



Photo: Small-scale fishers in Bongao, Tawi-Tawi, Philippines/ Fauriza Saddari/ USAID SuFiA TS

# The Implementation Status of Responsible Fishing Instruments to Combat Illegal, Unreported and Unregulated Fishing

*An assessment of endorsement and implementation levels of responsible fishing instruments to inform recommendations for the Regional Plan of Action to Combat IUU Fishing in the Indo-Pacific region*

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#### About this Document:

This report focuses on the implementation status of responsible fisheries international instruments (RFIIs) that can effectively combat illegal, unreported and unregulated (IUU) fishing in the Indo-Pacific region and the technical support needed to finish implementation where desired. This assessment was conducted in partnership with The Regional Plan of Action to Promote Responsible Fishing Practices Including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUU) and the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security's (CTI-CFF). It is a follow-up to RPOA-IUU's 2022 International Workshop on Advancing Regional Standards of Responsible Fisheries to combat IUU fishing and supports the CTI-CFF Regional Plan of Action 2.0.

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## ABBREVIATIONS AND ACRONYMS

|                |  |
|----------------|--|
| ASEAN          | Association of Southeast Asian Nations   |
| ASWGF          | ASEAN Sectoral Working Group on Fisheries  |
| C029           | ILO Forced Labour Convention, 1930 (No.29) (1930)  |
| CI88           | ILO CI88 - Work in Fishing Convention, 2007 (No. 188)  |
| CCRF           | Code of Conduct for Responsible Fisheries (1995)   |
| CEDAW          | Convention on the Elimination of All Forms of Discrimination against Women (1979)  |
| CITES          | Convention on International Trade of Endangered Species of Wild Fauna and Flora (1973)   |
| CT6            | Member countries to CTI-CFF, namely: Indonesia, Malaysia, Philippines, Papua New Guinea, Solomon Islands, and Timor-Leste  |
| CTI-CFF        | Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security   |
| Deep-sea       | International Guidelines for the Management of Deep-sea Fisheries in the High Seas Fisheries Guidelines  |
| DWF            | Distant Water Fleets   |
| EAFM           | Ecosystem Approach to Fisheries Management   |
| EU             | European Union   |
| FAO            | Food and Agriculture Organization of the United Nations  |
| FAO CA         | Food and Agriculture Organization of the United Nations Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993) |
| FFA            | Pacific Islands Forum Fisheries Agency   |
| FGD            | Focus Group Discussion   |
| GIS            | Geographical Information System  |
| ILO            | International Labour Organization of the UN  |
| IPOA-IUU       | International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (2001)  |
| IUU            | Illegal, Unreported and Unregulated Fishing  |
| KII            | Key Informant Interview  |
| MCS            | Monitoring, Control, and Surveillance  |
| MMPA           | U.S. Marine Mammal Protection Act  |
| MPAs           | Marine Protected Areas   |
| MSC            | Marine Stewardship Council   |
| NGOs           | Non-governmental Organizations   |
| NPOA-IUU       | National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing  |
| P029           | ILO Protocol of 2014 to C029, The Forced Labour Convention, 1930 (2014)  |
| PRC            | People's Republic of China   |
| PSMA           | FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (2009)  |
| RFII           | Responsible Fishing International Instrument   |
| RFMOs          | Regional Fisheries Management Organizations  |
| RDMA           | Regional Development Mission to Asia   |
| RPOA 2.0       | CTI-CFF's Regional Plan of Action 2.0  |
| RPOA-IUU       | The Regional Plan of Action to Promote Responsible Fishing Practices Including Combating Illegal, Unreported and Unregulated Fishing   |
| SEAFDEC        | Southeast Asian Fisheries Development Center   |
| SEAFish        | Southeast Asia Fish for Justice Network  |
| SSF            | Small-Scale Fisheries  |
| SSF Guidelines | Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014)   |

|          |   |
|----------|---|
| SuFiA TS | Sustainable Fish Asia Technical Support   |
| UN       | United Nations  |
| UNCLOS   | United Nations Convention on the Law of the Sea (1982)  |
| UN FSA   | Agreement for the Implementation of the Provisions of United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995) |
| U.S.     | United States   |
| USAID    | United States Agency for International Development  |
| VGCDs    | Voluntary Guidelines for Catch Documentation Schemes (2017)   |
| VGFS     | Voluntary Guidelines for Flag State Performance (2014)  |
| VGMFG    | Voluntary Guidelines on the Marking of Fishing Gear (2019)  |
| VMS      | Vessel Monitoring System  |



## EXECUTIVE SUMMARY

Combating illegal, unregulated, and unreported (IUU) fishing in the Indo-Pacific waters of Southeast Asia is crucial due to its multifaceted impact. IUU fishing threatens marine ecosystems, depletes fish stocks, undermines sustainable fisheries management, harms legitimate fishing operations, and endangers food security and livelihoods. Moreover, it fosters regional tensions, compromises maritime security, and provides a cover for various illicit activities. Addressing IUU fishing requires collaborative transboundary efforts to ensure the preservation of marine resources, sustainable fisheries, and the well-being of coastal communities in the region.

This report primarily focuses on identifying helpful, responsible fisheries international instruments (RFIs) specific to combating IUU fishing, and their successful implementation per seascape within Southeast Asia as defined by the US Agency for International Development (USAID) Regional Development Mission for Asia (RDMA). It also explores challenges in implementing priority RFIs within each seascape and the technical support required and desired to overcome these challenges and ultimately enhance the capacity to combat IUU fishing in the region. The report includes some country-level results to aid in interpreting the conclusions regarding the most beneficial technical support. However, the report does not extensively examine individual States' implementation details regarding their corresponding national laws and policies.

Mixed methods were used to collect and analyze data. Subject matter experts and practitioners from academia, government agencies, non-governmental organizations (NGOs), and the private sector were consulted through an online survey followed-up with key informant interviews and focus group discussions per Southeast Asian Indo-Pacific seascape (Appendix I).

This report reveals that the primary obstacle hindering coastal countries in Southeast Asia from endorsing and implementing these international instruments is the need for more capacity. Governments' competing priorities coupled with inadequate awareness among political decision-makers regarding the critical significance of sustainable fisheries result in underfunded and understaffed agencies needing to be equipped with the requisite skills and tools for their required duties.

Amidst these challenges lie promising opportunities to elevate responsible fisheries management. Embracing these opportunities can lead to significant advancements in combating IUU fishing in the region. Full implementation of the Food and Agriculture Organization of the United Nations (FAO) Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA), accompanied by improved information sharing and enforcement collaboration, holds high potential to strengthen efforts against IUU fishing. Similarly, achieving the complete implementation of the United Nations (UN) International Labour Organization's (ILO) Convention 188, Work in Fishing Convention, (C188) through training, social research and resource allocation promises better working conditions for fishing crews and increases market access. Developing and implementing a National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (NPOA-IUU) has prompted States to update their fisheries regulations and policies to address contemporary challenges posed by IUU fishing.

Furthermore, seizing the potential of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), backed by a well-defined operational plan and increased resources, can uplift numerous SSF communities in the region, a considerable population, fostering their sustainable development and enhancing their contribution to responsible fisheries. Upon achieving comprehensive endorsement and implementation of these instruments, in conjunction with the others assessed in this report, coastal States in Southeast Asia will be well-positioned to endorse the legally binding FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO CA). These opportunities pave the way toward a brighter future for fisheries where conservation, prosperity, and social well-being converge comprehensively.

The technical support recommended to enhance capacity in desired and key areas addressing IUU fishing in Indo-Pacific waters include:

- Technical guidance and infrastructure for implementing the PSMA.
- A digital information-sharing database platform for housing intelligence that will elevate the ability to enforce the PSMA and enable a future integrated enforcement plan.
- Transboundary collaboration through joint training, joint enforcement operations, and coordinated fisheries management plans informed by increased scientific research.
- Technical training on labor inspections, social research on fishers' current living and working conditions, and the required capacity-building that is identified as necessary by said research to comply effectively with ILO C188.

## I. INTRODUCTION

Understanding the regional implementation status of international sustainable fisheries policies in Southeast Asia is crucial to supporting the efforts of responsible fisheries management in the Indo-Pacific region. To assist the work executed by the Regional Plan of Action to promote responsible fishing practices including combating IUU Fishing (RPOA-IUU) (Regional Plan of Action to promote responsible fishing practices including combating IUU Fishing 2007) and that of the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2022), this assessment will provide a status update of the endorsement and implementation, including challenges and opportunities, of responsible fishing international instruments (RFIs) relevant towards combating illegal, unreported and unregulated (IUU) fishing in the Indo-Pacific region. Further, this assessment will identify technical support needs to meet the identified challenges to, and opportunities for, strengthening the implementation of these regional fishery policies and instruments.

This activity is part of the United States Agency for International Development (USAID) Regional Development Mission to Asia's (RDMA) Sustainable Fish Asia Technical Support (SuFiA TS) initiative (United States Agency for International Development 2022a). The USAID RDMA's primary foci are promoting sustainable development, encouraging economic growth, and addressing regional challenges across multiple countries in Asia (United States Agency for International Development 2022b). Through their Sustainable Fish Asia Technical Support (SuFiA TS) program, USAID's RDMA works to strengthen governance, enhance environmental conservation, and advance regional cooperation initiatives regarding responsible fisheries management for shared prosperity in Asia. Ultimately, USAID's backing of the RPOA-IUU and CTI-CFF aspires to cultivate sustainable development, environmental protection, and improved well-being in the Indo-Pacific region (United States Agency for International Development 2022c). This assessment supported the SuFiA TS's partnership with the RPOA-IUU and the CTI-CFF.

The Regional Plan of Action to Promote Responsible Fishing Practices Including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUU) is a collective effort begun in 2007 among 11 member countries in the Indo-Pacific to address the challenges posed by IUU fishing (Johns 2013). The 11 member countries include: the Commonwealth of Australia, Brunei Darussalam, Cambodia, Indonesia, Malaysia, Papua New Guinea, Philippines, Singapore, Thailand, Timor-Leste and Vietnam (Regional Plan of Action to promote responsible fishing practices including combating IUU Fishing 2023a).

Through this regional initiative, the RPOA-IUU Secretariat aims to combat illegal fishing activities to promote sustainable fisheries management, and protect marine resources (Regional Plan of Action to promote responsible fishing practices including combating IUU Fishing n.d.). Working collaboratively across State borders, they aim to foster international cooperation, information sharing, and joint actions to combat IUU fishing effectively. They often work closely with other regional and multilateral responsible fisheries management organizations like the CTI-CFF, Association of Southeast Asian Nations (ASEAN) Sectoral Working Group on Fisheries (ASWGF), Southeast Asian Fisheries Development Center (SEAFDEC), and other Regional Fisheries Management Organizations (RFMOs) (Regional Plan of Action to promote responsible fishing practices including combating IUU Fishing 2023a).

Illegal, unreported and unregulated (IUU) fishing is a problem due to its threat to vulnerable marine ecosystems, economic impact on legal fishing operations, and reduced fish stocks – increasing the risk to food security and livelihoods (Food and Agriculture Organization of the United Nations n.d.e). It causes environmental damage, undermines fisheries management efforts, and results in revenue loss for fishing communities and governments. The global economic loss estimates range from US\$23 (Food and Agriculture Organization of the United Nations 2018) to US\$50 billion (U. R. Sumaila et al. 2020) while illicit harvest in RPOA-IUU waters is estimated to be four million tonnes

annually (Johns 2013). In 2019, the economic damage to ASEAN countries from this illicit harvesting practice amounted to an estimated US\$6 billion (Malik 2022). IUU fishing can lead to regional tensions and other non-traditional security concerns, it often involves human rights violations and has been found to provide cover for other illicit criminal activities such as human, drug, or small-arms trafficking (U. R. Sumaila et al. 2020; Okafor-Yarwood et al. 2022; Miller et al. 2019; Long et al. 2020; Cabanelas et al. 2020; Lindley and Techera 2017; Pomeroy et al. 2016; United States Coast Guard 2020). Combating IUU fishing requires strategic transboundary, international cooperation and enforcement cohesion (Long et al. 2020; Begger et al. 2015; Fujii, Okochi, and Kawamura 2021). Doing so will protect marine ecosystems and support sustainable fisheries management to maintain fish stocks, support livelihoods, and secure the long-term health of our oceans (Lindley and Techera 2017; Long et al. 2020; United States Coast Guard 2020; Begger et al. 2015).

Distant water fleets (DWF) bring an additional dimension to the efforts to combat IUU fishing (United States Coast Guard 2020; Fujii, Okochi, and Kawamura 2021). DWF are fishing vessels that operate in foreign waters beyond their flag state's coastal boundaries (Grainger and Garcia 1996; United States Coast Guard 2020). These fleets are essential in the fight against IUU fishing because they can contribute to overfishing, depletion of marine resources, and illegal fish trade (Fujii, Okochi, and Kawamura 2021). Due to their mobility and capacity, distant water fleets can exploit vulnerable areas with weaker monitoring and regulations, undermining the efforts of coastal states to manage their fisheries sustainably (Okafor-Yarwood et al. 2022; United States Coast Guard 2020; Fujii, Okochi, and Kawamura 2021). Transshipment practices by DWF (U. R. Sumaila et al. 2020) can facilitate illegal marine wildlife trafficking and contribute to the illegal targeting of vulnerable species (Fujii, Okochi, and Kawamura 2021; Miller et al. 2019; United States Coast Guard 2020; Cabanelas et al. 2020). Effectively tackling the challenges posed by DWF necessitates strong international cooperation and effective monitoring and enforcement measures (Miller et al. 2019; U. R. Sumaila et al. 2020), or closing fishing on the high-seas all together, as suggested by U. Rashid Sumaila et al. (2015). Controlling their activities is crucial for promoting responsible fisheries management and conserving marine resources for future generations (Okafor-Yarwood et al. 2022; Cabanelas et al. 2020).

Common challenges in the Indo-Pacific region to implementing RFIs that combat IUU fishing are primarily based on a lack of government capacity leading to: weak enforcement and monitoring, lack of regional cooperation, corruption and governance issues (Williams 2013; Fujii, Okochi, and Kawamura 2021; Long et al. 2020), overfishing and unregulated fishing fleets, and a lack of public awareness (Fujii, Okochi, and Kawamura 2021; Begger et al. 2015). The issues caused by this lack in capacity are further exacerbated by destructive fishing practices (Pomeroy et al. 2016), poverty and livelihood concerns, the effects of climate change (Begger et al. 2015; Badjeck et al. 2010; Leichenko and Silva 2014) and pressure from other non-traditional maritime threats (Pomeroy et al. 2016; Cabanelas et al. 2020; Lindley and Techera 2017; United States Coast Guard 2020; Long et al. 2020). Addressing these challenges requires a coordinated effort among member countries supported by partnerships with international organizations and stakeholders (United States Coast Guard 2020). By providing technical assistance and support the international community can bolster the implementation of these RFIs to strengthen governance, enhance enforcement capabilities and raise awareness about the importance of combating IUU fishing for the long-term health of marine ecosystems, coastal communities, and global food security (Doulman 2009; United States Coast Guard 2020).

## 2. OBJECTIVES AND SCOPE

The assessment is a follow-up action from the International Workshop on Advancing Regional Standards of Responsible Fisheries to combat IUU fishing held by the RPOA-IUU in 2022 in line with the mandate and objectives of USAID's SuFiA TS Year Two Annual Work Plan. The workshop underscored that the RPOA-IUU Secretariat should identify gaps in each country and determine the context and scope that will be included in the regional guidelines to combat IUU fishing (United States Agency for International Development 2022c). Therefore, this broad assessment aims to identify each RPOA-IUU member country's implementation of international IUU fishing instruments, gaps in implementation, and will make recommendations for the technical assistance support desired per transboundary seascape within the Indo-Pacific waters. The results will be a reliable resource to guide the RPOA-IUU in creating the regional plan of action to combat IUU.

Furthermore, this assessment also supports the CTI-CFF's Regional Plan of Action 2.0 (RPOA 2.0) (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2022) in the implementation of the Target A3 for "Healthy and Productive Fisheries." This target works towards improved fish stocks and health in the Coral Triangle (CT) region. Pointedly, this target's desired outcomes include that by 2030: 1) IUU fishing in the CT region is reduced through strengthened and improved policies, enforcement and compliance, communication and information sharing, and 2) policies and regulations related to harvest strategy and IUU fishing among CT countries are developed, implemented and strengthened. Further, strengthening and implementing transboundary actions to address IUU fishing in the CT region through regional collaborations between sub-regional groups of priority seascapes is a key focus and indicator of meeting Target A3 according to the RPOA 2.0. This assessment also supports the SuFiA TS and CTI-CFF partnership in line with the mandate and objectives of USAID's SuFiA TS Year Two Annual Work Plan (United States Agency for International Development 2022c).

Therefore, in addition to the 11 member countries of the RPOA-IUU, this assessment extended its scope to include the Solomon Islands, ensuring the analysis encompassed all six countries collectively referred to as the CT6 (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2010). Linked through the CTI-CFF multilateral partnership, these six Southeast Asian and Pacific countries, including Papua New Guinea, Timor Leste, Philippines, Malaysia, Indonesia, and the Solomon Islands (the latter being the only non-member of the RPOA-IUU), along with the remaining RPOA-IUU members constitute the focus of the SuFiA TS defined seascapes presented in this report and outlined in USAID's SuFiA TS Year Two Annual Work Plan (United States Agency for International Development 2022c). For the remainder of this report, the term "member countries" refers to any country that is a member of either, or both, the RPOA-IUU and CTI-CFF, namely: the Commonwealth of Australia, Brunei Darussalam, Cambodia, Indonesia, Malaysia, Papua New Guinea, Philippines, Singapore, Solomon Islands, Thailand, Timor-Leste, and Vietnam.

### 3. METHODS

Assessing the implementation status of responsible fishing international instruments (RFIs) involved a two-fold approach. By combining both secondary and primary data, this broad assessment yielded a nuanced understanding of the status of RFIs' implementation within each seascape, explicitly focusing on the critical concerns within each seascape. It provided insights into the varying challenges to, and opportunities for, a coordinated implementation approach. Findings highlight technical support priorities tailored to the distinct characteristics of each unique seascape. The results contribute to informed recommendations on allocating resources strategically to promote sustainable fisheries management and effectively combat IUU fishing.

#### 3.1 KEY QUESTIONS

The following learning objectives steered this assessment. The first two objectives were inquired through the use of an online survey. The last three objectives were inquired through key informant interviews and focus group discussions with participating stakeholders.

- What RFIs have member countries signed or become party to in the case of binding agreements, or adopted in the case of non-binding agreements?
- What is each country's implementation status per RFI that they have committed to actualizing by voluntarily signing, becoming party to, or adopting?
- What obstacles and opportunities exist for strengthening the implementation of these RFIs per seascape?
- What technical support is needed and desired per seascape to finish implementing the seascape's priority RFIs?
- What technical support is desired as a priority per seascape to help finish implementation of the RFIs they see as benefiting said subregion the most?

#### 3.2 KEY INSTRUMENTS

International instruments are essential tools for shaping global governance and fostering collaboration among nations. There are binding and non-binding international instruments (OECD 2021). Binding international instruments are legal agreements that impose specific obligations on member states that must comply with the terms and provisions outlined in the instrument. In contrast, non-binding international instruments, also known as soft laws, are agreements that lack legally enforceable obligations, serving more as voluntary guidelines or recommendations for member states to consider and adopt at their discretion (Zhu and Tang 2023; OECD 2021).

Responsible fishing international instruments (RFIs) are agreements, conventions and treaties, as well as standards, guidelines and policies that promote sustainable and ethical fishing practices (Fujii, Okochi, and Kawamura 2021; OECD 2021). These instruments set standards and principles to ensure that fishing activities are conducted in a way that supports the long-term health and resilience of marine ecosystems while benefiting fishing communities and the global population (Food and Agriculture Organization of the United Nations n.d.d). They aim to address the challenges of overfishing, IUU fishing, and the conservation of marine resources (Palma, Tsamenyi, and Edeson 2010). This report will focus on the most crucial Responsible Fishing International Instruments

(RFIs) in the region for countering IUU fishing. Collaborative discussions between the RPOA-IUU and the SuFiA TS Team identified 15 key RFIs for assessment in this report (Table 1). It is important to note that while these RFIs provide a comprehensive approach to combat IUU fishing, they do not represent an exhaustive list.

Table 1: Binding and non-binding responsible fishing international instruments assessed for implementation status per member country.

| Responsible Fishing International Instrument   | Year of Onset | Organization Responsible                                      | Description   | Reference                              |
|--|---------------|---|---|--|
| <b>BINDING AGREEMENTS</b>  |               |   |   |  |
| <b>CITES</b> - Convention on International Trade of Endangered Species of Wild Fauna and Flora   | 1973          | United Nations (UN)   | Establishes regulations and monitors the international trade of endangered species of plants and animals for their conservation and protection.                 | (United Nations 1976)                  |
| <b>UNCLOS</b> - United Nations Convention on the Law of the Sea  | 1982          | United Nations (UN)   | Establishes the legal framework for the use and conservation of the world's oceans and their resources.   | (United Nations n.d.b)                 |
| <b>FAO CA</b> - FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas  | 1993          | Food and Agriculture Organization of the United Nations (FAO) | Aims to ensure that fishing vessels operating in international waters adhere to conservation and management measures.   | (FAO 1995b)                            |
| <b>UN FSA</b> - Agreement for the Implementation of the Provisions of United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks | 1995          | United Nations (UN)   | Provides a framework for the conservation and sustainable management of shared fish stocks that migrate between the exclusive economic zones and the high seas. | (United Nations General Assembly 1997) |



| Responsible Fishing International Instrument   | Year of Onset | Organization Responsible                                      | Description  | Reference  |
|--|---------------|---|--|--|
| <b>PSMA</b> - FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing | 2009          | Food and Agriculture Organization of the United Nations (FAO) | Aims to combat IUU fishing by strengthening port controls and promoting cooperation among countries to prevent illegal fish from entering the international market.        | (FAO 2016)   |
| <b>C188</b> - ILO Work in Fishing Convention (No. 188)   | 2007          | International Labour Organization of the UN (ILO)             | Sets out regulations to protect the rights and welfare of fishers and improve working conditions in the fishing industry.  | (International Labour Organization n.d.b)                              |
| <b>P029</b> - ILO Protocol of 2014 to C029, The Forced Labour Convention, 1930, (No.29)  | 2014          | International Labour Organization of the UN (ILO)             | Strengthens the measures to prevent and eliminate forced labor in the 1930 Convention on Forced Labour, No.29, by deleting the provisions for transitions allowed in C029. | (International Labour Organization n.d.c)                              |
| <b>CEDAW</b> - Convention on the Elimination of All Forms of Discrimination against Women                                      | 1979          | United Nations (UN)   | Seeks to advance women's rights and ensure their equal participation in all spheres of life.   | (Office of the United Nations High Commissioner for Human Rights n.d.) |
| <b>NON-BINDING AGREEMENTS</b>  |               |   |  |  |
| <b>CCRF</b> - Code of Conduct for Responsible Fisheries  | 1995          | Food and Agriculture Organization of the United Nations (FAO) | Provides guidelines for sustainable fisheries management and ethical fishing practices.  | (FAO 1995a)  |

| Responsible Fishing International Instrument  | Year of Onset | Organization Responsible                                      | Description  | Reference        |
|---|---------------|---|--|------------------|
| <b>NPOA-IUU</b> - National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing                               | 2001          | Food and Agriculture Organization of the United Nations (FAO) | A country-specific plan under the broader 2001 International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) that outlines specific actions and strategies a country will take to combat IUU fishing within its own waters and beyond its national jurisdiction. | (FAO 2001)       |
| <b>Deep-sea Fisheries Guidelines</b> - International Guidelines for the Management of Deep-sea Fisheries in the High Seas                           | 2008          | Food and Agriculture Organization of the United Nations (FAO) | Guidelines for the management of deep-sea fisheries beyond national jurisdictions, addressing the unique challenges and vulnerabilities of deep-sea ecosystems.  | (FAO 2009)       |
| <b>VGFSF</b> - Voluntary Guidelines for Flag State Performance  | 2014          | Food and Agriculture Organization of the United Nations (FAO) | Policy recommendations to assist flag states in effectively overseeing and regulating fishing vessels registered under their flag, with the aim of promoting sustainable fisheries and combating IUU fishing.  | (Camilleri 2015) |
| <b>SSF Guidelines</b> - Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication | 2014          | Food and Agriculture Organization of the United Nations (FAO) | Policy recommendations to support participatory strategies improving the socio-economics and development of small-scale fisheries' food and livelihood security while integrating financial concerns of the vulnerable communities reliant on these fisheries.   | (FAO 2015)       |

| Responsible Fishing International Instrument                        | Year of Onset | Organization Responsible                                      | Description   | Reference             |
|---|---------------|---|---|-----------------------|
| <b>VGCDS</b> - Voluntary Guidelines for Catch Documentation Schemes | 2017          | Food and Agriculture Organization of the United Nations (FAO) | Provides guidance for implementing catch documentation schemes that enhance traceability in the seafood supply chain as a tool to combat IUU fishing. | (FAO 2017; 2022)      |
| <b>VGMFG</b> - Voluntary Guidelines on the Marking of Fishing Gear  | 2019          | Food and Agriculture Organization of the United Nations (FAO) | Promotes the effective marking of fishing gear to enhance its traceability, reduce marine litter, and combat IUU fishing.                             | (He and Lansley 2023) |

It is essential to highlight that the International Labour Organization’s (ILO) P029 is a 2014 protocol to C029, The Forced Labour Convention, 1930 (International Labour Organization n.d.c; n.d.a). C029 is the original convention concerning forced labor, while ILO P029 is a supplementary protocol that enhances the measures to address contemporary challenges, and the expired transitional provisions originally allowed under C029.

### 3.3 SEASCAPES IN THE INDO-PACIFIC

In the context of geography and conservation, a seascape is a unit of region defined by its unique combination of marine and coastal features, including various habitats, ecosystems, and biodiversity (Pittman et al. 2022). A seascape encompasses a broader area than individual marine protected areas (MPAs) or individual habitats. It focuses on the interconnectedness of marine and coastal environments within a specific geographic region (Conservation International 2023). They consider the physical and ecological characteristics of the marine environment, promoting an ecosystem approach to fisheries management (EAFM) for better conservation (Atkinson et al. 2011). Seascapes facilitate coordinated and effective marine spatial planning and environmental protection, considering the broader ecological context and interdependencies of marine and coastal systems (Conservation International 2023; Atkinson et al. 2011). They address challenges to food and livelihood security like overfishing, habitat degradation, and climate change impacts on marine ecosystems (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2017). Seascapes enhance management strategies by taking into consideration the interconnectedness of marine and coastal environments (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2017). They involve multiple stakeholders in sustainable resource use, including local communities and industries. Seascapes encourage cross-border cooperation among countries for shared conservation goals in larger marine regions (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2017).

Various stakeholders have unique seascape definitions due to differing priorities and understandings based on their interests, expertise, and objectives. The USAID Regional Development Mission to Asia (RDMA) defines five unique seascapes in the Indo-Pacific region: the Andaman Sea, Bismarck

Solomon Seas, the South China Sea, the Sulu Sulawesi Seascape, and the Sunda Banda Seascape (Table 2, Figure 1) (United States Agency for International Development 2022c).

Table 2: States with borders and coastal zones within the U.S. Agency for International Development (USAID) Regional Development Mission for Asia (RDMA) defined Indo-Pacific seascapes in Southeast Asian waters (United States Agency for International Development 2022c).

| Seascape               | Bordering States  |
|------------------------|---|
| Andaman Sea            | Indonesia and Thailand  |
| Bismarck Solomon Seas  | Papua New Guinea, Solomon Islands   |
| South China Sea        | Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, and Vietnam |
| Sulu Sulawesi Seascape | Indonesia, Malaysia, and Philippines  |
| Sunda Banda Seascape   | Indonesia, Timor Leste and the Commonwealth of Australia                              |

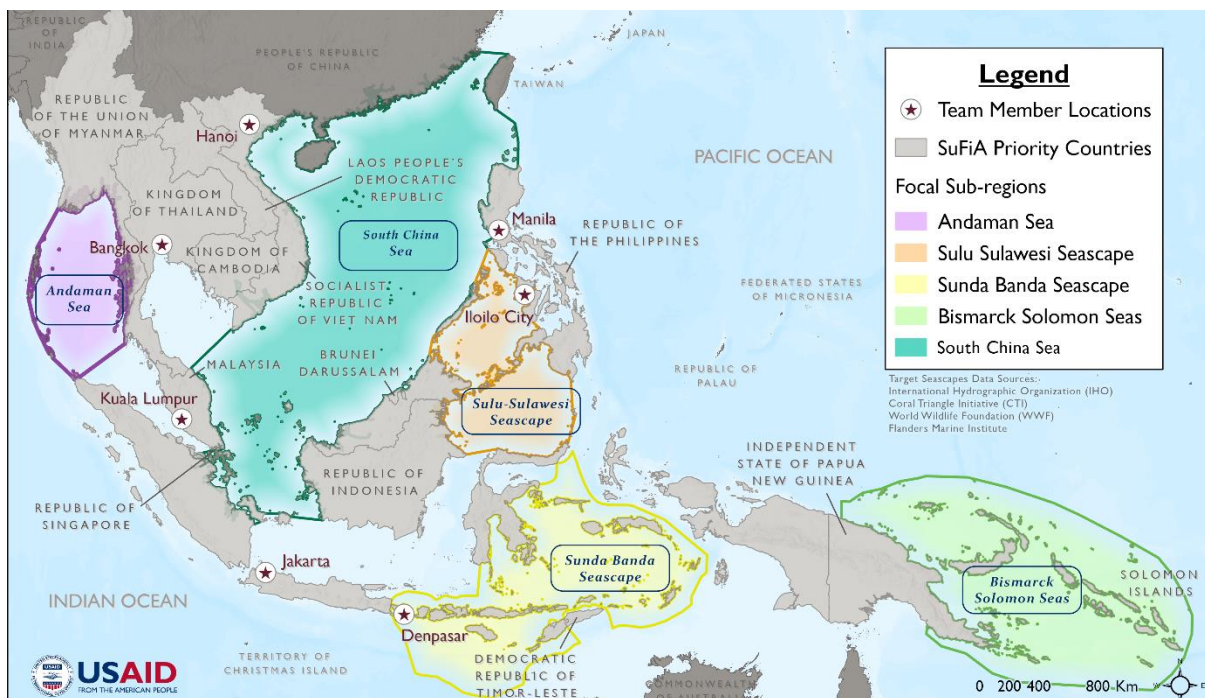


Figure 1: A map of the five seascapes as defined by the U.S. Agency for International Development (USAID) Regional Development Mission for Asia (RDMA) defined Indo-Pacific seascapes in Southeast Asian waters (United States Agency for International Development 2022c).

### 3.4 DATA COLLECTION

Secondary data was collected through a desktop literature review and included analyzing reports and publications pertinent to responsible fishing laws and policies, the implementation of said laws and policies in the Indo-Pacific region, and member country-specific national fishing laws and regulations. The documents reviewed consisted of government and international organization reports and websites, academic journal and newspaper articles, and RPOA-IUU workshop summaries. Literature was searched for using Google Scholar and Google search engines inputting search terms such as “PSMA endorsement”, “Thailand implementation C188”, and “Cooperation combat IUU”. Literature was selected when it was found to have specific information regarding the international instruments themselves, their endorsement status or implementation level in member countries. This review offered understanding of the prevailing circumstances, policy frameworks, and recent advancements

in implementing RFIs within each seascape while underscoring the inquiries necessary for subsequent investigation through primary data collection.

Primary data was collected through consultation with subject matter experts and practitioners from academia, labor and fisheries government agencies, non-governmental organizations (NGOs), and the private sector. This consultation occurred via an online survey followed-up with key informant interviews (KIs) and focus group discussions (FGDs) to represent the member countries assessed in this study (Table 3). Online surveys offered updates of each member country's RFI endorsement status and the extent of implementation for those RFI each member country had voluntarily agreed upon. Endorsement status was categorized as either: Not participating, Forward movement towards (becoming party to, or adopting), Signed, Party to (through ratification, accession, or acceptance) or Adopted. The extent of implementation was classified into tiers as either: Country has not engaged with this instrument, Engaged but no national implementation yet, Integrated into national legislation, or Integrated into national legislation with resources allocated for monitoring and enforcing. Then KIs and seascape-specific FGDs provided meaningful perspectives from stakeholders intimately engaged in fisheries management per seascape, spotlighting the challenges, successes, and gaps in implementing priority RFIs per seascape, as well as identifying the technical assistance required to bridge gaps and achieve cohesive implementation seen as necessary per seascape.

Table 3: A summary of the number of key informants, broken down by stakeholder group, that participated in the online surveys, key informant interviews and focus group discussions.

| Category       | Online Survey | Key Informant Interviews | Focus Group Discussions |
|----------------|---------------|--------------------------|-------------------------|
| Academia       | 5             | 0                        | 5                       |
| Government     | 9             | 2                        | 22                      |
| NGOs           | 5             | 1                        | 3                       |
| Private sector | 2             | 1                        | 0                       |
| <b>TOTAL</b>   | <b>21</b>     | <b>4</b>                 | <b>30</b>               |

### 3.5 ANALYSIS

Assessing the implementation status of RFIs entailed consolidating survey responses and using their results to establish critical questions related to the implementation process, challenges, and successes for each seascape. These critical questions were then used to provide an inquiry structure for conducting open-ended KIs and FGDs with a focus on identifying the priority technical assistance useful to each seascape achieving full implementation of desired RFIs. This analytical approach helped to gain a comprehensive understanding of the perspectives of subject matter experts shedding light on the complexities and nuances surrounding the implementation of each instruments (Morgan 1996). Data from KIs and FGDs were examined using discourse analysis (Hardy, Phillips, and Harley 2004) to identify key themes in order to provide recommendations for technical support necessary to support these seascapes in finishing their implementation of desired RFIs beneficial to combating IUU fishing.

### 3.6 STUDY LIMITATIONS

Acknowledging potential limitations in this assessment facilitated clearer data discernment. Sampling bias may have arisen from snowball sampling through a few professional networks and may not represent the entire population. The reliability of self-reported data could have been affected by participants' inconsistent understanding of progress tiers as the standardized metrics due to language

barriers, cultural and political sensitivities, or socially desirable bias and willingness to share accurate information. Limited access to information and lack of agreement in responses could have resulted from engagement responsibility on specific instruments spanning various governmental departments, with not all departments having visibility on all instruments, as well as from gaps in other professional remits. Resource and time constraints, like limited funding and key stakeholders' competing priorities, restricted the number of participants and locations covered. Furthermore, due to time constraints during the focus group discussions, conversations were centered around the technical support desired for the responsible fishing international instruments that participants defined as the priority for their seascape. As a result, comprehensive data on the implementation details beyond initial survey responses were not collected for every instrument. Additionally, as the scope of this assessment was to ascertain what technical support was desired by each seascapes' member countries, investigation into the reasons behind certain member countries not adopting or endorsing instruments was not pursued beyond information voluntarily shared. Finally, published sources used in triangulation may not be up-to-date. To mitigate these limitations, researchers provided language support and triangulated data from multiple sources when possible for data validation. These limitations were recognized to increase accurate interpretation and correct application of the results.

## 4. KEY FINDINGS

The presented findings examine the endorsement, or adoption, and subsequent implementation, of responsible fishing international instruments (RFIs) within various seascapes. They offer insights into the member countries' engagement with these instruments and the current status of their voluntary commitment to the RFIs. Additionally, these results explore the challenges and opportunities associated with strengthening the implementation of desired RFIs in each seascape. The key takeaways from the analysis highlight the specific technical support required in each seascape to effectively implement their priority RFIs. This valuable information serves as a guiding framework for policy-making and targeted interventions, ultimately fostering the advancement of sustainable fisheries management across the Indo-Pacific region.

Please use Table 4 as a notation key for the forthcoming Tables 5, 7, 9, 11, and 13.

Table 4: Key for status notations regarding the responsible fishing international instruments' endorsement levels and implementation tiers used in Tables 5, 7, 9, 11, and 13.

| Endorsement Status                      | Implementation Tier  |
|---|--|
| Not participating - N                   | Tier 0 : Country has not engaged with this instrument        |
| Forward movement towards - F            | Tier 1 : Engaged, but no national implementation yet         |
| Signed - S                              | Tier 2 : Integrated into National Legislation                |
| Party to - P                            | Tier 3 : Integrated into National Legislation with resources |
| Adopted - A                             | allocated for monitoring and enforcing                       |
| coresponding - C029<br>protocol of 2014 |  |

### 4.1 ANDAMAN SEA

The Andaman Sea's primary member country is Thailand, yet it also includes the waters off the northern tip of Sumatra, Indonesia. This seascape borders Myanmar's coastline as well, however, they are not a member country of the RPOA-IUU, nor CTI-CFF, and therefore were considered out of scope in this assessment. The endorsement level and implementation status per RFI for each member country can be seen in Table 5. Obstacles, opportunities, and technical support desired to finish implementing this seascape's priority RFIs are contained in Table 6.



Table 5: Endorsement and implementation status of responsible fishing international instruments in the Andaman Sea by country.

**Seascope: Andaman Sea**

|                               |                     | Indonesia | Thailand |
|-------------------------------|---------------------|-----------|----------|
| <b>BINDING:</b>               |                     |           |          |
| CITES                         | Signatory Status    | P         | P        |
|                               | Implementation Tier | 3         | 3        |
| UNCLOS                        | Signatory Status    | P         | P        |
|                               | Implementation Tier | 3         | 3        |
| FAO CA                        | Signatory Status    | N         | F        |
|                               | Implementation Tier | 0         | 1        |
| UN FSA                        | Signatory Status    | P         | P        |
|                               | Implementation Tier | 3         | 3        |
| PSMA                          | Signatory Status    | P         | P        |
|                               | Implementation Tier | 3         | 3        |
| C188                          | Signatory Status    | F         | P        |
|                               | Implementation Tier | 1         | 3        |
| P029 (C029)                   | Signatory Status    | C029      | P        |
|                               | Implementation Tier | 2         | 3        |
| CEDAW                         | Signatory Status    | P         | P        |
|                               | Implementation Tier | 2         | 3        |
| <b>NON-BINDING:</b>           |                     |           |          |
| CCRF                          | Signatory Status    | A         | A        |
|                               | Implementation Tier | 3         | 3        |
| NPOA - IUU                    | Signatory Status    | A         | A        |
|                               | Implementation Tier | 3         | 3        |
| Deep-sea Fisheries Guidelines | Signatory Status    | N         | A        |
|                               | Implementation Tier | 0         | 2        |
| VGFSP                         | Signatory Status    | A         | A        |
|                               | Implementation Tier | 2         | 3        |
| SSF Guidelines                | Signatory Status    | A         | A        |
|                               | Implementation Tier | 3         | 3        |
| VGCDS                         | Signatory Status    | A         | A        |
|                               | Implementation Tier | 3         | 3        |
| VGMFG                         | Signatory Status    | F         | F        |
|                               | Implementation Tier | 0         | 1        |

Table 6: Obstacles and opportunities for increasing responsible fishing international instruments' implementation and the technical support needed to address these desires in the Andaman Sea seascape.

| <b>Andaman Sea</b>  |   |
|---|---|
| <b>What obstacles exist?</b>                                    | <ul style="list-style-type: none"> <li>• Funding and resources - specifically to finish the implementation of VGMFG in Thailand.</li> <li>• Information sharing adequate to supporting effective PSMA implementation.</li> <li>• Lack of capacity to continually evaluate, update, and monitor vessel conditions to meet C188. Need funding, human resources and cross-departmental training.</li> <li>• Lack of capacity to implement the SSF Guidelines because there are so many SSF vessels and a wide range of gear types.</li> </ul>  |
| <b>What opportunities exist?</b>                                | <ul style="list-style-type: none"> <li>• Full implementation of the PSMA is desired - needs information sharing and enforcement collaboration.</li> <li>• Full implementation of ILO C188 is desired - needs training and resources.</li> <li>• Full implementation of SSF Guidelines - needs an operational plan and additional resources - resources have been allocated for only 200 out of 2800 SSF communities in Thailand.</li> </ul>   |
| <b>What technical support is desired?</b>                       | <ul style="list-style-type: none"> <li>• PSMA - States have different capacities and need customized technical assistance to bring every State up to the same equal level of implementation, along with practical information sharing, that allows the States to collaborate effectively.</li> <li>• Technical training on labor inspections to comply effectively with ILO C188.</li> <li>• Technical training on monitoring and enforcing the U.S. Marine Mammal Protection Act (MMPA) as well as identifying the cause of death of a marine mammal in order to effectively enforce Thailand's new Emergency Decree on Fisheries B.E. 2558 (2015), Section 66, which specifically prohibits the trading of marine mammals.</li> <li>• Exploratory survey research of deep-sea fisheries resources in Andaman Sea - stock assessments and information about how to build back healthy stocks.</li> </ul> |
| <b>Top Priority Technical Support Wishes - for the Seascape</b> | <ul style="list-style-type: none"> <li>• Technical training on labor inspections to comply effectively with ILO C188.</li> <li>• Exploratory survey research of deep-sea fisheries resources in the Andaman Sea - stock assessments and information about how to build back healthy stocks.</li> <li>• Technical training on protecting marine mammals to enforce Thailand's Emergency Decree on Fisheries B.E. 2558 (2015), Section 66.</li> </ul>   |
| <b>Top Priority Technical Support Wishes - for the Region</b>   | <ul style="list-style-type: none"> <li>• PSMA - Support PSMA endorsement and implementation by building capacity through cooperative enforcement supported by information sharing.</li> </ul>   |

Items to highlight are that Thailand has notably become a party to all but one binding instrument and non-binding instrument - the FAO CA and the VGMFG, respectively. Concerning the FAO CA, the Thailand Department of Fisheries has updated its previous ordinance and submitted it to its government's cabinet for approval and is, therefore, in the process of engaging with this instrument. In contrast, Indonesia is not participating at this time in endorsing the FAO CA. However, they are interested in moving forward towards becoming a party to ILO C188. The VGMFG is difficult, Thailand reports, because it is a very costly process and their capacity is lacking. This particular challenge is due to a large variety of fishing gear and not a lack of interest. Indonesia also signals wishing to make progress on the VGMFG.

The most significant challenges to the Andaman Sea include insufficient funding and resources for completing the implementation of Voluntary Guidelines on the Marking of Fishing Gear (VGMFG) in Thailand, inadequate information sharing to support practical implementations of The Agreement on Port State Measures Agreement (PSMA), and the lack of capacity to continually evaluate, update, and monitor vessel conditions to meet the standards of the ILO Work in Fishing Convention (C188) - which requires funding, human resources, and cross-departmental training. Additionally, there needs to be more capacity to implement the Small-Scale Fisheries (SSF) Guidelines due to the large number of SSF vessels and the diversity of gear types.

However, the fisheries managers of this seascape embrace opportunities that would meet these challenges and lead to significant advancements in fisheries management of the Andaman Sea. They want to see the PSMA fully implemented in the region with improved transboundary information sharing and enforcement. Achieving the complete implementation of ILO C188 is desired through training and resource allocation to better support improvements in working conditions for fishing crews. Finally, seizing the potential of the SSF Guidelines with a well-defined operational plan and increased resources could uplift numerous SSF communities in Thailand, foster their sustainable development, and enhance their contribution to responsible fisheries.

To capitalize on the opportunities at hand, fisheries managers in The Andaman Sea have identified specific technical support that would be beneficial for responsible fisheries management. Customized technical assistance for PSMA implementation is deemed essential to address varying capacities among states, along with practical information sharing to foster effective collaboration. Technical training on labor inspections has been highlighted to ensure compliance with ILO C188, contributing to better working conditions for fishing crews. Furthermore, exploratory survey research of deep-sea fisheries resources in the Andaman Sea is seen as a crucial step to facilitate stock assessments and promote the recovery of healthy fish stocks. Additionally, technical training on monitoring and enforcing the U.S. Marine Mammal Protection Act (MMPA) is of interest, with a particular focus on investigating marine mammal deaths, aiding in the enforcement of Thailand's new marine mammal protection regulation, Emergency Decree on Fisheries B.E. 2558 (2015), Section 66, which prohibits marine mammal trading.

Among the priorities for technical support in The Andaman Sea, exploratory deep-sea research takes precedence, aiming to enhance stock assessments from fish to migratory marine mammals and improve conservation measures for these species. Additionally, technical training on enforcing marine mammal protections is highly sought after, further reinforcing the commitment to protect migratory species and foster healthy marine life in the Andaman Sea.

## 4.2 BISMARCK SOLOMON SEAS

The member countries of the Bismarck Solomon Sea seascape include Papua New Guinea and the Solomon Islands. This seascape differs from the others in this assessment in that 1) the Solomon Islands are not a member of the RPOA-IUU (Regional Plan of Action to promote responsible fishing

practices including combating IUU Fishing 2023a), and 2) both countries are Parties to the Nauru Agreement (PNA) (Parties to the Nauru Agreement 2021), as well as members of The Pacific Islands Forum Fisheries Agency (FFA) (Pacific Islands Forum Secretariat n.d.), The Western and Central Pacific Fisheries Commission (WCPFC) regional fisheries management organization (RFMO) (Western and Central Pacific Fisheries Commission n.d.), and the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security 2010). They report that these organizations and their associated regulations, along with market demands for sustainability certifications like that of the Marine Stewardship Council (MSC) Certification (Marine Stewardship Council 2023), have played a crucial role in driving the development and implementation of RFIs in practice when their governments have lacked the capacity or motivation to do so formally. The endorsement and implementation status per RFI for each of these member countries can be seen in Table 7. Obstacles, opportunities, and technical support desired to finish implementing this seascape’s priority RFIs are contained in Table 8.

Table 7: Endorsement and implementation status of responsible fishing international instruments in the Bismarck Solomon Sea by country.

| <b>Seascope: Bismarck Solomon Seas</b> |                     | Papua New Guinea<br>Solomon Islands |      |
|--|---------------------|-------------------------------------|------|
|  |                     |                                     |      |
| <b>BINDING:</b>                        |                     |                                     |      |
| CITES                                  | Signatory Status    | P                                   | P    |
|  | Implementation Tier | 3                                   | 2    |
| UNCLOS                                 | Signatory Status    | P                                   | P    |
|  | Implementation Tier | 3                                   | 2    |
| FAO CA                                 | Signatory Status    | F                                   | F    |
|  | Implementation Tier | 2                                   | 3    |
| UN FSA                                 | Signatory Status    | P                                   | P    |
|  | Implementation Tier | 3                                   | 2    |
| PSMA                                   | Signatory Status    | F                                   | F    |
|  | Implementation Tier | 3                                   | 2    |
| C188                                   | Signatory Status    | F                                   | F    |
|  | Implementation Tier | I                                   | I    |
| P029 (C029)                            | Signatory Status    | C029                                | C029 |
|  | Implementation Tier | 3                                   | 0    |
| CEDAW                                  | Signatory Status    | P                                   | P    |
|  | Implementation Tier | I                                   | I    |
| <b>NON-BINDING:</b>                    |                     |                                     |      |
| CCRF                                   | Signatory Status    | A                                   | A    |
|  | Implementation Tier | 2                                   | 2    |
| NPOA - IUU                             | Signatory Status    | A                                   | A    |
|  | Implementation Tier | 3                                   | 2    |
| Deep-sea Fisheries Guidelines          | Signatory Status    | N                                   | A    |
|  | Implementation Tier | 0                                   | 2    |
| VGFSP                                  | Signatory Status    | A                                   | F    |
|  | Implementation Tier | I                                   | I    |
| SSF Guidelines                         | Signatory Status    | F                                   | F    |
|  | Implementation Tier | I                                   | I    |
| VGCDS                                  | Signatory Status    | A                                   | F    |
|  | Implementation Tier | 3                                   | 2    |
| VGMFG                                  | Signatory Status    | A                                   | N    |
|  | Implementation Tier | 3                                   | 0    |

Table 8: Obstacles and opportunities for increasing responsible fishing international instruments' implementation and the technical support needed to address these desires in the Bismarck Solomon Seas.

| <b>Bismarck Solomon Seas</b>                                    |  |
|---|--|
| <b>What obstacles exist?</b>                                    | <ul style="list-style-type: none"> <li>• Chinese presence overfishing their waters.</li> <li>• Even though as PNA members they are not permitted to fish on the high-seas, monitoring, control, surveillance, and enforcement to mitigate this, remain challenging.</li> <li>• Corruption, underfunding, and lack of education and training.</li> <li>• PSMA and ILO C188 implementation both require more resources than these governments can currently allocate, leading to their decision not to become a party.</li> <li>• Flag State accountability.</li> </ul>  |
| <b>What opportunities exist?</b>                                | <ul style="list-style-type: none"> <li>• Endorsement and full implementation of the PSMA may be possible with outside support to build capacity for its full implementation. It is desired to meet market demands. In particular, Papua New Guinea's national legislation already has 3 tools to implement the PSMA.</li> <li>• Catch documentation systems are desired by both countries to meet market demand. They would adopt the VGCDs if they had the capacity to implement.</li> </ul>  |
| <b>What technical support is desired?</b>                       | <ul style="list-style-type: none"> <li>• Customized solutions to address the specific needs of different Small-Scale Fisheries (SSF), including compliance monitoring equipment, data collection devices, funding for research on sustainability impacts, safety equipment, and legislative support for harvest control.</li> <li>• Technical training for both the private and public sector to correct onboard labor policies and inspections.</li> <li>• An assessment of active recruitment agencies in the area to support implementation of labor instruments.</li> <li>• Technical support for implementing the PSMA.</li> <li>• Development and resources needed to deploy a catch document system.</li> </ul> |
| <b>Top Priority Technical Support Wishes - for the Seascape</b> | <ul style="list-style-type: none"> <li>• Capacity development to be able to implement ILO C188.</li> <li>• Technical guidance and infrastructure for implementing the PSMA.</li> </ul>   |
| <b>Top Priority Technical Support Wishes - for the Region</b>   | <ul style="list-style-type: none"> <li>• PSMA - Support PSMA endorsement and implementation by building capacity through cooperative enforcement supported by information sharing.</li> </ul>  |

Key points to emphasize include that the Solomon Islands and Papua New Guinea have become parties to the same binding agreements, and have yet to endorse the FAO CA, UN FSA, and ILO C188. They have both become party to ILO C029, but have not joined the additional protocol of 2014, which deletes transitional provisions. Both States hesitate to become party to binding agreements due to a lack of enforcement capacity and not wanting to be held accountable if they cannot meet the binding legal requirements. Corruption was explicitly noted as an additional challenge in this seascape.

In the Bismarck Solomon Seas, resource-scarce governments face a lack of capacity and resources, hindering their ability to become party to binding RFIs like the PSMA, C188, and P029. Although, Papua New Guinea could endorse the PSMA as they have already fully implemented it. The focus within the seascape on enforcing the Nauru Agreement's requirements for no high-seas fishing further limits the interest in the FAO Compliance Agreement (FAO CA) at the moment. The formal commitment of these governments to RFIs hinges on their ability to develop adequate capacity and infrastructure for enforcement. Moreover, the private sector, guided by market demands and mandates from the WCPFC, the FFA, and the PNA, exerts significant influence and takes the lead in implementing RFIs, regardless of whether the governments have formally agreed to these instruments.

### 4.3 SOUTH CHINA SEA

The South China Sea is a highly contested and strategically significant region in Southeast Asia (Center for Preventive Action 2023) surrounded by several countries, including the People's Republic of China (PRC), Vietnam, the Philippines, Malaysia, Brunei Darussalam, Indonesia, and Singapore. Neither Brunei Darussalam, nor Singapore, were able to participate in this study. Information presented in this study regarding those countries come from secondary data, including binding instrument validation websites listed in Appendix 2 and an internal document from the RPOA-IUU entitled "RPOA-IUU's MCS Key Instrument Progress". Cambodia does not border the South China Sea, however they do engage and interact in these waters regularly and are therefore included in this seascape's assessment. The PRC is not included in this assessment as they are not a member country of the RPOA-IUU, nor CTI-CFF. The endorsement level and implementation status per RFI for each of these member countries can be seen in Table 9. Obstacles, opportunities, and technical support desired to finish implementing this seascape's priority RFIs are contained in Table 10.

Table 9: Endorsement and implementation status of responsible fishing international instruments in the South China Sea by country.

|                               |                     | <b>Seascope: South China Sea</b> |            |          |           |          |             |           |
|-------------------------------|---------------------|----------------------------------|------------|----------|-----------|----------|-------------|-----------|
|                               |                     | Brunei                           | Darussalam | Cambodia | Indonesia | Malaysia | Philippines | Singapore |
| <b>BINDING:</b>               |                     |                                  |            |          |           |          |             |           |
| CITES                         | Signatory Status    | P                                | P          | P        | P         | P        | P           | P         |
|                               | Implementation Tier |                                  | 3          | 3        | 3         | 3        |             | 2         |
| UNCLOS                        | Signatory Status    | P                                | S          | P        | P         | P        | P           | P         |
|                               | Implementation Tier |                                  | 2          | 3        | 3         | 3        |             | 3         |
| FAO CA                        | Signatory Status    |                                  | F          | N        | N         | P        |             | F         |
|                               | Implementation Tier |                                  | 1          | 0        | 0         | 3        |             | 2         |
| UN FSA                        | Signatory Status    | F                                | P          | P        | N         | P        | F           | P         |
|                               | Implementation Tier |                                  | 2          | 3        | 0         | 2        |             | 2         |
| PSMA                          | Signatory Status    | F                                | P          | P        | F         | P        | F           | P         |
|                               | Implementation Tier |                                  | 2          | 3        | 0         | 3        |             | 2         |
| CI 88                         | Signatory Status    |                                  | F          | F        | N         | F        |             | F         |
|                               | Implementation Tier |                                  | 1          | 1        | 0         | 0        |             | 2         |
| P029 (C029)                   | Signatory Status    | C029                             | C029       | C029     | P         | C029     | C029        | C029      |
|                               | Implementation Tier |                                  | 2          | 2        | 1         | 2        |             | 2         |
| CEDAW                         | Signatory Status    |                                  | P          | P        | P         | P        |             | P         |
|                               | Implementation Tier |                                  | 3          | 2        | 3         | 3        |             | 3         |
| <b>NON-BINDING:</b>           |                     |                                  |            |          |           |          |             |           |
| CCRF                          | Signatory Status    |                                  | A          | A        | A         | A        |             | A         |
|                               | Implementation Tier |                                  | 2          | 3        | 3         | 3        |             | 3         |
| NPOA - IUU                    | Signatory Status    | A                                | A          | A        | A         | A        | F           | A         |
|                               | Implementation Tier |                                  | 2          | 3        | 3         | 3        |             | 3         |
| Deep-sea Fisheries Guidelines | Signatory Status    |                                  | A          | N        | A         | F        |             | A         |
|                               | Implementation Tier |                                  | 2          | 0        | 3         | 1        |             | 2         |
| VGFSP                         | Signatory Status    |                                  | F          | A        | A         | A        |             | A         |
|                               | Implementation Tier |                                  | 1          | 2        | 3         | 2        |             | 2         |
| SSF Guidelines                | Signatory Status    |                                  | A          | A        | F         | A        |             | A         |
|                               | Implementation Tier |                                  | 2          | 3        | 1         | 2        |             | 2         |
| VGCDS                         | Signatory Status    | A                                | F          | A        | A         | A        | F           | A         |
|                               | Implementation Tier |                                  | 2          | 3        | 3         | 3        |             | 2         |
| VGMFG                         | Signatory Status    |                                  | F          | F        | A         | A        |             | A         |
|                               | Implementation Tier |                                  | 2          | 0        | 3         | 2        |             | 3         |



Table 10: Obstacles and opportunities for increasing responsible fishing international instruments' implementation and the technical support needed to address these desires in the South China Sea.

| <b>South China Sea</b>                    |   |
|---|---|
| <b>What obstacles exist?</b>              | <ul style="list-style-type: none"> <li>• Lack of transboundary collaboration, with regards to enforcement - often the perpetrators 'escape' and commit offenses again.</li> <li>• Lack of research to know the real status of each fishery.</li> <li>• Lack of transboundary collaboration, with regards to joint stock management plan.</li> <li>• Lack of transboundary collaboration, with regards to Marine Protected Areas (MPAs)</li> <li>• Sustainable financing for continued monitoring and enforcing.</li> </ul>  |
| <b>What opportunities exist?</b>          | <ul style="list-style-type: none"> <li>• PSMA - Information sharing for better transboundary collaboration to be able to enforce, and gain the benefits of, a fully, regionally implemented PSMA.</li> <li>• Joint management of stocks and fisheries would provide a forum for more transboundary collaboration. This has already been helpful between Thailand and Cambodia protecting the Mackerel during spawning season.</li> <li>• Joint enforcement operations would provide a forum for more transboundary collaboration.</li> <li>• An information-sharing database could help with all of the above, providing a space for information sharing as well as to coordinate joint enforcement operations and hold information relevant to the transboundary management of fish stocks.</li> </ul>   |
| <b>What technical support is desired?</b> | <ul style="list-style-type: none"> <li>• An information-sharing database platform for housing intelligence that will elevate the ability to enforce the PSMA and enable a future integrated enforcement plan, including but not limited to:               <ul style="list-style-type: none"> <li>-vessel list of suspected IUU vessels</li> <li>-vessel list of permitted vessels including flag and RFMO information</li> <li>-documents regarding registration and fishing license (because it is reportedly difficult to verify the documents onboard for document verification)</li> <li>-integrated, transparent implementation of the vessel monitoring system (VMS)</li> <li>-notifications regarding illegal vessel movement or environmental crimes</li> <li>-illegal fishing observations - locations and species</li> <li>-the modus operandi of each legal fishery</li> <li>-the modus operandi of illegal fishers, when available, to create a counter plan</li> <li>-heat maps on fishing efforts (GIS maps) linked to the fishing communities that fish in those areas</li> <li>-maps of marine protected areas (MPAs) containing coordinates of its boundaries, as well as species being protected and pertinent fishing laws, regulations, and permits.</li> <li>-information regarding the coordination and output of joint training and operations for better enforcement.</li> </ul> </li> <li>• Scientific research to aid in better management, including stock assessments of managed stocks and migratory species.</li> <li>• Support creating integrated fisheries management policies (including China) in the disputed areas.</li> <li>• Joint enforcement training and operations, specifically including workshops on illegal, unreported and unregulated fishing laws.</li> </ul> |

|   |   |
|---|---|
| <b>Top Priority Technical Support Wishes - for the Seascope</b> | <ul style="list-style-type: none"> <li>• Shared database containing the details in the above box of this table, entitled "What technical support is desired".</li> <li>• Joint enforcement trainings and operations, specifically including workshops on illegal, unreported and unregulated fishing laws.</li> <li>• Scientific research to aid creation of integrated fisheries management policies (including China), especially in the disputed territorial areas.</li> </ul> |
| <b>Top Priority Technical Support Wishes - for the Region</b>   | <ul style="list-style-type: none"> <li>• PSMA - Support PSMA endorsement and implementation by building capacity through cooperative enforcement supported by information sharing.</li> </ul>   |

Aspects to emphasize in the context of implementing RFIs in the South China Sea are that only the Philippines has become a party to the FAO CA. Malaysia, Brunei Darussalam, and Singapore have yet to endorse both the PSMA and the UN FSA. Cambodia has signed, but not become a party yet to the UNCLOS. Additionally, Cambodia has become a party to the PSMA but has not enabled enforcement and monitoring of this vital instrument through resource allocation. Further, all States with the exception of Malaysia have become a party to ILO C029; Cambodia, Indonesia, the Philippines, and Vietnam have self-reported an implementation status of tier 2 with regards to C029. However, a key consideration, none of the States have endorsed the 2014 protocol to C029, known as P029. This, with the self-reported tier 2 implementation statuses toward C029, indicates that while these member states have become party to C029 and have created national laws and policies inline with their binding obligation, they have not gone as far as allocating the resources necessary for monitoring and enforcement and are therefore still in a transitional time that P029 effectively removes allowance for. Additionally, all countries report having neither signed, nor endorsed, the more sector specific ILO Working in Fishing Convention, C188. Many of these countries report not having the capacity to implement C188 and therefore will not endorse a legally binding convention they cannot implement with confidence.

Regarding the non-binding agreements, Malaysia has adopted and fully implemented all agreements except for the SSF Guidelines, the Philippines has not adopted the Deep-sea Fisheries Guidelines and although they have adopted the VGFSP, SSF Guidelines, and VGMFG, they have not allocated resources to monitor and enforce the implementation of these instruments. Indonesia has also not adopted the Deep-sea Fisheries Guidelines, nor the VGMFG, however has fully implemented the other non-binding RFIs covered by this assessment. Cambodia has not been able to adopt the VGFSP, VGCDs, or VGMFG but are moving forward and report making some progress implementing these guidelines into their national laws and policies. What Cambodia has formally adopted, they report incorporating into national laws and policies, however have not had the resources allocated needed to move towards effective monitoring and enforcing.

In the South China Sea, significant emphasis is placed on the necessity of transboundary collaboration. This collaboration is relevant in multiple domains, all of which contribute to effectively addressing IUU fishing.

On a foundational level, a digital information sharing platform is needed to share, at a minimum, the intelligence vital to supporting the bedrock principles of the PSMA including a list of illegal vessels, a list of permitted vessels, and documents regarding fishing licenses translated in languages present in the South China Sea. It has been reported that verifying documents during boardings can be quite difficult.

Other intelligence that could be included on this platform, that would be helpful to combating IUU, also include an integrated vessel monitoring system (VMS) notifications or “red flags” regarding illegal vessel movement and environmental crimes, a place to store illegal fishing observations regarding the locations and species being harvested, the modus operandi of each legal fishery and of illegal fishers when available in order to create a counter plan, geographical information system (GIS) generated heat maps on fishing efforts linked to the fishing communities that fish in those areas as well as GIS maps of marine protected areas (MPAs) containing coordinates of its boundaries, as well as species being protected and pertinent fishing laws, regulations, and permits.

In addition, this platform could also store information regarding the coordination and output of joint training and operations for strategic and cohesive enforcement. Workshops regarding illegal, unreported, and unregulated fishing laws are requested to be included as part of these joint enforcement trainings.

Transboundary collaboration is not limited to enforcement mechanisms, however. Cross-border cooperation is also desired with regards to enabling effective fisheries management. An information-sharing database platform could also house data regarding stock assessments, migratory species, and provide a space for coordinating fishery management plans. Full regional endorsement and implementation of the PSMA is strongly desired.

#### 4.4 SULU SULAWESI SEASCAPE

The Sulu-Sulawesi Seascape, spanning the waters of the Sulu Sea and the Sulawesi Sea, extends across the Western Philippines, Sabah, Malaysia, and Indonesia. This seascape is renowned as one of the world's most ecologically diverse areas, boasting a wide array of marine life, such as coral reefs, seagrasses, mangrove forests, marine mammals, sea turtles and numerous species of fish (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security n.d.). Situated entirely within the Coral Triangle, the Sulu-Sulawesi Seascape benefits from the governance and management efforts of the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF). The endorsement level and implementation status per RFI for each of these member countries can be seen in Table 11. Obstacles, opportunities, and technical support desired to finish implementing this seascape’s priority RFIs are contained in Table 12.

Table II: Endorsement and implementation status of responsible fishing international instruments in the Sulu Sulawesi Seascape by country.

|                               |                     | Seascope: Sulu Sulawesi Seascape |          |             |
|-------------------------------|---------------------|----------------------------------|----------|-------------|
|                               |                     | Indonesia                        | Malaysia | Philippines |
| <b>BINDING:</b>               |                     |                                  |          |             |
| CITES                         | Signatory Status    | P                                | P        | P           |
|                               | Implementation Tier | 3                                | 3        | 3           |
| UNCLOS                        | Signatory Status    | P                                | P        | P           |
|                               | Implementation Tier | 3                                | 3        | 3           |
| FAO CA                        | Signatory Status    | N                                | N        | P           |
|                               | Implementation Tier | 0                                | 0        | 3           |
| UN FSA                        | Signatory Status    | P                                | N        | P           |
|                               | Implementation Tier | 3                                | 0        | 2           |
| PSMA                          | Signatory Status    | P                                | F        | P           |
|                               | Implementation Tier | 3                                | 0        | 3           |
| CI 88                         | Signatory Status    | F                                | N        | F           |
|                               | Implementation Tier | 1                                | 0        | 0           |
| P029 (C029)                   | Signatory Status    | C029                             | P        | C029        |
|                               | Implementation Tier | 2                                | 1        | 2           |
| CEDAW                         | Signatory Status    | P                                | P        | P           |
|                               | Implementation Tier | 2                                | 3        | 3           |
| <b>NON-BINDING:</b>           |                     |                                  |          |             |
| CCRF                          | Signatory Status    | A                                | A        | A           |
|                               | Implementation Tier | 3                                | 3        | 3           |
| NPOA - IUU                    | Signatory Status    | A                                | A        | A           |
|                               | Implementation Tier | 3                                | 3        | 3           |
| Deep-sea Fisheries Guidelines | Signatory Status    | N                                | A        | F           |
|                               | Implementation Tier | 0                                | 3        | 1           |
| VGFSP                         | Signatory Status    | A                                | A        | A           |
|                               | Implementation Tier | 2                                | 3        | 2           |
| SSF Guidelines                | Signatory Status    | A                                | F        | A           |
|                               | Implementation Tier | 3                                | 1        | 2           |
| VGCDS                         | Signatory Status    | A                                | A        | A           |
|                               | Implementation Tier | 3                                | 3        | 3           |
| VGMFG                         | Signatory Status    | F                                | A        | A           |
|                               | Implementation Tier | 0                                | 3        | 2           |

Table 12: Obstacles and opportunities for increasing responsible fishing international instruments' implementation and the technical support needed to address these desires in the Sulu Sulawesi Seascape.

| <b>Sulu Sulawesi Seascape</b>                                   |   |
|---|---|
| <b>What obstacles exist?</b>                                    | <ul style="list-style-type: none"> <li>• C188 has not been endorsed because it requires life insurance and safety for crews which these nations do not have capacity to provide, nor enforce.</li> <li>• Filipino Law Enforcement Agencies and their personnel lack basic resources like boats, as well as limited skills and human resources.</li> <li>• Information sharing regarding intelligence needed for effective PSMA implementation.</li> </ul>   |
| <b>What opportunities exist?</b>                                | <ul style="list-style-type: none"> <li>• Technical training to support an ecosystem approach to fisheries management (EAFM).</li> <li>• Regional cooperation to strengthen enforcement against IUU.</li> <li>• PSMA endorsement from Malaysia is desired by the region.</li> <li>• C188 endorsement.</li> </ul>   |
| <b>What technical support is desired?</b>                       | <ul style="list-style-type: none"> <li>• Scientific research to aid in better management, including stock assessments of managed stocks and migratory species, as well as research geared to supporting small-scale fisheries.</li> <li>• Technical training for the management bodies, including skills training, while providing fair compensation for these managers.</li> <li>• Workshops and awareness raising campaigns targeted for political leaders and decision-makers who are not experts in fisheries, inclusive of specifics regarding understanding these RFIs.</li> <li>• Social research that aims to assess current social conditions for fishers and identify the necessary steps to enhance capacity for ensuring crew safety so that States can effectively meet the legally binding requirements entailed by endorsing C188.</li> <li>• A monitoring and surveillance system.</li> <li>• An information-sharing database platform for PSMA enforcement.</li> </ul> |
| <b>Top Priority Technical Support Wishes - for the Seascape</b> | <ul style="list-style-type: none"> <li>• Technical training for the management bodies, including skills training, while providing fair compensation for these managers.</li> <li>• Workshops and awareness raising campaigns targeted for political leaders and decision-makers who are not experts in fisheries, inclusive of specifics regarding understanding these RFIs.</li> <li>• Social research and capacity development to be able to endorse and implement ILO C188.</li> </ul>   |
| <b>Top Priority Technical Support Wishes - for the Region</b>   | <ul style="list-style-type: none"> <li>• PSMA - Support PSMA endorsement and implementation by building capacity through cooperative enforcement supported by information sharing.</li> </ul>   |

Noteworthy observations include that out of the three States, the Philippines is the sole party to the FAO CA and reports comprehensive implementation through allocating resources for monitoring and enforcement measures. Additionally, both Indonesia and the Philippines are parties to the UN FSA; however, only Indonesia has been able to allocate resources to monitoring and enforcing this instrument while the Philippines has implemented it only as far as creating national laws and policies to align with the UN FSA. Malaysia's non-participation in the PSMA poses a significant challenge to its neighboring countries that have wholeheartedly endorsed the agreement and dedicated resources to its monitoring and enforcement. The absence of Malaysia's commitment potentially provides an accessible market for fish caught through IUU fishing, facilitating the activities of those engaging in illegal fishing. Only Malaysia has fully endorsed the protocol of 2014 (P029) to ILO's C029, but they have been unable to implement it into national laws and policies. None of these States have signed, nor become a party to ILO's sectoral specific C188. All States have become party to CEDAW, but Indonesia has not been able to allocate resources to monitoring and enforcing it whereas Malaysia and the Philippines have.

Regarding non-binding agreements, Malaysia has embraced and effectively adopted and implemented all of them, except for the SSF Guidelines. The Philippines, on the other hand, has not adopted the Deep-sea Fisheries Guidelines, and while they have adopted the VGFSP, SSF Guidelines, and VGMFG, they have yet to allocate resources for monitoring and enforcement. Indonesia, too, has yet to adopt the Deep-sea Fisheries Guidelines or the VGMFG, but has successfully implemented all the other non-binding RFIs covered in this assessment.

The Sulu Sulawesi Seascape's unique abundance of marine biodiversity certainly puts an emphasis on scientific research and technical trainings needed to preserve these ecosystems. Desired technical trainings encompass various subjects including ecosystem approach to fisheries management (EAFM) practices and stock assessments, as well as skills training and a need for fair compensation to secure the talent and human resources necessary. Additionally, specialized training sessions, workshops, and awareness-raising campaigns aimed at political leaders and decision-makers are sought after to foster their backing for the endorsement of, and implementation and resource allocation for, these RFIs. Member countries also express a keen interest in commissioning social research to accomplish two objectives: 1) assess and establish a baseline of the current social conditions for fishers, and 2) identify the essential steps to enhance capacity for ensuring crew safety. This comprehensive roadmap will guide them towards effective implementation of C188, meeting the legally binding requirements entailed by, and instilling the confidence necessary to, securing their endorsement of the convention. Finally, similarly to other seascapes, the Sulu Sulawesi Sea emphasizes the importance of regional States, particularly Malaysia as a member of the Sulu Sulawesi Sea, to endorse and implement the PSMA. This region also feels the PSMA is crucial to enhance with the establishment of an information-sharing database platform.

#### 4.5 SUNDA BANDA SEASCAPE

Nestled in the eastern part of Indonesia, the Sunda Banda Seascape stretches across the waters connecting the Sunda Islands and the Banda Sea. Contained entirely within Indonesia, Timor Leste juts into the southeastern border of the seascape, and the Commonwealth of Australia is to the southeast across the Timor Sea. Recognized for its vital ecological value (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security n.d.; Napitupulu et al. 2022), the seascape serves as a key focus area for conservation initiatives in Indonesia and feels the effects of the fisheries management decisions of Timor Leste. This seascape is an integral part of the broader Coral Triangle, and enjoys the advantages from the governance and management efforts spearheaded by the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) (Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security n.d.). The endorsement level and implementation status per RFI for Indonesia, along with those of the Commonwealth of Australia and Timor Leste as RPOA-IUU

member countries whose fishing management decisions affect the waters of the Sunda Banda Seascope, can be seen in Table 13. Obstacles, opportunities, and technical support desired to finish implementing this seascope's priority RFIs are contained in Table 14.

Table 13: Endorsement and implementation status of responsible fishing international instruments in the Sunda Banda Seascope by country.

| <b>Seascope: Sunda Banda Seascope</b> |                     | Indonesia | Timor | Leste | Australia |
|---------------------------------------|---------------------|-----------|-------|-------|-----------|
|                                       |                     |           |       |       |           |
| <b>BINDING:</b>                       |                     |           |       |       |           |
| CITES                                 | Signatory Status    | P         | F     | P     |           |
|                                       | Implementation Tier | 3         | 2     | 3     |           |
| UNCLOS                                | Signatory Status    | P         | P     | P     |           |
|                                       | Implementation Tier | 3         | 1     | 3     |           |
| FAO CA                                | Signatory Status    | N         | N     | P     |           |
|                                       | Implementation Tier | 0         | 0     | 3     |           |
| UN FSA                                | Signatory Status    | P         | F     | P     |           |
|                                       | Implementation Tier | 3         | 0     | 3     |           |
| PSMA                                  | Signatory Status    | P         | P     | P     |           |
|                                       | Implementation Tier | 3         | 2     | 3     |           |
| CI88                                  | Signatory Status    | F         | F     | N     |           |
|                                       | Implementation Tier | 1         | 0     |       |           |
| P029 (C029)                           | Signatory Status    | C029      | N     | P     |           |
|                                       | Implementation Tier | 2         | 0     | 3     |           |
| CEDAW                                 | Signatory Status    | P         | P     | P     |           |
|                                       | Implementation Tier | 2         | 1     | 3     |           |
| <b>NON-BINDING:</b>                   |                     |           |       |       |           |
| CCRF                                  | Signatory Status    | A         | N     | A     |           |
|                                       | Implementation Tier | 3         | 0     | 3     |           |
| NPOA - IUU                            | Signatory Status    | A         | F     | A     |           |
|                                       | Implementation Tier | 3         | 1     | 3     |           |
| Deep-sea Fisheries Guidelines         | Signatory Status    | N         | N     | A     |           |
|                                       | Implementation Tier | 0         | 0     | 3     |           |
| VGFSP                                 | Signatory Status    | A         | N     | A     |           |
|                                       | Implementation Tier | 2         | 0     | 3     |           |
| SSF Guidelines                        | Signatory Status    | A         | N     | A     |           |
|                                       | Implementation Tier | 3         | 0     | 3     |           |
| VGCDS                                 | Signatory Status    | A         | N     | A     |           |
|                                       | Implementation Tier | 3         | 0     | 3     |           |
| VGMFG                                 | Signatory Status    | F         | F     | A     |           |
|                                       | Implementation Tier | 0         | 2     | 3     |           |



Table 14: Obstacles and opportunities for increasing responsible fishing international instruments' implementation and the technical support needed to address these desires in the Sunda Banda Seascape.

| <b>Sunda Banda Seascape</b>                                     |  |
|---|--|
| <b>What obstacles exist?</b>                                    | <ul style="list-style-type: none"> <li>• Indonesia has not become a party to ILO's C188 because it requires life insurance and safety for crews which they do not have capacity to implement.</li> <li>• Information sharing for effective management of the PSMA remains difficult.</li> <li>• Lack of full regional endorsement of the PSMA</li> <li>• Fisheries laws that are too general in Timor Leste.</li> </ul>  |
| <b>What opportunities exist?</b>                                | <ul style="list-style-type: none"> <li>• The Commonwealth of Australia has a 5-year capacity building program underway, meeting countries where they are and providing what they want.</li> <li>• Full regional endorsement of the PSMA. At the time of this report, those that have not become a party to it include Brunei Darussalam, Malaysia, Papua New Guinea, Singapore, and the Solomon Islands.</li> <li>• Timor Leste reports the formulation of a comprehensive national plan of action to combat illegal, unreported, and unregulated fishing (NPOA-IUU), which commences with the effective implementation of the PSMA. This approach has significantly contributed to the enhancement of their legal framework, facilitated by outside legal experts.</li> </ul> |
| <b>What technical support is desired?</b>                       | <ul style="list-style-type: none"> <li>• Advice from legal experts on the revision of fisheries laws.</li> <li>• Training and capacity development that would allow every State in the region to become a party to the PSMA.</li> <li>• Workshops and awareness raising campaigns targeted for political leaders and decision-makers who are not experts in fisheries, inclusive of specifics regarding understanding these RFIs.</li> <li>• Social research aiming to assess current social conditions for fishers and identify the necessary steps to enhance capacity for ensuring crew safety so that States can effectively meet the legally binding requirements entailed by endorsing C188.</li> </ul>  |
| <b>Top Priority Technical Support Wishes - for the Seascape</b> | <ul style="list-style-type: none"> <li>• Technical guidance and infrastructure for implementing the PSMA.</li> <li>• Social research on fishers' living and working conditions that will build capacity to enforce, and therefore endorse, C188.</li> <li>• Advice from legal experts on the revision of fisheries laws.</li> </ul>  |
| <b>Top Priority Technical Support Wishes - for the Region</b>   | <ul style="list-style-type: none"> <li>• PSMA - Support PSMA endorsement and implementation by building capacity through cooperative enforcement supported by information sharing.</li> </ul>  |

A noteworthy development is Timor Leste's recent accession to the PSMA (de Sousa 2022), which has been positively received by neighboring States in the region. Timor Leste acknowledges that receiving legal guidance on incorporating the PSMA into their national legal framework was very helpful. However, full implementation remains pending, as resources have not yet been allocated to establish robust monitoring and enforcement mechanisms to ensure the effective application of the PSMA's provisions. Additionally, Timor Leste has not become a party to CITES and is the only member country assessed in this report to not have done so. The Commonwealth of Australia has endorsed the FAO CA, whereas Indonesia and Timor Leste have not been able to yet. None of these States have become a party to ILO's C188, although the Commonwealth of Australia reports having domestic labor laws and policies that reflect the C188 requirements.

Timor Leste is making significant strides towards establishing an NPOA-IUU after being prompted by the Commonwealth of Australia's recent monitoring, control, and surveillance (MCS) training, which underscored the importance of such a plan. They have embarked on this mission by revising their fisheries laws with the guidance of outside legal experts. Timor Leste's accession to the PSMA is a direct outcome of this initial step in their NPOA-IUU development. As they have not yet become a party to, nor adopted many RFIs, this presents an opportune moment to engage them while they construct their NPOA-IUU framework. Incorporating key instruments like the CCRF, VGCDS, VGFSP, SSF Guidelines, and binding agreements such as CITES, UN FSA, and C188 would lay a solid foundation for an effective NPOA-IUU. Indonesia, too, has not adopted the Deep-sea Fisheries Guidelines or the VGMFG, but has successfully implemented all the other non-binding RFIs covered in this assessment. Indonesia still needs to adopt the Deep-sea Fisheries Guidelines and the VGMFG. It has successfully implemented all the other non-binding RFIs covered in this assessment with the caveat that their VGFSP does require allocation of resources for full implementation, ensuring proper monitoring and enforcement.

The Commonwealth of Australia has played a crucial role in providing a 5-year capacity-building program (Australian Government Department of Agriculture, Fisheries and Forestry 2023), tailoring support based on individual country needs. As part of this program, Timor Leste participated in a recent monitoring, control, and surveillance (MCS) training that spurred the development of their NPOA-IUU and the endorsement of the PSMA as an integral step. With the valuable assistance of legal experts, they report successfully revising their fisheries laws and requiring further legal expertise assistance to finish. This experience underscores the potential for regional collaboration with bilateral and multilateral partners, demonstrating the efficacy of building capacity via legal expertise consultation and enforcement training. Indonesia and Timor Leste both desire technical guidance and infrastructure towards better implementation of the PSMA. In addition, there is genuine interest in endorsing ILO C188, Working in Fishing Convention, in this seascape. The need for social research on fishermen's living and working conditions that will build capacity to eventually implement and enforce, and could therefore bolster endorsement of, C188 has also been expressed.

## 4.6 TECHNICAL SUPPORT PRIORITIES

These distinct seascapes exhibited specific technical support needs for enhanced application and implementation of RFIs, while also demonstrating some areas of overlap. The highest priorities, for each seascape and for the region as a whole, as identified per seascape, have been consolidated in Table 15.

Table 15: Summary table of self-identified technical support priorities of each seascape and for the region as a whole.

| <b>Top Priorities for Technical Support</b> |   |
|---|---|
| <b>Andaman Sea</b>                          | <p><u>Capacity Building</u></p> <ul style="list-style-type: none"> <li>• Technical training on labor inspections to comply effectively with ILO C188.</li> <li>• Technical training on protecting marine mammals to enforce Thailand's Emergency Decree on Fisheries B.E. 2558 (2015), Section 66.</li> </ul> <p><u>Research</u></p> <ul style="list-style-type: none"> <li>• Exploratory survey research of deep-sea fisheries resources in the Andaman Sea - stock assessments and information about how to build back healthy stocks.</li> </ul>   |
| <b>Bismarck Solomon Seas</b>                | <p><u>Capacity Building</u></p> <ul style="list-style-type: none"> <li>• Capacity development to be able to implement ILO C188.</li> <li>• Technical guidance and infrastructure for implementing the PSMA.</li> </ul>  |
| <b>South China Sea</b>                      | <p><u>Capacity Building, Research, and Policy Support</u></p> <ul style="list-style-type: none"> <li>• An information-sharing database platform for housing intelligence that will elevate the ability to enforce the PSMA and enable a future integrated enforcement plan, including but not limited to: <ul style="list-style-type: none"> <li>-vessel list of suspected IUU vessels</li> <li>-vessel list of permitted vessels including flag and RFMO information</li> <li>-documents regarding registration and fishing license (because it is reportedly difficult to verify the documents onboard for document verification)</li> <li>-integrated vessel monitoring system (VMS)</li> <li>-notifications regarding illegal vessel movement or environmental crimes</li> <li>-illegal fishing observations - locations and species</li> <li>-the modus operandi of each legal fishery</li> <li>-the modus operandi of illegal fishers, when available, to create a counter plan</li> <li>-heat maps on fishing efforts (GIS maps) linked to the fishing communities that fish in those areas</li> <li>-maps of marine protected areas (MPAs) containing coordinates of its boundaries, as well as species being protected and pertinent fishing laws, regulations, and permits.</li> <li>-information regarding the coordination and output of joint training and operations for better enforcement.</li> <li>-scientific research for stock assessments and information pertaining to managed stocks and migratory species.</li> <li>-Information pertaining to a transboundary fisheries management plan.</li> </ul> </li> <li>• Joint enforcement trainings and operations, specifically including workshops on illegal, unreported and unregulated fishing laws.</li> </ul> <p><u>Research</u></p> <ul style="list-style-type: none"> <li>• Scientific research to aid creation of integrated fisheries management policies (including China), especially in the disputed territorial areas.</li> </ul> |

|  |  |
|--|--|
| <p><b>Sulu<br/>Sulawesi<br/>Seascape</b></p>           | <p><u>Capacity Building</u></p> <ul style="list-style-type: none"> <li>• Technical training for the management bodies, including skills training, while providing fair compensation for these managers.</li> <li>• Workshops and awareness raising campaigns targeted for political leaders and decision-makers who are not experts in fisheries, inclusive of specifics regarding understanding these RFIs.</li> </ul> <p><u>Research</u></p> <ul style="list-style-type: none"> <li>• Social research on fishers' living and working conditions that will build capacity to enforce, and therefore endorse, C188.</li> </ul> |
| <p><b>Sunda<br/>Banda<br/>Seascape</b></p>             | <p><u>Capacity Building</u></p> <ul style="list-style-type: none"> <li>• Technical guidance and infrastructure for implementing the PSMA.</li> </ul> <p><u>Research</u></p> <ul style="list-style-type: none"> <li>• Social research on fishers' living and working conditions that will build capacity to enforce, and therefore endorse, C188.</li> </ul> <p><u>Policy</u></p> <ul style="list-style-type: none"> <li>• Advice from legal experts on the revision of fisheries laws.</li> </ul>  |
| <p><b>The Region<br/>of<br/>Southeast<br/>Asia</b></p> | <p><u>Capacity Building</u></p> <ul style="list-style-type: none"> <li>• PSMA technical guidance and infrastructure necessary to raise all member countries' confidence to fully endorse and implement the PSMA, building capacity through cooperative enforcement supported by an information-sharing database platform.</li> </ul>   |

All five seascapes and the ten participating countries (representatives from Singapore and Brunei Darussalam were invited, however were unable to attend) spoke about the importance of achieving full regional implementation of the PSMA. Full regional implementation of the PSMA necessitates enhancing the capacity of every member country to a level that instills confidence in endorsing the PSMA, with both technical guidance and infrastructure playing crucial roles in this endeavor. A highly coveted technical resource to this end is an information-sharing database platform. This platform would serve as a valuable repository for intelligence essential in enforcing the PSMA at home ports and through strategic joint operations. Additionally, it would house other valuable data related to combating IUU fishing, providing insights into fishers' modus operandi and fisheries, and facilitating the development of joint management plans and on-going assessments. Details of the intelligence desired in this database include:

- Vessel list of suspected IUU vessels
- Vessel list of permitted vessels including flag and RFMO information
- Documents regarding registration and fishing license (because it is reportedly difficult to verify the documents onboard for document verification)
- Integrated VMS
- Notifications regarding illegal vessel movement or environmental crimes
- Illegal fishing observations - locations and species
- The modus operandi of each legal fishery
- The modus operandi of illegal fishers, when available, to create a counter plan
- illegal fishers when available to create a counter plan
- Heat maps on fishing efforts linked to the fishing communities that fish in those areas
- Maps of marine protected areas (MPAs) containing coordinates of its boundaries, as well as species being protected and pertinent fishing laws, regulations, and permits.
- Information regarding the coordination and output of joint training and operations for better enforcement.
- Scientific research for stock assessments and information pertaining to managed stocks and migratory species.
- Information pertaining to a transboundary fisheries management plan.

In addition to the information sharing platform, several seascapes, particularly the South China Sea, express a strong interest in conducting joint trainings focused on IUU fishing instruments and enforcement operations. These trainings aim to foster a strategic enforcement approach and facilitate coordinated efforts in carrying out joint enforcement operations.

It is a similar story with endorsing and implementing ILO's C188, the Work in Fishing Convention, in that it requires technical guidance and resources, and its implementation is desired by many seascapes in the region. The technical support sought to achieve full implementation of C188 revolves around three main aspects. First, there is a need for building enforcement capacity through

skills training and workshops to complete productive labor inspections during high-seas boardings and in-port. Secondly, legal expertise support is required to integrate this instrument into national laws and policies. Third, technical support in the form of social science research is needed to provide essential baseline data in order for the government to address gaps in the current labor standards of this sector. This research would include intelligence on the fishers' living and working conditions, and identify the essential steps to enhance the government's capacity for ensuring crew safety. It may also include information on how to engage the private sector in helping to adopt a new labor culture.

The unique priorities of each seascape are interesting. The Andaman Sea desires revolve around Thailand's Emergency Decree on Fisheries B.E. 2558 (2015), Section 66, that protects marine mammals (Office of the Council of State of Thailand's Law for ASEAN project 2015). They would like technical guidance from the U.S. on how to enforce this ordinance as they feel it is similar to the U.S. Marine Mammal Protection Act. Specifically, the fisheries managers in this seascape report needing to learn how to identify the cause of death in marine mammals. The Sulu Sulawesi Sea, South China Sea, and the Sunda Banda Seascape requested technical trainings or workshops aimed at bringing political leaders and decision-makers up-to-speed on these RFIs and their importance in order to facilitate more resource allocation for better implementation and enforcement. Furthermore, the South China Sea requests technical trainings for the fisheries management bodies, including skills training, while providing fair compensation for these managers.

## 5. DISCUSSION

The Southeast Asian region's distinct seascapes share similarities while also exhibiting individual variations in their RFI endorsement abilities, priorities, and levels of implementation, influenced by the distinct characteristics of each seascape.

### 5.1 COMMONALITIES

Largely, most states recognize the NPOA-IUU and PSMA as highly beneficial RFIs to combat IUU fishing within their respective seascapes. The establishment of an NPOA-IUU has facilitated the development of comprehensive frameworks for new fishery laws and regulations, creating opportunities to integrate the PSMA and other RFIs at a foundational level. Many states emphasize the importance of regional cooperation and alliance in becoming parties to and implementing the PSMA, as it acts as a deterrent to IUU fishing vessels, leaving them with no regional ports to land their catch.

However, it is essential to acknowledge the foundational laws that have played a proactive role in mitigating IUU fishing in the region. The UN Fish Stocks Agreement (UN FSA), and the establishment of regional fisheries management organizations (RFMOs) under its convention, have reduced the influence of foreign distant water fleets (DWF) and bolstered the sovereignty of the States in the Indo-Pacific region, especially within the Bismarck Solomon Seas seascape. RFMOs play a critical role in protecting smaller island nations from being coerced by foreign states. Additionally, UNCLOS's rule on the 200-nautical-mile exclusive economic zone (EEZ) has been instrumental in enabling these island states to assert control over their fisheries resources, empowering them to reclaim their wealth. This control over resources has been pivotal in helping these countries maintain authority over their fisheries.

Member countries show a genuine commitment to, and interest in, combating IUU fishing. However, a shared challenge among them is insufficient capacity. This lack of capacity includes limited human and financial resources, as well as inadequate training, legal expertise, and platforms for transboundary information sharing. Addressing underfunding, and the need for technical training, are crucial to overcome these obstacles. This may be why the Philippines is the only Southeast Asian member country that has become a party to the binding obligations set forth in the FAO CA which requires capacity to fulfill the mandated responsibilities of flag and coastal States (FAO 1995b).

The primary deterrent for States in endorsing legally binding instruments is the fear of potential repercussions spurred from lacking the capacity to fulfill their legal obligations. This is the case with many States and the ILO C188, or the few that have not yet become a party to the PSMA. Capacity constraints can also hamper the adoption of non-binding instruments, such as the case is with the SSF Guidelines in Thailand. Due to the large number of small-scale fishing communities (over 2,800 in Thailand alone) with diverse vessels and gear types, capacity constraints leave the fisheries managers focused on commercial fishers. The limited implementation of many instruments throughout the Indo-Pacific can be attributed to challenges in resource allocation and capacity limitations.

Transboundary collaboration for effective management of the PSMA is widely acknowledged amongst participants of this study as the critical, necessary, next phase. The lack of PSMA commitment in any one member country creates a readily available market for IUU fishing-caught fish, thus enabling and facilitating illegal fishing operations. Universal participation in the PSMA is seen as a key priority for most member countries, and achieving this goal necessitates providing varying levels of technical support through bilateral and multilateral partnerships to elevate all member countries to a level of confidence for securing endorsement. Collaboration efforts, regardless of a



particular State's endorsement status at the onset of collaboration, may be helpful in raising all member countries' confidence towards the level necessary for PSMA endorsement.

This strategic, transboundary collaboration would be best executed through two channels of effort: joint enforcement operations and cooperative management initiatives. Central to this endeavor is establishing a digital platform that facilitates information sharing for enhanced PSMA enforcement. This platform could be leveraged as a comprehensive repository, encompassing details not only about illegal vessels and fishing practices but also aid in the execution of an integrated, cooperative enforcement plan and support data, information and analytical tools essential to transboundary fisheries management including stock assessments and evaluations of the fisheries' management progress. Conducting joint trainings on platform usage, enforcement strategies and operations, and management plans within a seascape would foster increased transboundary communication and strategic cooperation.

The RPOA-IUU is moving forward with developing a data-sharing mechanism policy and agreement (Stanford and Tania 2023). USAID RDMA SuFiA TS is supporting this initiative that will have two parts: 1) a regional data sharing protocol, and 2) a regional data sharing agreement on the structure. Currently, the working group to develop this mechanism is sorting through what data can be included (internal communication, 2023, e-mail message to author, August 2, 2023).

This assessment indicated that the data requested by member countries to include on a digital information sharing platform would support a multifaceted approach to combating IUU fishing, beginning with data central to effective PSMA enforcement. Staying vigilant regarding identifying illegal vessels and prosecuting perpetrators with effective evidence is vital for effective enforcement. Identifying illegal vessels can happen at ports through enhanced PSMA enforcement or on the water by enforcement agents empowered with details on the characteristics of both legal fishers and fisheries, as well as the characteristics of illegal fishing like known violators or hot spots for illegal harvests. Collecting effective evidence for prosecution starts with successful apprehension. Joint training and transboundary enforcement operations supported by fisheries characteristics intelligence will support the need for apprehending perpetrators and gathering the evidence needed, especially when they attempt to evade authorities by crossing borders. Finally, combating IUU proactively starts with forming fisheries management plans. For migratory species, transboundary management plans supported by fisheries data, like stock assessments and migratory species behavior, are fundamental (Table 16).

Table 16: Information requested by member countries to be contained on a digital information-sharing platform.

| Intelligence to support:                         | Initiative supported:                                 | Information desired:   |
|--|---|--|
| Identifying IUU fishing Vessels - at port        | PSMA Enforcement                                      | <ul style="list-style-type: none"> <li>● Vessel list of suspected IUU vessels</li> <li>● Vessel list of permitted vessels including flag and RFMO information</li> <li>● Documents, with translated language versions, regarding registration and fishing licenses per vessel (as it is difficult to verify the documents onboard for document verification)</li> <li>● Integrated vessel monitoring system (VMS) data</li> <li>● Notifications regarding illegal vessel movement or environmental crimes</li> </ul>   |
| Identifying IUU fishing Vessels - on the water   | Identification Characteristics of Fisheries & Fishers | <p>In addition to the above information desired to identify IUU fishing Vessels:</p> <ul style="list-style-type: none"> <li>● Illegal fishing observations - locations and targeted species</li> <li>● The modus operandi of each legal fishery</li> <li>● The modus operandi of illegal fishers, when available, to create a counter plan</li> <li>● Heat maps on fishing efforts, linked to the fishing communities that fish in those areas</li> <li>● Heat maps of illegal fisheries activity</li> <li>● Maps of marine protected areas (MPAs) containing coordinates of its boundaries, as well as species being protected and pertinent fishing laws, regulations, and permits.</li> </ul> |
| Prosecuting Perpetrators with Effective Evidence | Joint Initiatives                                     | <p>In addition to the above information desired to identify IUU fishing Vessels:</p> <ul style="list-style-type: none"> <li>● Joint training logistics plannings and content details</li> <li>● Joint trainings on cooperative enforcement operations</li> <li>● Joint trainings on IUU fishing laws and policies</li> <li>● Documents, tools, and other resources used in trainings</li> <li>● Logistical details for joint enforcement operations=</li> <li>● Evidence database - include details on what should be logged with the evidence to increase its efficacy</li> <li>● Feedback useful for assessing and improving joint operations</li> </ul>                                       |
| Proactive Fisheries Management                   | Scientific Data                                       | <p>In addition to the 3 maps listed above:</p> <ul style="list-style-type: none"> <li>● Stock assessments of migratory species</li> <li>● Behavior characteristics of migratory species</li> <li>● Integrated fisheries' management plans</li> <li>● Catch documentation</li> </ul>  |

Some member countries also show a genuine interest in endorsing and implementing both the ILO Protocol of 2014 to C029 known as P029, and C188. However, they report not knowing where to begin building capacity and have requested research on the current social conditions of fishers in order to determine where they should start addressing issues in order to become inline with the mandate of C188. Cambodia, Indonesia, the Philippines, and Vietnam have self-reported an implementation status of tier 2 with regards to C029. This indicates that while these member countries have become party to C029, and have created national laws and policies in line with their binding obligation, they have not gone as far as allocating the resources necessary for monitoring and enforcement.

Member countries need baseline data on fishers' living and working conditions, as well as information pertaining to the necessary steps for improving fishers' labor conditions to align with the standards of C188, the Work in Fishing Convention. By doing the work necessary to reach a level of implementation with regards to C188, these member countries may also be able to endorse the P029 which removes the transitional provisions allowed in C029. However, where C188 specifically speaks to the fishing sector, C029 and its associated P029 applies to all sectors and may prove out of reach even after full implementation of C188. The desired technical support for full implementation of C188 includes building enforcement capacity through skills training and workshops for enforcement agents with regards to labor investigations, integrating C188 into national laws with the assistance of legal expertise, and conducting social science research to identify and address gaps in labor standards and ensure crew safety. This support aims to enhance the governments' abilities to effectively implement C188 and foster a more secure and compliant labor environment in the fishing sector.

## 5.2 DIFFERENCES

The Andaman Sea seascape desires for technical support are dominated by Thailand in this assessment as Myanmar is not a member country of the RPOA-IUU, nor CTI-CFF, and is therefore not included. Thailand is interested in technical assistance geared to enforcing their new marine mammal protection ordinance, Emergency Decree on Fisheries B.E. 2558 (2015), Section 66 and exploratory research to better understand the migratory stocks within these waters. Additionally, although Thailand is notably the only member country in the region to have become a party to ILO C188, they request training to conduct more effective labor inspections onboard vessels. Their endorsement of C188 is a direct result of being threatened with the "red card" from the European Union (EU) (European Commission 2021; 2019), which would stop the importation of Thailand's seafood to the EU. Important to note that despite having national labor laws and policies that reflect the intention of C188, the Commonwealth of Australia has not become a party to C188 - it is also worth mentioning that neither has the U.S.

The Bismarck Solomon Sea seascape is quite unique. It is Party to the Nauru Agreement (PNA), which allows Pacific Islands to recoup the revenues and rents from the tuna fisheries that exist in this seascape. This seascape also benefits from being part of the Pacific Islands Forum Fisheries Agency (FFA) and the Western Central Pacific Fisheries Commission (WCPFC) regional fisheries management organization (RFMO). These organizations and their regulations have played a pivotal role in advancing the adoption and implementation of RFIs by the private sector in situations where the seascape's governments faced challenges in doing so formally.

The South China Sea seascape's unique territorial disputes have led to the focus of the seascape to be on transboundary collaboration. This seascape has specific ideas on the details they would like included in a regional information-sharing database that would help enable effective implementation of the PSMA, and joint enforcement operations and management approaches. This transboundary

collaboration would create strategic enforcement capabilities and a comprehensive base for fostering relationships, building trust, and promoting cooperation among nations.

The Sulu Sulawesi Seascape is focused on technical trainings for fisheries managers, labor inspectors, and political leaders in charge of decision-making. Raising awareness of the importance of these RFIs would help elevate resource allocation from political leaders enabling capacity for better management and enforcement of fisheries laws and policies. In particular, Indonesia would like to move towards implementing CI88 and has recognized a need for research on the social conditions of their fishers, so that they can move forward towards becoming a party to CI88.

The Sunda Banda Seascape has recently received advice and training from legal experts and fisheries enforcement agencies that have enabled rewriting the fisheries laws of Timor Leste while creating an NPOA-IUU, and has driven their recent accession to the PSMA (de Sousa 2022). This legal technical assistance is having a positive impact for Timor Leste and the relationships between the member countries in this seascape.

Most member countries have become a party to UNCLOS and UN FSA, but not the FAO CA, with the exception of the Commonwealth of Australia and the Philippines. Brunei Darussalam and Singapore, also have not endorsed the FAO CA, but they also have not signed the UN FSA. This is interesting being that the UN FSA implements the conservation provision of UNCLOS, which closely aligns with the conservation management of the FAO CA. Out of the Southeast Asian member countries, only the Philippines has become a party to the FAO CA.

### 5.3 ADDITIONAL CONSIDERATIONS

The FAO CA has only been ratified by one Southeast Asian member country, the Philippines. This binding agreement commits its parties to implement measures addressing IUU fishing like marking fish gear, cooperating with other States, record keeping, and adequate inspections while enforcing penalties on illegal fishing vessels and sharing useful intelligence - much of which lacks capacity (FAO 1995b). Moving States towards becoming a party to the FAO CA will entail first moving these member countries through the successful implementation of the other RFIs assessed in this report. This will secure their capacity, meeting the mandates required by the FAO CA with confidence.

The UN FSA is an interesting instrument and presents an opportunity to hold vessels accountable through means other than their flag State (United Nations General Assembly 1997). UNCLOS's Article 92 regarding the flag State of a vessel having exclusive jurisdiction on the high seas only holds when other international treaties do not make specific mention altering this regulation (United Nations n.d.b). However, the UN FSA does specifically alter this regulation. When the State is a party to the UN FSA and an RFMO they may impede on flag state jurisdiction for high-seas boarding inspections within the region of the RFMO following procedures outlined in the UN FSA. Significantly, if States endorse the UN FSA, it increases the effectiveness of UN FSA and the potential to hold more perpetrators accountable.

Additionally, for those member countries that are party to the UN FSA - namely the Commonwealth of Australia, Cambodia, Indonesia, Papua New Guinea, the Philippines, Solomon Islands, Thailand, and Vietnam - it would be prudent to recognize that catch verification is a duty under the flag state responsibilities through the UN FSA (United Nations General Assembly 1997). Cambodia and the Solomon Islands would therefore benefit from adopting and fully implementing the VGCDs.

Moreover, for those member countries reporting adoption and implementation of the VGCDs, namely Thailand, the Philippines, Papua New Guinea, Malaysia, and Indonesia, along with Vietnam who is at an implementations tier level 2, should consider that the VGCDs provides specific

guidance for supply chain due diligence requiring the catch to be caught in a manner consistent with applicable national, regional and international conservation and management measures (FAO 2017). Therefore, if a particular member country has become a party to C029, or C188, then it could be argued that in order to achieve adoption of the VGCDS they must also have already achieved full implementation of the international labor instruments they have become a party to and implemented into national legislation. Fair labor metrics should be captured with the catch documentation scheme employed. This applies to Indonesia, Malaysia, Papua New Guinea, the Philippines, Thailand, and Vietnam as they have adopted the VGCDS.

## 5.4 EMERGING RESPONSIBLE FISHERIES INTERNATIONAL INSTRUMENTS

There has been a pivotal shift towards sustainable and accountable fishing practices with various responsible fishing international instruments emerging. Key developments to stay current on are presented in Table 17.

Table 17: Emerging responsible fishing international instruments.

| Instrument:  | Description:  | Status:  | Reference:  |
|--|---|--|---|
| UN Biodiversity Beyond National Jurisdiction (BBNJ) Agreement                                      | A provision under UNCLOS to address conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction   | Not yet in force; Binding instrument - needs 60 parties at the time of this report                 | (UNGA 2023)   |
| FAO Voluntary Guidelines for Transshipment   | Ensures transparency and legality in the transfer of catch at sea.  | Non-binding instrument; has been adopted by FAO in 2022  | (FAO 2023)  |
| IMO Cape Town Agreement  | Enhance the safety of fishing vessels, a crucial step towards safeguarding lives at sea.  | Not yet in force; Binding instrument - needs 8 more parties at the time of this report             | (International Maritime Organization n.d.)                                |
| FAO Global Record of Fishing Vessels/Refrigerated Transport Vessels and Supply Vessels (GRFV/RFVR) | Enhance transparency and control in the fishing industry by establishing a comprehensive and accessible global database of fishing vessels, refrigerated transport vessels, and supply vessels.                       | Launched in 2017; data regarding more than 16,200 vessels by 68 States at the time of this report. | (FAO 2014; Food and Agriculture Organization of the United Nations n.d.c) |
| FAO Global Information Exchange System (GIES)  | Enhances international cooperation for member countries to exchange and access real-time data and information about fishing vessels, fishing licenses, fishing activities, catch data, and other relevant information | Pilot phase moving into global coverage by the end of 2023.  | (Food and Agriculture Organization of the United Nations 2023; n.d.)      |

## 6. RECOMMENDATIONS

Regional partners should recognize that multiple lines of effort are being applied to capacity-building initiatives addressing IUU fishing in the region. To optimize the utilization of limited and highly sought-after resources, it is crucial for these partners to collaborate to streamline these efforts. The subsequent sections include recommendations suitable for all member countries on an individual basis, by seascape, and for regional collaborations. The list concludes with recommendations tailored to individual partners.

### 6.1 TECHNICAL DEVELOPMENT RECOMMENDATIONS FOR ALL MEMBER COUNTRIES

Enhanced training sessions focused on the detection of illicit marine wildlife harvesting should be implemented across all government agencies engaged with traveling populations. Unlike terrestrial wildlife, marine species are often less recognizable to these officials. Given that unlawfully acquired marine life is not solely transported through maritime routes, but also through other transport hubs, like airports and train stations, it is imperative to extend identification training to enforcement personnel stationed at all travel checkpoints.

All member countries should be encouraged to maintain a transparent, regularly updated repository detailing the conventions they have endorsed and the non-binding agreements they have adopted, similar to the structure of the Australian Treaties Database (Australian Government Department of Foreign Affairs and Trade n.d.). This repository would serve as a valuable tool for partners to assess and follow member countries' advancements. Crucial information, including the date the country became a signatory or party and what their method of endorsement was (ratification, accession, or acceptance), the implementation status of RFII and details of its integration into domestic laws should be readily accessible. It is worth noting that this compilation should encompass non-binding agreements embraced by member countries, setting it apart from the Australian Treaties Database.

Additionally, it would help cooperation and collaboration if as member countries update their national laws to reflect the international instruments in which they have become a party, or adopted, they confirm the UN FAO FAOLEX Database contained this update in their FAOLEX country profile (Food and Agriculture Organization of the United Nations n.d.b).

### 6.2 TECHNICAL SUPPORT RECOMMENDATIONS BY SEASCAPE

The following are the recommendations for technical support provision broken down by seascapes within Southeast Asia as defined by USAID RDMA (United States Agency for International Development 2022c). They are informed by the analysis and assessment of gaps, challenges, opportunities, and desires of the member countries within each seascape. For a summary of desired technical support per seascape, see table 15.

#### 6.2.1 ANDAMAN SEA

- 1) Provide technical training on the nuance and best practices of labor inspections onboard fishing vessels, including comprehensive cross-training between Thailand's Ministry of Labour, Department of Social Development and Welfare, and Department of Fisheries and Indonesia's Ministry of Manpower, Ministry of Marine Affairs and Fisheries, and the Ministry of Social Affairs.
- 2) Provide technical training to Thailand's Department of Fisheries on enforcing the marine mammal protection ordinance, Emergency Decree on Fisheries B.E. 2558 (2015), Section 66, and identifying the cause of death in marine mammals.



- 3) Conduct stock assessments and behavior research on the deep-sea fisheries resources in the Andaman Sea.

### 6.2.2 BISMARCK SOLOMON SEAS

- 1) Conduct research to identify and analyze the gaps between the present living and working conditions of fisherfolk and the requirements for endorsing ILO C188 for both Papua New Guinea and the Solomon Islands. This research should include analyzing the technical training and legal frameworks necessary to fully implement, monitor, and enforce C188.
- 2) Supply technical guidance and infrastructure for implementing the PSMA.

### 6.2.3 SOUTH CHINA SEA

- 1) Coordinate joint enforcement trainings and operations. Trainings should specifically include workshops on illegal, unreported and unregulated fishing laws and policies.
- 2) Conduct scientific research to aid the creation of integrated fisheries management policies, including China if possible.
- 3) Provide a digital information-sharing database supporting recommendations numbers one and two above, and as outlined in detail in Table 16.

### 6.2.4 SULU SULAWESI SEA

- 1) Build capacity for fisheries management bodies, including provision of technical skills training and fair compensation to retain talent and human resources.
- 2) Raise awareness to political leaders and decision-makers, who allocate resources towards endorsement and implementation, regarding the importance and impact of these RFIs through workshops and technical briefings.
- 3) Conduct research to identify and analyze the gaps between fisherfolk's present living and working conditions and the requirements for endorsing ILO C188 for Indonesia, Malaysia, and the Philippines. This research should include analyzing the technical training and legal frameworks necessary to fully implement, monitor, and enforce C188.

### 6.2.5 SUNDA BANDA SEASCAPE

- 1) Supply technical guidance and infrastructure for implementing the PSMA.
- 2) Conduct research to identify and analyze the gaps between the present living and working conditions of fisherfolk and the requirements for endorsing ILO C188 in Indonesia and Timor Leste. This research should analyze the technical training and legal frameworks necessary to fully implement, monitor, and enforce C188.
- 3) Provide legal expertise on the revision of fisheries laws.

## 6.3 TECHNICAL SUPPORT RECOMMENDATIONS FOR THE REGIONAL PARTNERSHIPS

The following are technical support recommendations for regional organizations in the Indo-Pacific region that will support all member countries to combat transboundary IUU fishing issues. Among the regional organizations that can provide this support are the United States Agency for

International Development's (USAID) Sustainable Fish Asia Technical Support (SuFiA TS), the Association of Southeast Asian Nations (ASEAN) Sectoral Working Group on Fisheries (ASWGF) and the Southeast Asian Fisheries Development Center (SEAFDEC).

- 1) Regional partners can streamline efforts through the coordination of a donor platform to make sure our efforts are complimentary. This donor platform could potentially be housed on the digital information-sharing platform discussed below and represented by Table 18.
- 2) All seascapes expressed a desire for unilateral PSMA full endorsement and implementation in the region. They also each expressed needing technical guidance and infrastructure to do so. Technical guidance and training should be provided and customized to each member country's specific needs. The infrastructure development of a digital information-sharing platform will bolster this technical guidance and training and operationalize enforcement agents. The data sharing mechanism currently being created by the RPOA-IUU in conjunction with SuFiA TS should be built to house this information-sharing needed for effectively combating IUU fishing, and the data contained should support a multifaceted approach. The data that should be included in this platform and through the RPOA-IUU data-sharing mechanism is contained in Table 18.

Table 18: Information requested by member countries to be contained on a digital information-sharing platform.

| Intelligence to support:                         | Initiative supported:                                 | Information desired:   |
|--|---|--|
| Identifying IUU fishing Vessels - at port        | PSMA Enforcement                                      | <ul style="list-style-type: none"> <li>● Vessel list of suspected IUU vessels</li> <li>● Vessel list of permitted vessels including flag and RFMO information</li> <li>● Documents, with translated language versions, regarding registration and fishing licenses per vessel (as it is difficult to verify the documents onboard for document verification)</li> <li>● Integrated vessel monitoring system (VMS) data</li> <li>● Notifications regarding illegal vessel movement or environmental crimes</li> </ul>   |
| Identifying IUU fishing Vessels - on the water   | Identification Characteristics of Fisheries & Fishers | <p>In addition to the above information desired to identify IUU fishing Vessels:</p> <ul style="list-style-type: none"> <li>● Illegal fishing observations - locations and targeted species</li> <li>● The modus operandi of each legal fishery, and illegal fishers when available to create a counter plan</li> <li>● Heat maps on fishing efforts, linked to the fishing communities that fish in those areas</li> <li>● Heat maps of illegal fisheries activity</li> <li>● Maps of marine protected areas (MPAs) containing coordinates of its boundaries, as well as species being protected and pertinent fishing laws, regulations, and permits.</li> </ul> |
| Prosecuting Perpetrators with Effective Evidence | Joint Initiatives                                     | <p>In addition to the above information desired to identify IUU fishing Vessels:</p> <ul style="list-style-type: none"> <li>● Joint training logistics plannings and content details</li> <li>● Joint trainings on cooperative enforcement operations</li> <li>● Joint trainings on IUU fishing laws and policies</li> <li>● Documents, tools, and other resources used in trainings</li> <li>● Logistical details for joint enforcement operations=</li> <li>● Evidence database - include details on what should be logged with the evidence to increase its efficacy</li> <li>● Feedback useful for assessing and improving joint operations</li> </ul>         |
| Proactive Fisheries Management                   | Scientific Data                                       | <p>In addition to the 3 maps listed above:</p> <ul style="list-style-type: none"> <li>● Stock assessments of migratory species</li> <li>● Behavior characteristics of migratory species</li> <li>● Integrated fisheries' management plans</li> <li>● Catch documentation</li> </ul>  |

Of note, while developing this data-sharing mechanism, the RPOA-IUU and SuFiA TS should consider its potential for seamless integration with the FAO Global Information Exchange System (GIES) (Food and Agriculture Organization of the United Nations n.d.f). Whereas the GIES would require less information, the RPOA-IUU platform would contain more detailed regional information specifically geared to combat IUU in the region. However, developing this platform with seamless integration in mind would support the platform's users in the field, and support member countries' adoption of other emerging RFIs already capable of working with the FAO's GIES.

Finally, all documents and information contained in the database would benefit from being translated into the local enforcement language of RPOA-IUU member countries.

- 3) Building capacity for the full endorsement and implementation of ILO C188, the Work in Fishing Convention, is desired but necessitates a two-fold strategy. Initially, social research per member country should be conducted to assess and identify the discrepancies existing between fisherfolk's current living and working conditions and the mandates stipulated by C188. This research should encompass a thorough examination of the requisite technical training and legal frameworks indispensable for the effective implementation, monitoring, and enforcement of C188. Subsequently, specialized training sessions should be provided to enhance the proficiency and nuance needed for adequate labor inspections aboard fishing vessels. These training programs should incorporate comprehensive cross-training encompassing domestic government departments of labor, fisheries, and sometimes human welfare.
- 4) The provision of legal expertise to member countries seeking assistance in revising their fisheries laws and regulations while developing their NPAO-IUU would prove beneficial.

#### 6.4 TECHNICAL DEVELOPMENT RECOMMENDATIONS FOR THE RPOA-IUU

- 1) Develop and implement a plan to provide the technical guidance and infrastructure support needed for regional implementation of the PSMA and ILO C188 as recommended per the above mentioned seascapes.
- 2) Move forward quickly developing a data sharing mechanism in support of RPOA-IUU recommendation number 1.
- 3) Offer legal expertise to any member country creating their NPOA-IUU and consequently revising their fishery laws. Legal expertise is desired and appreciated by individual member countries.
- 4) Finish the RPOA-IUU website to contain the information currently outlined on it and include a specific addition that consists of the RFII endorsement and implementation statuses of each member country to facilitate coordination.
- 5) Keep their webpage "IUU Vessel Movements and Sightings" on their website up-to-date and consider creating a filter to look for IUU fishing vessel movements by region. At the time of this report, August 2023, the latest update is from February 2021 (Regional Plan of Action to promote responsible fishing practices including combating IUU Fishing 2023b).

#### 6.5 TECHNICAL DEVELOPMENT RECOMMENDATIONS FOR INTERNATIONAL GOVERNANCE ORGANIZATIONS

- 1) Ensure the availability of a user-friendly and regularly updated list of countries that have signed or become parties to a binding agreement, or adopted for non-binding agreements. While some organizations like the ILO and FAO offer such lists, they can be challenging to locate and need clear indication of their last update, leading to uncertainty about their accuracy. Establishing consistent presentation standards for these lists across various UN organizations is essential. For instance, the PSMA list includes details about endorsement through ratification, accession, or acceptance, along with corresponding dates (Food and Agriculture Organization of the United Nations n.d.a). In contrast, the ILO page simply states "In Force" without specifying the type of action taken (International Labour Organization n.d.d). Additionally, the UN's database warrants a thorough review to enhance its comprehensiveness and ease of navigation. For instance, the Agreement to Promote

Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (CA) and CITES do not appear in the UN Treaty Database's lists under relevant chapters, indicating the need for improvements in its categorization and accessibility (United Nations n.d.a).

- 2) The FAO should allow regional access for streamlining data inputs from regional databases to the FAO's Global Information Exchange System (GIES) (Food and Agriculture Organization of the United Nations n.d.f).

## 7. CONCLUSION

Illegal, unreported, and unregulated (IUU) fishing poses a multifaceted threat, endangering marine ecosystems, economies, and food security (Food and Agriculture Organization of the United Nations n.d.e). It undermines fisheries management, generates substantial economic losses, and can fuel criminal activities (Food and Agriculture Organization of the United Nations 2018; U. R. Sumaila et al. 2020; Johns 2013). To combat IUU fishing, international cooperation bolstered by effective enforcement is paramount (Long et al. 2020; Bejer et al. 2015; Fujii, Okochi, and Kawamura 2021). Distant water fleets (DWF) compound these challenges, exacerbating overfishing and undermining regulations (United States Coast Guard 2020; Fujii, Okochi, and Kawamura 2021). Resolving IUU fishing-related challenges in the Indo-Pacific hinges on addressing capacity gaps and fostering regional collaboration. International assistance is crucial in building capacity towards promoting responsible fishing practices, protecting marine ecosystems, and ensuring sustainable livelihoods for coastal communities.

The RPOA-IUU organization is a regional effort to combat IUU fishing in order to work towards ensuring sustainable fisheries, and safeguarding the marine resources in Southeast Asia (Johns 2013). To effectively create a regional plan, it's crucial to understand member countries' endorsement or adoption, and implementation status of responsible fishing international instruments (RFIs). Recognizing the challenges in endorsing and implementing these policies, and understanding the region's preferences and successful practices, helps build a nuanced understanding of what individual seascape and overall regional priorities and opportunities exist. Analyzing the member countries' desired technical support and capacity-building initiatives (Table 15), aligning them with seascape priorities, and subsequently implementing these strategies through bilateral and multilateral partnerships, can effectively bolster the adoption and implementation of RFIs in Southeast Asian waters.

This assessment aimed to pinpoint the crucial technical support needed in each USAID RDMA defined seascape to facilitate the successful implementation of vital RFIs addressing IUU fishing challenges within the region in fulfillment of the SuFiA TS Year Two Work Plan and partnership with RPOA-IUU and CTI-CFF (United States Agency for International Development 2022c) by asking:

- What RFIs have member countries signed or become party to in the case of binding agreements, or adopted in the case of non-binding agreements?
- What is each country's implementation status per RFI that they have committed to actualizing by voluntarily signing, becoming party to, or adopting?
- What obstacles and opportunities exist for strengthening the implementation of these RFIs per seascape?
- What technical support is needed and desired per seascape to finish implementing the seascape's priority RFIs?
- What technical support is desired as a priority per seascape to help finish implementation of the RFIs they see as benefiting said subregion the most?

Mixed methods were used to find the answers to these questions. Academics, government officials, NGOs, and the private sector were all called on to share their perspective through an online survey, key informant interviews, and seascape specific focus group discussions. This information was triangulated for verification where possible. The limitations of this study revolve around self-reported data that could not be validated, and limited access to some key stakeholders.

This assessment found that increasing endorsement and implementation of the PSMA is the most sought after goal for each of these seascapes. To bolster confidence and ensure full endorsement and implementation of the PSMA across all member countries, it is essential to provide comprehensive technical guidance and develop the necessary infrastructure. This involves building capacity through cooperative joint enforcement efforts, facilitated by the establishment of an

information-sharing database platform. Such measures will pave the way for effective collaboration and support in the successful realization of the PSMA's objectives. Furthermore, the implementation of the ILO C188, the Work in Fishing Convention, is a priority to be competitive in the export markets. However, this priority is also met with some reservations due to the intricate challenges posed by the fluid and opaque fishing environment, compounded by marine seascape management officials intersecting with the realm of labor rights. Full endorsement and implementation of the FAO CA would be a significant step in curtailing IUU fishing, but entails first building capacity through the endorsement and adoption of the other RFIs included in this assessment. A summary of all member countries' endorsement and implementation status of these RFIs is presented in Table 19.

Table 19: An overview of the endorsement and implementation statuses of the responsible fishing international instruments assessed in this report across member countries.

| Region: Southeast Asia        |                     | Australia | Brunei | Darussalam | Cambodia | Indonesia | Malaysia | Papua New Guinea | Philippines | Singapore | Solomon Islands | Thailand | Timor Leste | Vietnam |
|-------------------------------|---------------------|-----------|--------|------------|----------|-----------|----------|------------------|-------------|-----------|-----------------|----------|-------------|---------|
| <b>BINDING:</b>               |                     |           |        |            |          |           |          |                  |             |           |                 |          |             |         |
| CITES                         | Signatory Status    | P         | P      | P          | P        | P         | P        | P                | P           | P         | P               | F        | P           |         |
|                               | Implementation Tier | 3         |        | 3          | 3        | 3         | 3        | 3                |             | 2         | 3               | 2        | 2           |         |
| UNCLOS                        | Signatory Status    | P         | P      | S          | P        | P         | P        | P                | P           | P         | P               | P        | P           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 3         | 3        | 3                |             | 2         | 3               | 1        | 3           |         |
| FAO CA                        | Signatory Status    | P         |        | F          | N        | N         | F        | P                |             | F         | F               | N        | F           |         |
|                               | Implementation Tier | 3         |        | 1          | 0        | 0         | 2        | 3                |             | 3         | 1               | 0        | 2           |         |
| UN FSA                        | Signatory Status    | P         | F      | P          | P        | N         | P        | P                | F           | P         | P               | F        | P           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 0         | 3        | 2                |             | 2         | 3               | 0        | 2           |         |
| PSMA                          | Signatory Status    | P         | F      | P          | P        | F         | F        | P                | F           | F         | P               | P        | P           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 0         | 3        | 3                |             | 2         | 3               | 2        | 2           |         |
| C188                          | Signatory Status    | N         |        | F          | F        | N         | F        | F                |             | F         | P               | F        | F           |         |
|                               | Implementation Tier | 3         |        | 1          | 1        | 0         | 1        | 0                |             | 1         | 3               | 0        | 2           |         |
| P029 (C029)                   | Signatory Status    | P         | C029   | C029       | C029     | P         | C029     | C029             | C029        | C029      | P               | N        | C029        |         |
|                               | Implementation Tier | 3         |        | 2          | 2        | 1         | 3        | 2                |             | 0         | 3               | 0        | 2           |         |
| CEDAW                         | Signatory Status    | P         |        | P          | P        | P         | P        | P                |             | P         | P               | P        | P           |         |
|                               | Implementation Tier | 3         |        | 3          | 2        | 3         | 1        | 3                |             | 1         | 3               | 1        | 3           |         |
| <b>NON-BINDING:</b>           |                     |           |        |            |          |           |          |                  |             |           |                 |          |             |         |
| CCRF                          | Signatory Status    | A         |        | A          | A        | A         | A        | A                |             | A         | A               | N        | A           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 3         | 2        | 3                |             | 2         | 3               | 0        | 3           |         |
| NPOA - IUU                    | Signatory Status    | A         | A      | A          | A        | A         | A        | A                | F           | A         | A               | F        | A           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 3         | 3        | 3                |             | 2         | 3               | 1        | 3           |         |
| Deep-sea Fisheries Guidelines | Signatory Status    | A         |        | A          | N        | A         | N        | F                |             | A         | A               | N        | A           |         |
|                               | Implementation Tier | 3         |        | 2          | 0        | 3         | 0        | 1                |             | 2         | 2               | 0        | 2           |         |
| VGFSP                         | Signatory Status    | A         |        | F          | A        | A         | A        | A                |             | F         | A               | N        | A           |         |
|                               | Implementation Tier | 3         |        | 1          | 2        | 3         | 1        | 2                |             | 1         | 3               | 0        | 2           |         |
| SSF Guidelines                | Signatory Status    | A         |        | A          | A        | F         | F        | A                |             | F         | A               | N        | A           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 1         | 1        | 2                |             | 1         | 3               | 0        | 2           |         |
| VGCDS                         | Signatory Status    | A         | A      | F          | A        | A         | A        | A                | F           | F         | A               | N        | A           |         |
|                               | Implementation Tier | 3         |        | 2          | 3        | 3         | 3        | 3                |             | 2         | 3               | 0        | 2           |         |
| VGMFG                         | Signatory Status    | A         |        | F          | F        | A         | A        | A                |             | N         | F               | F        | A           |         |
|                               | Implementation Tier | 3         |        | 2          | 0        | 3         | 3        | 2                |             | 0         | 1               | 2        | 3           |         |

These identified challenges present opportunities for technical training and capacity building for effective enforcement and management. Joint trainings and strategic and coordinated enforcement operations could make progress towards perpetrator apprehension and securing evidence needed for prosecution while also building relationships between governments and the practitioners working towards the same goals. Scientific fisheries data like stock assessments and information on migratory species would aid in creating coordinated management plans and monitoring fishing effects within a seascape's fisheries. Additionally, technical trainings for the fisheries managers on how to use this data would also be productive. Finally, raising awareness to political leaders of the RFIs and their importance through technical workshops would garner more support and allocation of resources, increasing endorsement and implementation.



In summary, there are many opportunities for targeted technical support to strengthen the fisheries enforcement and governance of the member countries of the RPOA-IUU and CTI-CFF, bolstering the region's plan of action to combat and deter illegal, unregulated and unreported fishing. Tailored to the specific needs and possibilities of each seascape and member countries, this support can be categorized into three priority areas. These areas encompass achieving comprehensive regional implementation of the PSMA, successfully realizing the commitments within CI88, and establishing an effective NPOA-IUU for every member country. By achieving these goals, attention can subsequently shift toward the remaining RFIs covered in this assessment. As a result of these collective efforts, the member countries of RPOA-IUU and CTI-CFF will be well-prepared to endorse the FAO's Compliance Agreement.

## 8. APPENDICES

### 8.1 APPENDIX 1 - SEASCAPES OF THE INDO-PACIFIC WATERS IN SOUTHEAST ASIA AS DEFINED BY THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT REGIONAL DEVELOPMENT MISSION FOR ASIA

| Seascape               | Bordering States  |
|------------------------|---|
| Andaman Sea            | Indonesia and Thailand  |
| Bismarck Solomon Seas  | Papua New Guinea, Solomon Islands   |
| South China Sea        | Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, and Vietnam |
| Sulu Sulawesi Seascape | Indonesia, Malaysia, and Philippines  |
| Sunda Banda Seascape   | Indonesia, Timor Leste and the Commonwealth of Australia                              |

### 8.2 APPENDIX 2 - ONLINE DATABASES RELEVANT TO THE ENDORSEMENT AND IMPLEMENTATION OF RESPONSIBLE FISHING INTERNATIONAL INSTRUMENTS

Below are the online databases, offered by different UN bodies, aiming to provide current information about the endorsement status of individual countries or other information relevant for the binding RFIs evaluated in this report.

|               |  |  |
|---------------|--|--|
| <b>CITES</b>  | Convention on International Trade of Endangered Species of Wild Fauna and Flora  | <a href="https://treaties.un.org/pages/showDetails.aspx?objid=0800000280105383">https://treaties.un.org/pages/showDetails.aspx?objid=0800000280105383</a><br>A checklist of CITES species can be found here: <a href="https://checklist.cites.org/#/en">https://checklist.cites.org/#/en</a> |
| <b>UNCLOS</b> | United Nations Convention on the Law of the Sea  | <a href="https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&amp;mtdsg_no=XXI-6&amp;chapter=21&amp;Temp=mtdsg3&amp;clang=_en">https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&amp;mtdsg_no=XXI-6&amp;chapter=21&amp;Temp=mtdsg3&amp;clang=_en</a>                      |
| <b>FAO CA</b> | FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas  | <a href="https://www.fao.org/treaties/results/details/en/c/TRE-000023/">https://www.fao.org/treaties/results/details/en/c/TRE-000023/</a>  |
| <b>UN FSA</b> | Agreement for the Implementation of the Provisions of United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks | <a href="https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&amp;mtdsg_no=XXI-7&amp;chapter=21&amp;clang=_en">https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&amp;mtdsg_no=XXI-7&amp;chapter=21&amp;clang=_en</a>  |

|                                |  |   |
|--------------------------------|--|---|
| <b>PSMA</b>                    | FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing | <a href="https://www.fao.org/port-state-measures/background/parties-psma/en/">https://www.fao.org/port-state-measures/background/parties-psma/en/</a> and <a href="https://treaties.un.org/pages/showDetails.aspx?objid=080000028007be1a">https://treaties.un.org/pages/showDetails.aspx?objid=080000028007be1a</a> |
| <b>C188</b>                    | ILO Work in Fishing Convention (No. 188)   | <a href="https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO::PI1300_INSTRUMENT_ID:312333">https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO::PI1300_INSTRUMENT_ID:312333</a>   |
| <b>C029</b>                    | The Forced Labour Convention, 1930, (No.29)  | <a href="https://www.ilo.org/dyn/normlex/en/f?p=1000:11300:0::NO:11300:PI1300_INSTRUMENT_ID:312174">https://www.ilo.org/dyn/normlex/en/f?p=1000:11300:0::NO:11300:PI1300_INSTRUMENT_ID:312174</a>   |
| <b>P029</b>                    | ILO Protocol of 2014 to C029, The Forced Labour Convention, 1930, (No.29)  | <a href="https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:PI1300_INSTRUMENT_ID:3174672:NO">https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:PI1300_INSTRUMENT_ID:3174672:NO</a>   |
| <b>CEDAW</b>                   | Convention on the Elimination of All Forms of Discrimination against Women                                       | <a href="https://indicators.ohchr.org/">https://indicators.ohchr.org/</a>   |
| <b>FAOLEX Country Profiles</b> | An FAO comprehensive national legislative and policy database.   | <a href="https://www.fao.org/faolex/country-profiles/en/">https://www.fao.org/faolex/country-profiles/en/</a>   |

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