in designing effective responses to maritime environmental crimes.

CASE STUDIES IN CIV-MIL PARTNERSHIPS WITH A GENDER PERSPECTIVE

“The Indonesian Coast Guard utilizes women in service to engage other women in local fishing communities due to religious gender-based barriers that prevent male security practitioners from communicating with women directly. Understanding the gender dimension overlaid on the cultural context of society demonstrates an important application of a gender perspective in combating maritime environmental crimes. It allows U.S. [the Indonesian Coast Guard] access to the whole-of-society and its wealth of knowledge to combat the diverse crimes in our coastal waters more effectively.”

- Dr. Ayu Bulan Tisna, LtCol. Indonesian Coast Guard

A prime example of effective civ-mil cooperation in the maritime environment can be observed in Timor-Leste. Here, officials have spearheaded a community-based initiative to map IUU fishing activities, resulting in a comprehensive database that monitors reported illegal activities. This initiative involved extensive engagement with 27 communities across the country and interaction with hundreds of individuals, leading to a detailed understanding of the issues and informed policy recommendations. By integrating community data collection efforts, supported by government agencies and civil society organizations (CSOs), Timor-Leste has been able to tailor national strategies to its unique local contexts and realities.¹³¹

Indonesian participants highlighted particularly strong collaboration between the Indonesian Coast Guard and CSOs active in the maritime domain. However, they also acknowledged a significant challenge in advancing this relationship: the military's constraints on sharing classified information with civil society due to security restrictions. Despite these limitations, the data and insights provided by local CSOs have been critical in enhancing efforts to combat maritime environmental crimes. Moreover, the Coast Guard has offered compensation to CSOs for deploying both women and men to provide a gendered perspective to assist on maritime patrols, though deployment carries inherent risks for those involved due to potential exposure to dangerous situations.

In PNG, collaboration between CSOs and government enforcement agencies is traditionally weak, even when incorporating a gender perspective in tackling environmental crimes. Participants noted an ongoing but fragile partnership between civil society and the government, which is focused on investigating and potentially closing a fish maw fishery operated by the PRC in the Kikori Delta.¹³² This fishery is significantly affecting local villagers' livelihoods and the region's biodiversity, while also contributing to civil unrest, including increased violence due to its impact on local culture, economic power and influence, food scarcity, and employment for local fishers. Despite the pressing need for enforcement to shut down this operation, no action has been taken yet. This is partly because the military's presence is limited in many PNG provinces,¹³³ and there are considerable challenges in coordinating efforts between remote areas and the capital, Port Moresby.

¹³¹ Enrique Alonso Población et al., “Working Together. A Collaborative Approach to Counter Illegal, Unreported and Unregulated (IUU) Fishing Is under Way in Timor-Leste,” *Samudra Report*, November 2012, No. 63 edition, https://www.researchgate.net/publication/306519422_Working_Together_A_collaborative_approach_to_counter_illegal_unreported_and_unregulated_IUU_fishing_is_under_way_in_Timor-Leste.

¹³² Secretariat of the Pacific Regional Environment Programme, “Assessment of Target and Non-Target Species Catch Rates in the Kikori Fish Maw Fishery and Local Ecological Knowledge of Locally Threatened Dolphin Species” (Apia, Samoa: SPREP, 2022), <https://www.sprep.org/news/a-new-fishery-threatens-papua-new-guineas-shark-and-dolphin-species>.

¹³³ Johnny Blades, “Pandemic Exposes Weakness of PNG's Border Security,” RNZ, April 23, 2020, <https://www.rnz.co.nz/international/pacific-news/415003/pandemic-exposes-weakness-of-png-s-border-security>.

“What are the things that used to work? My father told me that for mud crabs, you only get what you need for your family. If it's an economic issue, what are the other ways that we can meet these demands... There is pressure coming from our communities. And there is external pressure. What can we collaborate on and use our shared knowledge towards to find a solution?”

-Ruth Kissam, Advancing PNG Women Leaders Network, PNG

ROOM FOR GROWTH IN CIV-MIL PARTNERSHIPS FOR BETTER MARITIME ENVIRONMENTAL SECURITY

While there are promising examples of civ-mil partnerships improving maritime environmental security, such as the collaboration between the Indonesian Coast Guard and local communities in combating illegal fishing, there is significant room for expanding these efforts across the Coral Triangle. Each country, and individual locations within each country, has a unique socio-political and cultural context that requires tailored approaches to these collaborations. There is no one-size-fits-all model. Effective partnerships in one location may involve military support for community-based monitoring programs, while another might see CSOs providing vital intelligence to enforcement agencies to safeguard marine resources.

Given the nascent nature of civil-military collaborations in this domain, there is ample scope for innovation and creativity. Military and CSO professionals should remain vigilant for opportunities to collaborate, whether through formal initiatives or ad-hoc projects that address emerging challenges. The flexibility in the form these partnerships can take is a strength, allowing for solutions that are as diverse as the regions they aim to protect. Embracing this versatility, stakeholders can devise new and unorthodox methods of cooperation, from joint training programs and data-sharing initiatives to coordinated enforcement actions and educational campaigns. By fostering a culture of collaboration and openness, civ-mil partnerships can play a pivotal role in enhancing maritime environmental security, ensuring sustainable management and protection of marine resources and empowering local communities in the face of global environmental challenges.

GENDER IN REGIONAL
ARCHITECTURE AND
CROSS-BORDER
COOPERATION



Many maritime environmental crimes in the Coral Triangle are transboundary in nature, necessitating cooperative efforts in monitoring, control, surveillance, enforcement, and prosecution among regional States.¹³⁴ While cross-border cooperation often occurs through bilateral agreements, it is also facilitated by regional and international organizations and multilateral frameworks. Below is a summary of some relevant regional governance frameworks, highlighting gender elements where they exist and areas for improvement.

CORAL TRIANGLE INITIATIVE ON CORAL REEFS, FISHERIES, AND FOOD SECURITY (CTI-CFF)

The Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) is a multilateral partnership among Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands, and Timor-Leste.¹³⁵ Member countries collaborate to safeguard marine and coastal resources in the Coral Triangle, addressing critical regional challenges such as declining fish stocks, climate change, food security, and biodiversity loss. CTI-CFF initiatives also aim to alleviate poverty through economic development, food security, and sustainable livelihoods. The initiative's efforts are structured around five technical working groups that allow for focused programming in priority areas: Seascapes, Ecosystem Approach to Fisheries Management (EAFM), Marine Protected Areas (MPA), Climate Change Adaptation (CCA), and Threatened Species (TS).¹³⁶ CTI-CFF also supports national and regional efforts to combat and mitigate maritime environmental crimes beyond IUU fishing, including wildlife trafficking and pollution. Critical in a data-sparse environment, CTI-CFF collects data on species abundance, marine habitats, threats, and protected areas across the six countries, some of which is distributed through the publicly available Coral Triangle Atlas.¹³⁷

The CTI-CFF includes a cross-cutting working group known as the Women Leaders' Forum, a peer-learning network for women in leadership roles within Coral Triangle marine conservation. The forum champions the inclusion of women's and girls' perspectives in the regional action plan and provides a platform to build the capacity of women, particularly at the grassroots level, to lead efforts in protecting and sustaining marine and coastal biodiversity. This unique initiative supports CTI-CFF's commitment to integrating gender, equity, and social inclusion considerations into both institutional and country programming.¹³⁸

REGIONAL PLAN OF ACTION TO PROMOTE RESPONSIBLE FISHING PRACTICES INCLUDING COMBATING IUU FISHING (RPOA-IUU)

The Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing (RPOA-IUU) is a voluntary, non-binding initiative to prevent and eliminate IUU fishing in Southeast Asia's regional water bodies. Member countries include Australia, Brunei Darussalam, Cambodia, Indonesia, Malaysia, Papua New Guinea, the Philippines, Singapore, Timor-Leste, Thailand, and Vietnam. There are four regional sub-working groups: the South-East South China Sea (SESCS), Sulu-Sulawesi Seascape (SSS), Gulf of Thailand (GoT), and the Arafura-Timor Sea (ATS). The Coordinating Committee advises members on the implementation of the RPOA for national, subregional, and regional priorities and communicates with the FAO and other relevant international organizations. RPOA-IUU also publishes the movements

¹³⁴ Sarah A. Heck, "Ocean Governance in the Coral Triangle: A Multi-Level Regulatory Governance Structure," *Politics and Governance* 10, no. 3 (July 14, 2022): 70–79.

¹³⁵ UN Department of Economic and Social Affairs, "The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)."

¹³⁶ UN Department of Economic and Social Affairs, "The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)."

¹³⁷ Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security, "The Coral Triangle Atlas."

¹³⁸ Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security, "CTI Women Leaders' Forum," November 6, 2017, <https://www.coraltriangleinitiative.org/wlf>.

and sightings of vessels known or suspected to be engaged in IUU fishing in the region. The RPOA-IUU Secretariat is housed within Indonesia’s Ministry of Fisheries and Marine Resources (KKP) in Jakarta.¹³⁹

Because RPOA-IUU is an entirely voluntary organization, member countries are not required to participate in programming or implement regional priorities in national-level laws and policies.¹⁴⁰ The IUU Vessel Movements and Sightings List is not kept up-to-date; the most recent entries are from 2021. RPOA-IUU also does not have specific, public initiatives on women or gender. However, RPOA-IUU is an important convening body that brings together ministers from countries throughout Southeast Asia, including the Coral Triangle, and connects regional activities with other international organizations. As a voluntary entity, the Secretariat also has a “big tent” approach, which encourages members to join and participate even if they cannot, or will not, implement policies or priorities.

ASEAN SECTORAL WORKING GROUP ON FISHERIES (ASWGFi)

The ASEAN Sectoral Working Group on Fisheries (ASWGFi) supports ASEAN Senior Officials Meetings between ASEAN Ministers of Agriculture and Fisheries to provide technical and policy support on fisheries issues.¹⁴¹ Recent initiatives supported by ASWGFi include the ASEAN Guidelines of Good Aquaculture Practices for Food Fish; Standards on ASEAN Good Aquaculture Practices for Shrimp Farming; Template on the Arrangement on the Equivalence of Fishery Product Inspection and Certification System; and Regional Guidelines on Traceability System for Aquaculture Products in ASEAN.¹⁴² ASWGFi conducts counter-IUU fishing efforts through the ASEAN-SEAFDEC [Southeast Asian Fisheries Development Center] Joint Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products and; implementation of the Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain and Regional Plan of Action for Managing Fishing Capacity and ASEAN Catch Documentation Scheme for Marine Fisheries.¹⁴³ Although the ASWGFi does not have any subgroups directly focused on overlaying gender perspectives in its solutions, it does look for guidance from guidelines that do, like the Small-Scale Fisheries guidelines from FAO, and lists gender issues for consideration in its strategic action plans.¹⁴⁴

PARTNERSHIP IN ENVIRONMENTAL MANAGEMENT FOR THE SEAS OF ASIA (PEMSEA)

The Partnership in Environmental Management for the Seas of Asia (PEMSEA) is the regional coordinating body for the Sustainable Development Strategy for Seas of East Asia (SDS-SEA), which aims to simultaneously develop the region’s blue economy while also protecting and preserving critical biodiversity while designing adaptation measures to climate change. PEMSEA has 10 country members: Cambodia, Indonesia, Japan, Laos, North Korea, the People’s Republic of China, Philippines, Republic of Korea, Singapore, and Timor-Leste. In addition to country members, PEMSEA also has members from local governments, non-governmental organizations, academic institutions, and development partners

¹³⁹ RPOA-IUU, “The Regional Plan of Action to Promote Responsible Fishing Practices Including Combating IUU Fishing,” accessed June 10, 2024, <https://www.rpoaiuu.org/>.

¹⁴⁰ Department of Economic and Social Affairs, “Singapore’s Contributions to Combating Illegal, Unreported and Unregulated (IUU) Fishing,” United Nations, Sustainable Development, accessed June 12, 2024, <https://sdgs.un.org/partnerships/singapores-contributions-combating-illegal-unreported-and-unregulated-iuu-fishing>.

¹⁴¹ The ASEAN Secretariat, “Fisheries Cooperation,” Association of Southeast Asian Nations (ASEAN), accessed June 10, 2024, <https://asean.org/our-communities/economic-community/enhanced-connectivity-and-sectoral-development/asean-food-agriculture-and-forestry/fisheries-cooperation/>.

¹⁴² ASEAN Sectoral Working Group on Fisheries, “STRATEGIC PLAN OF ACTION ON ASEAN COOPERATION ON FISHERIES 2021-2025” (ASEAN), accessed June 11, 2024, <https://asean.org/wp-content/uploads/2021/12/FAFD-16.-SPA-Fisheries-202528ASWGFi.pdf>.

¹⁴³ The ASEAN Secretariat, “Fisheries Cooperation.”

¹⁴⁴ ASEAN Secretariat, “AMAF’s Approach to Gender Mainstreaming in the Food, Agriculture and Forestry Sectors” (Ha Noi, Viet Nam: ASEAN Secretariat, October 11, 2018), <https://asean.org/wp-content/uploads/2021/09/AMAF-Approach-to-gender-mainstreaming.pdf>.

throughout the region. Members support targeted programming on marine plastic pollution and integrated coastal management.¹⁴⁵

PEMSEA is unique from other regional organizations because it convenes national and local government organizations together with non-governmental and academic institutions. However, PEMSEA has no specific programming with a focus on gender, or on combating maritime environmental crimes.



Image Credit: Gou Fiona Ava, Sea Women of Melanesia Inc., PNG

¹⁴⁵ PEMSEA, “Partnerships in Environmental Management for the Seas of East Asia (PEMSEA),” accessed June 10, 2024, <https://www.pemsea.org/>.

WOMEN, CUSTOMARY
LAW, AND THE MARITIME
SECURITY ENVIRONMENT



Marine environmental management challenges in Coral Triangle nations intersect with enduring customary laws governing resource management that are deeply embedded in cultural and societal contexts. These traditional marine resource management regulations frequently govern land and marine tenure, dictating resource ownership and access essential for effective maritime resource management and environmental conservation. Crafted and upheld by local communities across generations, these customs are steeped in traditional ecological knowledge, cultural ethos, and societal norms.¹⁴⁶

"Why is the way that we fished before now changing? Do we need to meet certain expectations of us? Women have always been a part of this life."

-Ruth Kissam, Advancing PNG Women Leaders Network, PNG

Integrating and enforcing customary law in the Coral Triangle region faces various hurdles, including legal pluralism, jurisdictional conflicts, translation issues, and declining traditional ecological knowledge due to urbanization and globalization.¹⁴⁷ Instances of misalignment between customary laws and national or international legal frameworks regarding security and legal responses to maritime environmental crimes are common, and are often compounded by language barriers.¹⁴⁸ For example, there are over 840 spoken languages in PNG, and each community has its own form of customary law and coastal tenure.¹⁴⁹ Recent changes in law are not widely understood or accepted. Indonesia has over 1000 customary marine tenure practices, but only 32 of them are recognized by the national government.¹⁵⁰ And Timor-Leste's national laws are written in Portuguese, instead of the local language of Tetum.¹⁵¹

"The government acknowledges the rights of the local communities, but the practice is only being supported if they submit it to the government. The problem is that there are a lot of practices, but only a fraction are recognized by the government because there are too many requirements and too many steps to get recognition from the government."

-Dr. Dedi Adhuri, Research Center for Society and Culture, National Research and Innovation Agency, Indonesia

Efforts to integrate customary laws with formal legal mechanisms through capacity-building programs, community-based approaches, and policy reforms are underway. Collaboration among governments, CSOs, and local communities is vital

¹⁴⁶ Gillian Goby and Katrina Moore, "Enforcing and Ensuring Compliance of Marine Laws and Community Based Marine Protected Areas" (Jakarta, Indonesia: Coral Triangle Initiative on Corals, Fisheries and Food Security (CTI-CFF), September 2013), https://coraltriangleinitiative.org/sites/default/files/resources/10_Information%20Paper%20for%20the%20Western%20Provincial%20Government_Enforcing%20and%20Ensuring%20Compliance.pdf.

¹⁴⁷ Joeri Scholtens and Maarten Bavinck, "Lessons for Legal Pluralism: Investigating the Challenges of Transboundary Fisheries Governance," *Current Opinion in Environmental Sustainability* 11 (December 2014): 10–18.

¹⁴⁸ Jerica Rossi, "Community Viability and Marine Conservation: Hybrid Resource Management and the Role of the Coral Triangle Center on Pulau Ay, Indonesia" (Capstone Collection, SIT Graduate Institute, 2016), <https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=3920&context=capstones>.

¹⁴⁹ Day Translations, "Linguistic Diversity: The Languages in Papua New Guinea," Day Translations Blog, May 7, 2018, <https://www.daytranslations.com/blog/languages-in-papua-new-guinea/>.

¹⁵⁰ C.A. Courtney et al., "Marine Tenure and Small-Scale Fisheries: Learning From The Indonesia Experience," USAID, Tenure and Global Climate Change Program (Burlington, Vermont: Tetra Tech, May 2017), https://pdf.usaid.gov/pdf_docs/PA00SSNT.pdf.

¹⁵¹ USAID, The Asia Foundation, and Timor-Leste Education Project, "Legal History and the Rule of Law in Timor-Leste," Introduction to the Laws of Timor-Leste (Palo Alto, California: Stanford Law School), accessed June 11, 2024, <https://law.stanford.edu/wp-content/uploads/2018/04/Legal-History-and-the-Rule-of-Law-in-Timor-Leste.pdf>.

“It is very hard to harmonize the customary and legal systems. The old traditional ways. The [new] legal system is not translated to the local language, so 95 percent of the people do not understand their own legal system.”

-Nélson Carvalho Belo, Fundasaun Mahein, Timor-Leste

for creating understanding between and / or integrating traditional and modern legal frameworks; promoting the involvement of local communities, especially women, in marine conservation and management endeavors; and combating maritime environmental crimes. Such collaboration and cooperation can leverage traditional marine resource management systems like the *Sasi* system in Indonesia and the *Tara B Bandu* system in Timor-Leste to enhance local marine conservation and management efforts.¹⁵² Furthermore, stakeholders and partners can address legal pluralism by leveraging cultural traditions and the informal community leadership roles of women through intentional project design, resourcing, and outcome metrics. Women play pivotal roles in shaping and implementing customary laws related to maritime environmental security. They contribute significantly to crafting laws concerning land and marine tenure, resource management, and disaster preparedness. Moreover, women preserve and pass down indigenous knowledge on environmental stewardship, sustainable aquaculture, and health practices.

“Women play a significant role in passing down customary law as the story-tellers of the community.”

-Joyce Mavera, The Piku Biodiversity Network, Papua New Guinea

Traditional Marine Resource Management Practices Systems

In the Kei and Banda Islands, local NGOs collaborated with local populations to implement outside fishers and tourist entry fees and heightened fines for violations of regulations that have been put in place to implement customary laws and traditional knowledge, the *Sasi* system. The revenue generated from these measures has been allocated to enhance local monitoring, control, and surveillance (MCS) efforts and to fund educational and healthcare initiatives for children, illustrating the power of the *Sasi* system.

In Timor-Leste, the customary law practice known as *Tarabandu* has been successfully used to protect marine habitats and resources through the establishment of temporary no-take zones.

¹⁵² Elizabeth Mcleod, Brian W. Szuster, and Rodney Salm, “Sasi and Marine Conservation in Raja Ampat, Indonesia,” *Coastal Management* 37, no. 6 (January 2009): 656–76.



Image Credit: Luis Ximenes, Belun: Traditional male leaders engage in a Tara Bandu ritual ceremony to begin the protection of a lagoon in Timor-Leste

“The future of customary law and coastal tenure hinges on striking a balance between tradition and modernity, as many customary laws are adhered to, but not written down.... Efforts to document and codify customary practices can enhance transparency and communication between communities and government agencies.”

-Joyce Mavera, The Piku Biodiversity Network, Papua New Guinea

Despite their contributions, women may encounter disadvantages under customary systems, affecting their resource access and decision-making processes, especially post-environmental disasters. Timorese workshop participants noted that while the community has an opportunity to provide input, women’s participation is still not widely accepted as *Tara Bandu* laws primarily apply to male-dominated activities and men are the primary *Tara Bandu* decision-makers. However, they also highlighted that women influence decision-making in other ways, for example by reminding their husbands to adhere to catch limits and other fisheries management mechanisms. Yet challenges remain in gaining consensus due to lack of information and shared understanding.

"We want to implement this customary law but where is the information, where is the evidence, so that a woman can come and make a decision. We need a consensus from the community to do this, if there is no consensus, then it is impossible."

-Bernardete Da Fonseca, Blue Ventures Conservation, Timor-Leste

Balancing customary laws with national and international frameworks is critical for effective marine management in the Coral Triangle, where traditional practices rooted in ecological knowledge and cultural values are vital. Efforts to align these frameworks are necessary, especially as modernization erodes traditional knowledge. Women, as custodians of indigenous knowledge, play crucial roles in resource management, yet their participation in decision-making is often constrained by customs. Integrating women's perspectives and ensuring their active involvement is essential for sustainable marine conservation. Collaborative efforts among governments, civil society, and local communities are needed to bridge the gap between traditional and modern laws. Creating a legal environment that respects customary laws while evolving to meet modern gender equity and inclusion expectations will empower women and strengthen societal bonds, ensuring the sustainable protection of marine resources in the Coral Triangle.

ACTION ITEMS AND RECOMMENDATIONS TO ADVANCE INTEGRATION OF GENDER-RESPONSIVE CROSS-BORDER CIV-MIL COOPERATION TOWARDS COMBATING MARITIME ENVIRONMENTAL CRIMES

A Community of Practice comprises participants in the Cross-Border Cooperation on WPS and Maritime Environmental Crimes in the Coral Triangle Workshop series. The Community has committed to reconvene virtually in late July 2024 to discuss next steps. In the interim, and to facilitate progress, recommendations were made for participants to do the following:

- Report back to their respective organizations the outcomes of the Project and share the feedback with the Community.
- Gather the information needed to assess their organizations' interest in becoming active members of this Community.¹⁵³
- Identify the resources their organizations may or may not be willing to allocate:
 - Time
 - Finance
 - Labor
- Search for and identify tools and resources available to them that they may not have previously recognized. Share available tools and resources on gender and maritime environmental security with all other Community members.
- Gather questions and feedback on the key findings and final report documents.
- Participate actively in group chats and organized discussions.
- Communicate to workshop organizers suggestions for people to add to the Community in the future.
- Maintain connections between civil society and defense / security personnel.
- CTC to request CTI-CFF consider inviting members of this Community to participate in the WLF meetings.
- Collect ground-sourced data on gender and maritime environmental security within local communities.
- Prepare for the next Community of Practice meeting with a list of recommendations for best practices.
- Workshop organizers to share the key findings and final report with the Community, which will be re-shared by Community members in the following venues:

¹⁵³ If some Community Members are unable to gather all the necessary information by the meeting, that is acceptable; the goal is to collect as much data as possible to understand the current landscape. Even a lack of information can provide insight into the resources available for addressing these critical issues.

- Regional Plan of Action to Promote Responsible Fishing Practices including to combating Illegal, Unreported, and Unregulated Fishing Practices in the Region (RPOA-IUU) Secretariat [Re-shared by Pedro Rodrigues, General Directorate of Fisheries, Aquaculture and Marine Resources, Timor-Leste, and member of the RPOA-IUU Secretariat].
- Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) Technical Working Group (TWG) and Women Leaders Forum (WLF) [Re-shared by Leilani Gallardo, Regional Communications and CTI Program Coordinator for the Coral Triangle Center (CTC), Indonesia and member of the WLF].
- The ASEAN Fisheries Consultative Forum (AFCF) [Community members encouraged to volunteer to re-share with AFCF]
- The ASEAN Commission on the Promotion and Protection of the Rights of Women and Children (ACWC), the ASEAN Committee on Women (ACW), and the ASEAN Women Peace Security Advisory Group [Re-shared by the USINDOPACOM Office of WPS].
- U.S. Agency for International Development (USAID) [Re-shared by the USINDOPACOM Office of WPS].
- United States Institute of Peace (USIP) [Re-shared by the USINDOPACOM Office of WPS].
- Australian Department of Agriculture, Fisheries and Forestry (DAFF) SEA-IUU Fishing Program

The upcoming discussions in late July 2024 will focus on determining the feasibility of establishing a formal Community of Practice with a mission statement and dedicated resources to continue the work initiated during this workshop series. Such a Community of Practice would elevate the integration of gender-responsive approaches and the enhancement of cross-border civil-military cooperation to more effectively combat maritime environmental crimes. Recommendations for the Community's agenda for this meeting include:

- Determine feasibility of formalizing the Community.
- Develop a Community Action Plan that suits the Community's capacity.
- Consider expansion of the Community to all six Coral Triangle countries.
- Event organizers and Community members to collaborate to source funding for future in-person engagements.
- Develop practical recommendations that account for the diverse contexts within the Coral Triangle, ensuring that strategies are inclusive and reflect the needs of local populations, particularly women. This collaborative effort will help bridge gaps in current practices, promote shared learning, and foster a cohesive approach to maritime environmental security that leverages the unique strengths of both civil society and military actors. The commitment to regular meetings and continuous dialogue underscores the Community's dedication to advancing these goals, setting the stage for innovative and impactful initiatives in the region.

CONCLUSION

This Project emphasized the paramount significance of integrating a WPS agenda into strategies aimed at combating maritime environmental crimes in the Coral Triangle. It also revealed a strong commitment from both military and civilian sectors in Indonesia, Papua New Guinea, and Timor-Leste to embrace this approach while working collaboratively across the civil-military sectors and cooperating across state boundaries. This report has examined various facets of combating maritime environmental crimes, from the intersection of customary laws with modern legal frameworks and the role of women in decision-making processes and leadership roles, to the challenges and opportunities presented by civil-military partnerships and transnational cooperation.

One of the key takeaways is the need for better integration of gender perspectives in all aspects of marine environmental management and governance. Women are crucial stakeholders, not only as custodians of traditional ecological knowledge but also as active participants in resource management and environmental stewardship. Empowering women and ensuring their inclusion in decision-making processes are essential steps toward achieving comprehensive and sustainable marine conservation and management.

Furthermore, the importance of enhanced civ-mil collaboration across state borders is essential for combating maritime environmental crimes. By fostering partnerships between governments, civil society organizations, and local communities, it becomes possible to bridge the gap between traditional and modern legal frameworks, promote gender equality, and strengthen enforcement efforts.

Moving forward, it is imperative to prioritize the implementation of the recommendations outlined in this report. These recommendations include investigating the potential of a formalized Community of Practice with funding and resources necessary to facilitate ongoing dialogue and collaboration among stakeholders. Additionally, efforts should be made to raise awareness about the WPS Agenda and how its application can positively impact marine environmental security within the Coral Triangle region.

By embracing the WPS agenda and non-traditional collaboration opportunities, development of more effective strategies to combat maritime environmental crimes in the Coral Triangle becomes more realistic. The challenges ahead are significant, but with concerted efforts and collective action, work towards a future where oceans are protected, sustainable, and resilient for generations to come is possible.

REFERENCES

- Afriansyah, Arie, Amira Solihin, Amira Bilqis, and Jeremia Humolong Prasetya. "Baseline Estimates Of RPOA-IUU Participating Countries." Indonesia: Faculty of Law Universitas Indonesia, March 2021. https://atsea-program.com/wp-content/uploads/2023/01/Final-Report_Baseline-Estimates-RPOA-IUU_FIN__organised_2.pdf.
- Aisi, H.E. Robert. "52nd Session of the Commission on the Status of Women 'Financing for Gender Equality and the Empowerment of Women.'" Independent State of Papua New Guinea, 2008. https://www.un.org/womenwatch/daw/csw/csw52/statements_missions/papua.pdf.
- Amepou, Yolarnie, Andrew Chin, Simon Foale, Glenn Sant, Olivia Smailes, and Michael I. Grant. "Maw Money, Maw Problems: A Lucrative Fish Maw Fishery in Papua New Guinea Highlights a Global Conservation Issue Driven by Chinese Cultural Demand." *Conservation Letters*. Accessed June 8, 2024. <https://doi.org/10.1111/conl.13006>.
- Amnesty International. "Papua New Guinea Violence Against Women: Not Inevitable, Never Acceptable!," September 2006. <https://www.amnesty.org/en/wp-content/uploads/2021/08/asa340022006en.pdf>.
- Anggita, Kumara. "How the Fisherwomen of Java Rise above Climate Change and an Increase in Gender-Based Violence." Women's Resilience To Disasters Knowledge Hub. *Case Studies* (blog), October 31, 2021. <https://wrd.unwomen.org/explore/insights/how-fisherwomen-java-rise-above-climate-change-and-increase-gender-based-violence>.
- Armstrong, Olivia H., Rama Wong, Antonio Lorenzo, Amirah Sidik, Glenn Sant, and Serene C.L. Chng. "Illegal Wildlife Trade: Baseline for Monitoring and Law Enforcement In The Sulu-Celebes Seas." TRAFFIC, May 2023. https://www.traffic.org/site/assets/files/21879/illegal_wildlife_trade_baseline_for_monitoring_and_law_enforcement_in_the_sulu-celebes_seas_2023.pdf.
- ASEAN Secretariat. "AMAF's Approach to Gender Mainstreaming in the Food, Agriculture and Forestry Sectors." Ha Noi, Viet Nam: ASEAN Secretariat, October 11, 2018. <https://asean.org/wp-content/uploads/2021/09/AMAF-Approach-to-gender-mainstreaming.pdf>.
- ASEAN Sectoral Working Group on Fisheries. "STRATEGIC PLAN OF ACTION ON ASEAN COOPERATION ON FISHERIES 2021-2025." ASEAN. Accessed June 11, 2024. <https://asean.org/wp-content/uploads/2021/12/FAFD-16.-SPA-Fisheries-202528ASWGF.pdf>.
- Asian Development Bank. "State Of The Coral Triangle: Indonesia." Mandaluyong City, Philippines: ADB, 2014. <https://www.adb.org/sites/default/files/publication/42409/state-coral-triangle-indonesia.pdf>.
- Associated Press. "4,000 Foreign Fishermen Stranded on Remote Indonesian Islands." *The Guardian*, March 28, 2015. <https://www.theguardian.com/world/2015/mar/28/4000-foreign-fishermen-stranded-on-remote-indonesian-islands>.
- ATSEA. "Wave of Collaborations: Joint Actions in Enhancing Coastal Communities Livelihoods." Newsletter. ATSEA Newsletter. ATSEA, March 2023. https://www.undp.org/sites/g/files/zskgke326/files/2023-04/2023-Q1_E-newsletter_draft_Final.docx_compressed.pdf.
- Bank, Asian Development. "Country Gender Assessment: Papua New Guinea 2011-2012," December 15, 2012. <https://www.adb.org/documents/country-gender-assessment-papua-new-guinea-2011-2012>.
- Berge, Allard-Jan tan. "Best & Bad Practices on Civil-Military Interaction." The Netherlands: Civil-Military Cooperation Centre of Excellence, June 2014. <https://nllp.jallc.nato.int/IKS/Sharing%20Public/Civil-Military%20Interaction%20Best%20and%20Bad%20Practices%20Handbook.pdf>.
- Blades, Johnny. "Pandemic Exposes Weakness of PNG's Border Security." RNZ, April 23, 2020. <https://www.rnz.co.nz/international/pacific-news/415003/pandemic-exposes-weakness-of-png-s-border-security>.
- Bollen, Myriame, and Jori Pascal Kalkman. "Civil-Military Cooperation in Disaster and Emergency Response Practices, Challenges, and Opportunities." *Journal of Advanced Military Studies* 13, no. 1 (2022): 79–91.
- Braithwaite, E.J., and L.G. Lim. "Women in the Armed Forces." Research on Women in the Armed Forces (2000 - Present). NATO Science & Technology Organization, April 2021. <https://bit.ly/32RjBjX>.
- Brewster, David. "Chinese Fishing Fleet a Security Issue for Australia." *The Interpreter*, November 7, 2018. <https://www.lowyinstitute.org/the-interpreter/chinese-fishing-fleet-security-issue-australia>.

- Bricker, Kim. "Women in Small-Scale Fisheries." *Ocean Wise*, March 7, 2024. <https://ocean.org/blog/women-in-small-scale-fisheries/>.
- Center for Strategic and International Studies (CSIS). "Legacies, Lessons and Lobsters: Indonesia's Maritime Policy in a Post-Susi World," January 15, 2020. <https://www.csis.org/analysis/legacies-lessons-and-lobsters-indonesias-maritime-policy-post-susi-world>.
- Commission for Reception, Truth, and Reconciliation Timor-Leste (CAVR). "The Report of the Commission for Reception, Truth, and Reconciliation Timor-Leste." Timor Leste, 2005. <https://www.etan.org/etanpdf/2006/CAVR/Chega!-Report-Executive-Summary.pdf>.
- Conservation and Environment Protection Authority. "Rapid Assessment: Criminal Justice Response to Wildlife and Forest Crime in Papua New Guinea." United Nations Office on Drugs and Crime (UNODC), December 2022. https://www.unodc.org/res/environment-climate/asia-pacific_html/PNG_Assessment.pdf.
- Cook, Alistair D.B., and Sangeetha Yogendran. "Conceptualising Humanitarian Civil-Military Partnerships in the Asia-Pacific: (Re-)Ordering Cooperation." Australian Institute of International Affairs, February 17, 2020. <https://www.internationalaffairs.org.au/australianoutlook/conceptualising-humanitarian-civil-military-partnerships-in-the-asia-pacific-re-ordering-cooperation/>.
- Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security. "CTI Women Leaders' Forum," November 6, 2017. <https://www.coraltriangleinitiative.org/wlf>.
- . "Regional State Of The Coral Triangle Coral Triangle Marine Resources: Their Status, Economies, and Management." Asian Development Bank, 2014. <https://www.adb.org/sites/default/files/publication/42393/regional-state-coral-triangle.pdf>.
- . "The Coral Triangle Atlas." Accessed June 8, 2024. <http://ctatlas.coraltriangleinitiative.org/About>.
- Correa, Mariette. "Women Play a Crucial Role in Marine Environments and Fisheries Economies." UN Women. *Asian and the Pacific* (blog), September 18, 2015. <https://asiapacific.unwomen.org/en/news-and-events/stories/2015/09/women-play-a-crucial-role-in-marine-environments-and-fisheries-economies>.
- "Counterpart Launches Capacity Building Program in Support of Women's Peace Building in PNG - Counterpart International." Accessed March 12, 2024. <https://www.counterpart.org/counterpart-launches-capacity-building-program-in-support-of-womens-peace-b/>.
- "Country WID Profile Papua New Guinea." Japan International Cooperation Agency Planning and Evaluation Department, 2002. https://www.jica.go.jp/Resource/english/our_work/thematic_issues/gender/background/pdf/e02png.pdf.
- Courtney, C.A., R. Pomeroy, M. De Alessi, D. Adhuri, C. Yuni, and A. Halim. "Marine Tenure and Small-Scale Fisheries: Learning From The Indonesia Experience." USAID. Tenure and Global Climate Change Program. Burlington, Vermont: Tetra Tech, May 2017. https://pdf.usaid.gov/pdf_docs/PA00SSNT.pdf.
- CTI-CFF Regional Secretariat. "Marine Plastic Pollution and Its Sources in the Coral Triangle." Indonesia: Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, 2023. <https://www.coraltriangleinitiative.org/sites/default/files/resources/WWF-CTI%20Stocktake%20report%20v4%20-%20lowres.pdf>.
- Dakeyne, Olivia. "International Women's Day: The Disproportionate Impact of Environmental Crime on Women." THEMIS, March 8, 2024. <https://www.wearethemis.com/uk/about/blog/international-women-s-day-the-disproportionate-impact-of-environmental-crime-on-women/>.
- Darunee, Sukanan. "Illegal Fishing Endangers Both Ecosystems and Food Security," July 18, 2019. <https://www.sustainability-times.com/environmental-protection/illegal-fishing-wreaks-havoc-with-marine-ecosystems/>.
- Day Translations. "Linguistic Diversity: The Languages in Papua New Guinea." Day Translations Blog, May 7, 2018. <https://www.daytranslations.com/blog/languages-in-papua-new-guinea/>.
- Department for Community Development. "National Policy For Women And Gender Equality 2011-2015." Papua New Guinea. Accessed June 10, 2024. <https://faolex.fao.org/docs/pdf/png205113.pdf>.
- Department of Economic and Social Affairs. "Singapore's Contributions to Combating Illegal, Unreported and Unregulated (IUU) Fishing." United Nations. Sustainable Development. Accessed June 12, 2024. <https://sdgs.un.org/partnerships/singapores-contributions-combating-illegal-unreported-and-unregulated-iuu-fishing>.

- Environmental Justice Foundation. “Blood and Water: Human Rights Abuse in the Global Seafood Industry.” London, United Kingdom: EJF, May 6, 2019.
<https://ejfoundation.org/reports/blood-and-water-human-rights-abuse-in-the-global-seafood-industry>.
- Food and Agriculture Organization of the United Nations. “What Is IUU Fishing? | Illegal, Unreported and Unregulated (IUU) Fishing.” Accessed June 7, 2024. <https://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/>.
- Fritsvold, Erik. “Why We Need More Women Working in Law Enforcement.” University of San Diego Online Degrees, January 6, 2017. <https://onlinedegrees.sandiego.edu/women-in-law-enforcement/>.
- Fundasau Mahein. “Suspension of Patrol Boat Delivery from Australia Harms National Security,” June 6, 2024. <https://www.fundasau.mahein.org/2024/06/06/suspension-of-patrol-boat-delivery-from-australia-harms-national-security/>.
- Goby, Gillian, and Katrina Moore. “Enforcing and Ensuring Compliance of Marine Laws and Community Based Marine Protected Areas.” Jakarta, Indonesia: Coral Triangle Initiative on Corals, Fisheries and Food Security (CTI-CFF), September 2013.
https://coraltriangleinitiative.org/sites/default/files/resources/10_Information%20Paper%20for%20the%20Western%20Provincial%20Government_Enforcing%20and%20Ensuring%20Compliance.pdf.
- Gokkon, Basten. “Indonesia Ranks High on Legal Wildlife Trade, but Experts Warn It Masks Illegal Trade.” Mongabay Environmental News, December 3, 2021.
<https://news.mongabay.com/2021/12/indonesia-ranks-high-on-legal-wildlife-trade-but-experts-warn-it-masks-illegal-trade/>.
- Griffiths, Elizabeth, Sara Jarman, and Eric Talbot Jensen. “World Peace and Gender Equality: Addressing UN Security Council Resolution 1325’s Weaknesses.” *Michigan Journal of Gender & Law* 27, no. 2 (2021).
<https://doi.org/10.36641/mjgl.27.2.world>.
- Ha, Tim. “Coastal Communities Take the Lead: How Plans to Safeguard Southeast Asia’s Biodiverse Waters Are Evolving.” *Eco-Business*, June 23, 2021.
<https://www.eco-business.com/news/coastal-communities-take-the-lead-how-plans-to-safeguard-southeast-asias-biodiverse-waters-are-evolving/>.
- Haywood, M.D.E, D. Dennis, D.P. Thomson, and Pillans. “Mine Waste Disposal Leads to Lower Coral Cover, Reduced Species Richness and a Predominance of Simple Coral Growth Forms on a Fringing Coral Reef in Papua New Guinea.” *Marine Environment Research* 115 (April 2016): 36–48.
- Heck, Sarah A. “Ocean Governance in the Coral Triangle: A Multi-Level Regulatory Governance Structure.” *Politics and Governance* 10, no. 3 (July 14, 2022): 70–79.
- House, Jenny, Nelson M.S. Amaral, Janicia Silva de Jesus, Jemima Gomes, Michael Chew, Danika Kleiber, Dirk J. Steenbergen, and Natasha Stacey. “Women’s Experiences of Participatory Small-Scale Fisheries Monitoring in Timor-Leste.” *Maritime Studies* 23, no. 9 (February 5, 2024).
<https://link.springer.com/article/10.1007/s40152-024-00352-6>.
- Innovation Support Network Hubs. “Promoting Gender Diversity through Innovation Hubs.” ISNHubs, March 27, 2023.
<https://isnhubs.org.ng/2023/03/27/promoting-gender-diversity-through-innovation-hubs/>.
- International Growth Centre. “Sustainable Fishing and Women’s Labour in the Blue Economy.” IGC. *Gender Equality* (blog), March 15, 2023.
<https://www.theigc.org/blogs/gender-equality/sustainable-fishing-and-womens-labour-blue-economy>.
- International Organization for Migration. “Report on Human Trafficking, Forced Labour and Fisheries Crime in the Indonesian Fishing Industry.” coventry university, 2016.
<https://www.iom.int/sites/g/files/tmzbdl486/files/country/docs/indonesia/Human-Trafficking-Forced-Labour-and-Fisheries-Crime-in-the-Indonesian-Fishing-Industry-IOM.pdf>.
- International Rescue Committee. “10 Ways to Help End Violence against Women and Girls.” IRC, March 6, 2024.
<https://www.rescue.org/article/10-ways-help-end-violence-against-women-and-girls>.
- International Union for Conservation of Nature. “Women Fishers Learn Sustainable Practices and Give Back to the Ocean.” IUCN, June 1, 2024.
<https://iucn.org/story/202405/women-fishers-learn-sustainable-practices-and-give-back-ocean>.
- International Union for Conservation of Nature (IUCN). “Plastic Pollution.” *IUNC Issues Brief* (blog), May 2024.
<https://www.iucn.org/resources/issues-brief/plastic-pollution>.
- Jones, Elizabeth. “The Environmental and Socioeconomic Effects of Overfishing Due to the Globalization of the Seafood

- Industry.” Thomas Jefferson University | College of Science, Health, and the Liberal Arts. Accessed June 10, 2024. <http://www.philau.edu/collegestudies/Documents/Elizabeth%20Jones.pdf>.
- Kahler, Jessica S., and Marisa A. Rinkus. “Women and Wildlife Crime: Hidden Offenders, Protectors and Victims.” *Oryx* 55, no. 6 (November 2021): 835–43. <https://doi.org/10.1017/S0030605321000193>.
- Kitolelei, Salanieta, Annette Breckwoldt, Jokim Kitolelei, and Natalie Makhoul. “Fisherwomen’s Indigenous and Local Knowledge - the Hidden Gems for the Management of Marine and Freshwater Resources in Fiji.” *Frontiers in Marine Science* 9 (December 5, 2022). <https://doi.org/10.3389/fmars.2022.991253>.
- Knouse, Stephen, and Schuyler Webb. “Networks Among Women and Minorities in the Military.” Defense Equal Opportunity Management Institute, January 1, 1999. https://www.researchgate.net/publication/235045853_Networks_Among_Women_and_Minorities_in_the_Military.
- Mcleod, Elizabeth, Brian W. Szuster, and Rodney Salm. “Sasi and Marine Conservation in Raja Ampat, Indonesia.” *Coastal Management* 37, no. 6 (January 2009): 656–76.
- Morrison, Blair, Marcy Cockrell, Nicole Rhody, and Kevan Main. “Women of the Water: Enhancing Equity and Inclusion in Aquaculture.” *Oceanography* 36, no. 4 (2023): 162–63. <https://doi.org/10.5670/oceanog.2024.112>.
- National Geographic Society. “Marine Pollution.” National Geographic, February 22, 2024. <https://education.nationalgeographic.org/resource/marine-pollution>.
- National Oceanic and Atmospheric Administration. “Human Trafficking in the Seafood Supply Chain.” Report to Congress. National Defense Authorization Act for Fiscal Year 2020, December 23, 2020. https://media.fisheries.noaa.gov/2020-12/DOSNOAARepor_t_HumanTrafficking.pdf.
- Nations, United. “Oceans and the Law of the Sea.” United Nations. United Nations. Accessed March 26, 2024. <https://www.un.org/en/global-issues/oceans-and-the-law-of-the-sea>.
- NATO. “Deep Dive Recap: Cooperative Security and the Gender Perspective.” NATO, May 14, 2022. https://www.nato.int/cps/en/natohq/news_195146.htm.
- Ngum, Faith, and Radha Barooah. “Impact of Biodiversity Loss and Environmental Crime on Women from Rural and Indigenous Communities Evidence from Ecuador, Mexico, Cameroon, and Indonesia.” Global Initiative Against Transnational Organized Crime, October 2023. <https://globalinitiative.net/wp-content/uploads/2023/10/Faith-Ngum-Radha-Barooah-Impact-of-biodiversity-loss-and-environmental-crime-on-women-from-rural-and-indigenous-communities-GI-TOC-October-2023.v3.pdf>.
- Office on Drugs and Crime. “Breaking Waves: Women Pioneers in Maritime Law Enforcement.” United Nations. Accessed June 11, 2024. https://www.unodc.org/unodc/en/frontpage/2024/May/breaking-waves_-women-pioneers-in-maritime-law-enforcement.html.
- . “UNODC Empowers Female Officers in Maritime Law Enforcement Across Eastern Africa.” United Nations, December 18, 2020. <https://www.unodc.org/unodc/frontpage/2020/December/unodc-empowers-female-officers-in-maritime-law-enforcement-across-eastern-africa.html>.
- One Earth Future. “Angling for Equality: Why Women Are Vital to Maritime Security.” *Secure Fisheries* (blog), May 23, 2018. <https://oneearthfuture.org/en/secure-fisheries/news/angling-equality-why-women-are-vital-maritime-security>.
- “Papua New Guinea Vision 2050 | Papua New Guinea Environment Data Portal.” Accessed March 27, 2024. <https://png-data.sprep.org/dataset/papua-new-guinea-vision-2050>.
- PEMSEA. “Partnerships in Environmental Management for the Seas of East Asia (PEMSEA).” Accessed June 10, 2024. <https://www.pemsea.org/>.
- Petrossian, Gohar A. “Preventing Illegal, Unreported and Unregulated (IUU) Fishing: A Situational Approach” 189 (September 2015): 39–48.
- Población, Enrique Alonso, Crispin Wilson, Pedro Rodrigues, and Mario Pereira. “Working Together. A Collaborative Approach to Counter Illegal, Unreported and Unregulated (IUU) Fishing Is under Way in Timor-Leste.” *Samudra Report*, November 2012, No. 63 edition. https://www.researchgate.net/publication/306519422_Working_Together_A_collaborative_approach_to_counter_illegal_unreported_and_unregulated_IUU_fishing_is_under_way_in_Timor-Leste.
- Roll, Christina. “Inclusive Protection.” AXA XL, March 7, 2022.

- <https://axaxl.com/fast-fast-forward/articles/inclusive-protection-women-in-ehs>.
- Roman, Maj. Lindsay. "Pioneering Women: Redefining Military Leadership and Inspiring Generations." U.S. Army, March 15, 2024. https://www.army.mil/article/274569/pioneering_women_redefining_military_leadership_and_inspiring_generations.
- Rossi, Jerica. "Community Viability and Marine Conservation: Hybrid Resource Management and the Role of the Coral Triangle Center on Pulau Ay, Indonesia." Capstone Collection, SIT Graduate Institute, 2016. <https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=3920&context=capstones>.
- RPOA-IUU. "The Regional Plan of Action to Promote Responsible Fishing Practices Including Combating IUU Fishing." Accessed June 10, 2024. <https://www.rpoaiuu.org/>.
- Samana, Funke. "Establishing a National Machinery for Women's Development in Papua New Guinea." Victoria University of Wellington Library. *Women, Development and Empowerment: A Pacific Feminist Perspective* (blog). Accessed June 10, 2024. <https://nzetc.victoria.ac.nz/tm/scholarly/tei-GriWom2-c2-6.html>.
- Satapornvanit, Arlene Nietes. "The Importance of Gender in Fisheries: The USAID Oceans Experience." *Fish for the People* 16, no. 2 (2018). https://pdf.usaid.gov/pdf_docs/PA00WK6D.pdf.
- Schlieman, Lily. "Illegal, Unreported, and Unregulated Fishing in Southeast Asia: Trends and Actors." *Asia Policy* 18, no. 4 (October 26, 2023). <https://www.nbr.org/publication/illegal-unreported-and-unregulated-fishing-in-southeast-asia-trends-and-actors/>.
- Scholtens, Joeri, and Maarten Bavinck. "Lessons for Legal Pluralism: Investigating the Challenges of Transboundary Fisheries Governance." *Current Opinion in Environmental Sustainability* 11 (December 2014): 10–18.
- Secretariat of the Pacific Regional Environment Programme. "Assessment of Target and Non-Target Species Catch Rates in the Kikori Fish Maw Fishery and Local Ecological Knowledge of Locally Threatened Dolphin Species." Apia, Samoa: SPREP, 2022. <https://www.sprep.org/news/a-new-fishery-threatens-papua-new-guineas-shark-and-dolphin-species>.
- SecurityWomen. "INDONESIA." SecurityWomen. Accessed June 12, 2024. <https://www.securitywomen.org/unscr-1325-and-national-action-plans-nap/indonesia>.
- Selibas, Dimitri. "Funding for Women-Led Conservation Remains Tiny, but That's Changing Fast." Mongabay Environmental News, April 20, 2022. <https://news.mongabay.com/2022/04/funding-for-women-led-conservation-remains-tiny-but-thats-changing-fast/>.
- Sobha, T.R., C.P. Vibija, and P. Fahima. "Coral Reef: A Hot Spot of Marine Biodiversity." *Conservation and Sustainable Utilization of Bioresources, Sustainable Development and Biodiversity*, 30 (January 6, 2023): 171–94.
- Soejoeti, Ariani, Chelsea Lanzoni, and Jasmin Mohd. Saad. "Bringing Women and Youth in the Regional Efforts to Address Illegal, Unreported and Unregulated Fishing (IUU) in the Indo-Pacific Region." USAID, February 27, 2024.
- Stop Illegal Fishing. "Chinese Fishing Boats Found with Piles of Dead Sharks Linked to Company Accused of Forced Labour, Torture." Stop Illegal Fishing, November 7, 2017. <https://stopillegalfishing.com/press-links/chinese-fishing-boats-found-piles-dead-sharks-linked-company-accused-forced-labour-torture/>.
- Tam-Seto, Linna, and Bibi Imre-Millei. "Scoping Review of Mentorship Programs for Women in the Military." *Journal of Military, Veteran and Family Health* 8, no. s1 (April 2022): 15–25. <https://doi.org/10.3138/jmvfh-2021-0075>.
- The ASEAN Secretariat. "Fisheries Cooperation." Association of Southeast Asian Nations (ASEAN). Accessed June 10, 2024. <https://asean.org/our-communities/economic-community/enhanced-connectivity-and-sectoral-development/asean-food-agriculture-and-forestry/fisheries-cooperation/>.
- The Asia Foundation. "Trade in the Sulu Archipelago: Informal Economies Amidst Maritime Security Challenges." San Francisco: The Asia Foundation, October 2019. <https://asiafoundation.org/wp-content/uploads/2019/10/Trade-in-the-Sulu-Archipelago-Informal-Economies-Amidst-Maritime-Security-Challenges.pdf>.
- "Timor-Leste – 1325 National Action Plans." Accessed March 12, 2024. <https://1325naps.peacewomen.org/index.php/timor-leste/>.
- UN Capital Development Fund. "Five Reasons Women in Solomon Islands and Papua New Guinea Are Financially

- Excluded -." UNCDF, June 4, 2020.
<https://www.uncdf.org/article/5804/five-reasons-women-in-solomon-islands-and-papua-new-guinea-are-financially-excluded>.
- UN Department of Economic and Social Affairs. "The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)." United Nations. Accessed June 10, 2024.
<https://sdgs.un.org/partnerships/coral-triangle-initiative-coral-reefs-fisheries-and-food-security-cti-cff>.
- UN Women. "How Gender Inequality and Climate Change Are Interconnected." *Explainer* (blog), February 28, 2022.
<https://www.unwomen.org/en/news-stories/explainer/2022/02/explainer-how-gender-inequality-and-climate-change-are-interconnected>.
- . "Training for Gender Equality and Women's Empowerment." Accessed June 11, 2024.
<https://www.unwomen.org/en/how-we-work/capacity-development-and-training>.
- UN Women – Asia-Pacific. "Timor-Leste Launches 2nd Generation of Its National Action Plan 1325 on Women, Peace and Security (NAP 1325)," February 16, 2024.
<https://asiapacific.unwomen.org/en/stories/press-release/2024/02/timor-leste-launches-2nd-generation-of-its-national-action-plan-1325>.
- UN WomenWatch. "Women, Gender Equality and Climate Change." United Nations, 2009.
https://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf.
- UNFCCC. "Promoting Indigenous Women Alternative Livelihood and Reducing Climate Change - India." UN Climate Change. Accessed June 11, 2024.
<https://unfccc.int/climate-action/momentum-for-change/activity-database/promoting-indigenous-women-alternative-livelihood-and-reducing-climate-change>.
- UNICEF-WHO. "Women and Girls Bear Brunt of Water and Sanitation Crisis." World Health Organization (WHO), July 6, 2023.
<https://www.who.int/news/item/06-07-2023-women-and-girls-bear-brunt-of-water-and-sanitation-crisis---new-unicef-who-report>.
- United Nations. "International Day for the Fight against Illegal, Unreported and Unregulated Fishing: The Toll of Illegal, Unreported and Unregulated Fishing." United Nations. United Nations. Accessed June 7, 2024.
<https://www.un.org/en/observances/end-illegal-fishing-day>.
- United Nations Development Programme. "Gender Development Index." Gender Development Index (GDI). Accessed June 12, 2024. <https://hdr.undp.org/gender-development-index>.
- . "Women Spearheading Sustainable Production of Blue Swimming Crab in Indonesia." UNDP, June 7, 2019.
<https://www.undp.org/indonesia/news/women-spearheading-sustainable-production-blue-swimming-crab-indonesia>.
- United Nations Office for the Coordination of Humanitarian Affairs. "Humanitarian Civil Military Coordination," February 27, 2023. <https://reliefweb.int/topic/humanitarian-civil-military-coordination>.
- United Nations Office on Drugs and Crime. "Fisheries Crime: Transnational Organized Criminal Activities in the Context of the Fisheries Sector." Vienna, Austria: UNODC. Accessed June 26, 2023.
https://www.unodc.org/documents/about-unodc/Campaigns/Fisheries/focus_sheet_PRINT.pdf.
- . "Tackling Crimes That Affect Our Ocean." UNODC, May 30, 2024.
https://www.unodc.org/documents/Maritime_crime/UNODC_Tackling_Crimes_that_Affect_our_Ocean.pdf.
- United Nations Security Council. "Landmark Resolution on Women, Peace and Security." United Nations, October 31, 2000. <https://www.un.org/womenwatch/osagi/wps/>.
- . "The Four Pillars of United Nations Security Council Resolution 1325." United Nations. Accessed June 12, 2024.
<https://www.un.org/shestandsforpeace/content/four-pillars-united-nations-security-council-resolution-1325>.
- United States Department of Justice. "Task Force on Human Trafficking in Fishing in International Waters." United States Department of Justice, January 2021.
<https://www.justice.gov/crt/page/file/1360366/dl?inline#:~:text=Beyond%20the%20significant%20human%20costs,13%20and%20the%20international%20community>.
- United States Institute of Peace. "What Is UNSCR 1325? An Explanation of the Landmark Resolution on Women, Peace and Security." Accessed June 11, 2024. https://www.usip.org/gender_peacebuilding/about_UNSCR_1325.
- U.S. Agency for International Development Sustainable Fish Asia Technical Support Activity. "Gender and Inclusive

Development Action Plan (GIDAP).” USAID, August 2022. https://pdf.usaid.gov/pdf_docs/PA00ZJZG.pdf.

U.S. Customs and Border Protection. “Wildlife Trafficking,” August 1, 2023. <https://www.cbp.gov/trade/programs-administration/natural-resources-protection/wildlife-trafficking>.

US Department of Defense, Joint Force Development. “Civil-Military Operations.” Joint Publication 3-57, July 9, 2018. https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_57.pdf?ver=2018-09-13-134111-460.

USAID, The Asia Foundation, and Timor-Leste Education Project. “Legal History and the Rule of Law in Timor-Leste.” Introduction to the Laws of Timor-Leste. Palo Alto, California: Stanford Law School. Accessed June 11, 2024. <https://law.stanford.edu/wp-content/uploads/2018/04/Legal-History-and-the-Rule-of-Law-in-Timor-Leste.pdf>.

Weeratunge, Nireka, Katherine A. Snyder, and Choo Poh Sze. “Gleaner, Fisher, Trader, Processor: Understanding Gendered Employment in Fisheries and Aquaculture.” *Fish and Fisheries* 11, no. 4 (October 29, 2010): 405–20.

Winn, Teddy. “Where Are the Women? The Challenge Facing the next PNG Parliament | Lowy Institute.” *The Interpreter*, May 10, 2022. <https://www.lowyinstitute.org/the-interpreter/where-are-women-challenge-facing-next-png-parliament>.

Women, Peace and Security Programme of the Women’s International League for Peace and Freedom. “Indonesia.” 1325 National Action Plans (NAPs). Accessed June 12, 2024. <http://1325naps.peacewomen.org/index.php/indonesia/>.

Women’s International League For Peace & Freedom. “1325 National Action Plans.” 1325 National Action Plans (NAPs). Accessed June 12, 2024. <https://1325naps.peacewomen.org/>.

Woods, Zonibel, and Micaela P. Agoncillo. “How to Confront Gender-Based Violence in a Warming World.” *Asian Development Blog*, May 4, 2024. <https://blogs.adb.org/blog/how-confront-gender-based-violence-warming-world#>.

World Wildlife Fund (WWF). “Coral Triangle | Facts.” Accessed June 6, 2024. <https://www.worldwildlife.org/places/coral-triangle>.